



# ability

Accessible IT at work

Issue 76 Winter 2009

## Education sharpens up its technology act

- Why RSI is on the rise
- Disabled photographers reveal their tricks
- How a civil servant beat dyslexia
- The future for accessible HTML

SPECIAL NEEDS  
FRINGE GUIDE  
p20





DOLPHIN

EasyReader

Try our  
NEW v5  
Demo for FREE!

# For a wider reading World

Read and listen to:  
Project Gutenberg  
books, DAISY books,  
ePub, text, HTML  
& Google books



Add bookmarks



Listen



Zoom in



Highlight



Search

Get it from: [www.YourDolphin.com/EasyReader](http://www.YourDolphin.com/EasyReader)



ISSN 1352-7665

## Contacts

### Editor and publisher

John Lamb  
john.lamb@abilitymagazine.org.uk

### Production Editor

Mandie Beckley  
mandie.beckley@abilitymagazine.org.uk

### Contributors

Chris Bignell  
David Bridge  
Kevin Carey  
Neil Cottrell  
Gary Flood  
Sandra Howard  
Betsy Langford  
Tom Molloy  
Chris Mounsey  
Simon Stevens

### Published by

John Lamb Media Ltd  
Pellingbrook House  
Lewes Road  
Scaynes Hill  
Haywards Heath  
West Sussex RH17 7NG  
Tel: 01444 831226

### Printed by

Micropress  
27 Norwich Road  
Halesworth  
Suffolk IP19 8BX

Ability is grateful for the support of the following sponsors:



## Editorial 4

### How education is sharpening up its act

John Lamb awards top marks to recent efforts to improve access to AT for school students

## Feedback 5

- More options for satellite navigation
- Dyslexia led to assistive software development
- Training software is too hard to see

## News 7-12

- Disabled students hang on for equipment
- Trial aims to speed up pupils' access to alternative formats
- Research could end AAC lottery
- ACE site aims to compare communication aids
- Awareness of Access to Work too low, says study
- Mobile industry to target senior citizens

## Simon Says 13

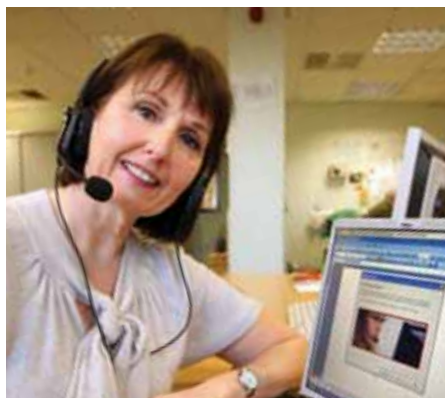
### Addressing inclusion

Simon Stevens examines the contribution that email has made to ensuring disabled people feel more valued

## Workspace 14

### Hiding from the written world

Dyslexia often goes unnoticed at work. Sandra Howard spoke to a civil servant who eventually got the help she needed



## Ergonomics 15-16

### Long live RSI, alas

Gary Flood finds plenty of cause for concern in our love affair with technology

## Briefing 17



### Snap happy

Tom Molloy of the Disabled Photographers' Society zooms in on the technology his members use

## Briefing 18

### High fives for better web pages

Chris Mounsey explains why the latest draft of the language for describing web pages, is going to make sites a lot more accessible

## Show Guide 20-22

### Special Needs Fringe

Across the tracks from the giant BETT exhibition, the Fringe is an oasis of calm

## Resources 23-27

- Digital hearing device reduces interference
- Braille notetaker from HumanWare
- Portable Intel Reader turns text to speech
- 2010 sees upgrade for Dolphin's software
- Reports put the business case for investing in accessible IT
- Texthelp updates Browsealoud
- Global Autocorrect keeps ideas flowing
- What's on and list of useful contacts

## Carey On 30

### Life in the slow lane

Even with technology, disabled workers can't keep up with their non-disabled colleagues. The answer is to match the work to the people, argues Kevin Carey





John Lamb awards top marks to recent efforts to improve access to AT for school students

## How education is sharpening up its act

**E**ducation, education, education was Tony Blair's mantra and it is a slogan that applies as much to assistive technology as it does to public policy. Only with appropriate assistance at as young an age as possible can disabled school children hope to surmount the barriers that confront them.

Take dyslexia. Children start to read to learn at around the age of seven and by the age of ten the top 10% of pupils are reading 1.4m words per year, greatly expanding their capacity to learn. By contrast the bottom 10% only manage around 8,000 words annually.

The slower readers need all the help they can get, which is why initiatives such as the Department for Children, Schools and Families' alt format trial (see p7) are crucial.

The trial involves providing pupils with a small library of electronic texts which they can convert into whatever format they want.

Combined with efforts to train 4,000 teachers to identify and support children in England with dyslexia, these moves represent a vital step forward in tackling dyslexia.

But children with special educational needs are getting assistance across the board.

Next year, Home Access, the £300m scheme to provide children with computers to use at home, gets underway in earnest. Low-income families will be able to apply for a grant to purchase a Home Access computer and internet package.

The systems will come with a suite of assistive software and hardware as standard. Children with more complex needs will also be catered for.

Government efforts to provide the technology to benefit young learners coincide with an upsurge of innovative systems ranging from the Intel Reader, a portable optical character recognition device, to improved eye gaze systems and new aids to spelling and composition.

Many of these products can be seen at the BETT and Special Needs Fringe shows at Olympia in January.

However, things are not so happy in higher education. Thousands of students who began courses in the autumn are still waiting for computers and software that they need to study properly.

Administration of the Disabled Students Allowance by the Students Loan Company (SLC), which it took over from Local Education Authorities in the autumn, is a scandal, according to Lord Addington, the Lib Dem peer.

The SLC has promised to make improvements recommended in a report by Professor Deian Hopkins. Let us hope, as the agency begins to take applications for next year, that it will get its house in order sooner rather than later so that disabled students can study on equal terms with their non-disabled contemporaries. ■

## More options for satellite navigation

Interesting article about the BBNav satellite navigation system for disabled travellers in Issue 75. You might also like to pass on to your readers these other options:

<http://www.gonmad.co.uk>

This site has blue badge parking; accessible toilets and shopmobility schemes around the world and is contributed to by



the people who use them, or good hearted people, who see the benefits to disabled people, taking the time to add to these.

I wrote to my local council asking them to add the blue badge bays to the site. All locations can be downloaded as a point of interest (POI) to a variety of sat nav systems.

<http://www.smartnav.com>

Smartnav is Trafficmaster's satellite navigation system and is the one that Motability install into complex adaptations, my son's vehicle has this installed as voice only, but it can have a graphic device fitted as well.

In addition to the normal sat nav guidance it uses GPS to locate a vehicle in



the event of a breakdown and an immediate link (press of a button) via mobile phone SIM to the customer service centre.

Using the link, a driver can ask for an operator to program in a destination and download it to the car system. This is particular useful for those people with learning disabilities who find

programming an address difficult.

*David Bridge*

*Chairman, Disability & Accessibility Group, Ford of Europe*

## Training software is too hard to see

I am writing to you because of your interest in the design of systems for disabled people.

My aunt recently underwent an eye operation to correct her age-related macular degeneration. This pioneering operation involved inserting additional lenses into her eye in order to direct images away from the diseased parts of her retina to those unaffected by the condition.

After a successful operation, my aunt, who is in her eighties, had to undergo six weeks of exercises designed to 'retrain' her brain to understand the new signals it now receives. The training involves staring for half an hour a day at words that are flashed on a computer screen.

My aunt was supplied with training software on a standard Eee notebook by a company called Veni Vidi. However, she cannot use the software unaided because she is unable to see the on-screen controls.

She can only guess the position of buttons such as start, exit and finish: when she moves the cursor across the finish button it comes up bright pink, which is difficult for her to make out.

Coupled with the fact that she is unfamiliar with computer technology, she has numbness in her fingers that makes it difficult for her to use the touch pad to control the cursor or to find the small on/off button on the back of the machine.

## HAVE YOUR SAY

**Ability welcomes letters and articles on all issues relating to IT for disabled people in work, education and daily life.**

**Contributions can be sent to the editor, John Lamb, at [john.lamb@abilitymagazine.org.uk](mailto:john.lamb@abilitymagazine.org.uk)**

All this means that someone has to be present during her sessions on the system.

I can't understand why the software isn't voice controlled. After all, by definition the people who use it have trouble seeing and are unlikely to be computer literate.

*Betsy Langford, Eastbourne*

## Dyslexia led to assistive software development

I have severe dyslexia and have been a heavy user of assistive software since the end of primary school. I also had a great deal of support at school, including a reader and laptop in exams, and extra English tuition.

While at school and university I realised that the assistive software available wasn't satisfying all my needs. My ideas couldn't flow because they were constantly being disrupted by thinking about spelling.



And my spelling wasn't improving because I was never fully focusing on that either. So I developed my own assistive software to combat these problems.

Now I've graduated from Cardiff University and I'm using my skills and knowledge to help other people like me to achieve their full potential. I have set up my own company, LexAble ([www.LexAble.com](http://www.LexAble.com)), and the software I developed, Global AutoCorrect, is available on the disabled students allowance (and hopefully through Access to Work soon).

I'm very aware that if I'd been born a few years earlier or had less supportive school or parents I would not have completed my GCSEs, let alone graduated. I've been extremely lucky, and for that reason I'm passionate about helping other people with dyslexia and other disabilities to achieve their full potential.

*Neil Cottrell, LexAble*

# dyslexic?

## hands-free computing



...we can **greatly improve**  
your working life...

**Hands-Free Computing** provides workplace solutions for dyslexia and a range of other disabilities.

We work with individuals and employers to release the abilities that are often unique to dyslexics.

With the right coping strategies, software and training, life in the work place can become so much easier.

**For more information or to find out about funding from Access to Work call**

# 0845 899 0880



textHELP

inspiration



Telephone: 0845 899 0880 Fax: 0845 899 0440 Email: [enquiries@hands-free.co.uk](mailto:enquiries@hands-free.co.uk) Web: [www.hands-free.co.uk](http://www.hands-free.co.uk)



## Global AutoCorrect™

Worried by spelling?  
Want your ideas to flow?

Try Global AutoCorrect

Free trial at: [www.LexAble.com](http://www.LexAble.com)

Also available from:  
Disabled Students' Allowance  
Access to Work

Freephone: 0800 458 1922  
[www.LexAble.com](http://www.LexAble.com)

**LexAble**  
Assistive Software Development

## TextScout

... reads for you!

- Just take a picture of a printed text – TextScout will tell you what it says; wherever you are, anytime ...



- Easy handling due to the integrated alignment assistant

**Now available in the UK!**

[www.TextScout.co.uk](http://www.TextScout.co.uk)

E-mail: [textscout@elumo.net](mailto:textscout@elumo.net)

# Disabled students hang on for DSA equipment

Disabled students were still waiting before Christmas for the Students Loan Company (SLC) to clear a backlog of applications for the Disabled Students Allowance (DSA).

Thousands of students, who can qualify for just over £5,000 for equipment and £20,000 for a helper under the £90m DSA scheme, have been left without vital hardware and software to carry out their studies.

Over 90% of students entitled to DSA grants had to start their courses this year without their funding. By the end of November SLC figures revealed that only 3,294 applications for the DSA had been fully processed out of 15,371 applications.

This academic year the SLC took over administration of the DSA from local education authorities, starting with first year students.

However, students reported lost documents, confusion over new procedures and poor communications with the SLC.

New technology, supposed to manage the thousands of documents submitted to verify applications, failed at a critical point.

Delays were also caused by tighter requirements for medical evidence and new rules requiring quotes from two suppliers for IT systems.

"Disabled students may be disproportionately affected compared with other students because going through the DSA means they have to go through additional processes," says Nicola Martin, chair of the National Association of Disability Practitioners, which represents 600 disability professionals.

"It's a scandal that disabled students who have worked hard to secure a place at university are not getting the support they need. Many are still waiting for funding to buy special equipment so they can do their course," said Lord Addington, the Liberal Democrat peer. ■

[www.slc.co.uk](http://www.slc.co.uk)

## Trial aims to speed up pupils' access to alternative formats

School students who have problems reading may in future be offered books in alternative formats at the same time as their classmates receive print documents.

Children with dyslexia and vision impairments often have to wait for materials because of the time it takes to translate them into formats such as Daisy, PDF, MP3 and Braille.

However, the Department for Schools, Families and Children is funding a trial involving 40 children in nine schools in the North of England that aims to cut the waiting times by allowing them to produce their own materials.

In November, children at the schools were provided with Toshiba laptops and software that includes EasyConvertor for producing the alternative formats and

TextHelp Read and Write Gold and EasyReader for reading them.

The package also includes a library of text books.

A consortium including Dolphin Computer Access, Inclusive Technology, The University of Southampton and RPM Associates will run the project.

Those involved hope the trial will prove that putting pupils in charge of selecting and reformatting materials works.

"The idea is that they become self-sufficient and that they create their own versions," says Noel Duffy managing director of Dolphin Computer Access. "Students have their favourite formats or prefer different formats in different circumstances." ■

[www.dolphinuk.co.uk](http://www.dolphinuk.co.uk)

### Briefs

#### Searle steps up at Leonard Cheshire

Jenny Searle has become a vice chair of Leonard Cheshire Disability. Searle is a former teacher of science and mathematics who later became an IT specialist. She managed IT projects in the pharmaceutical, telecommunications and electronics industries and ran the government programme called UK Online for Business.

#### BCS guide targets IT professionals

The British Computer Society (BCS) has published a guide to accessibility targeted at those who work in IT. ***Accessible Technology: a Guide for IT Professionals*** is available free in Word from the BCS. "Awareness and understanding of the issues are the keys to ensuring that everyone can access IT," says Elizabeth Sparrow, BCS President. "The steps involved are not complicated, nor is achieving accessibility expensive. What is required is that accessibility is considered whenever IT is under discussion." To download the guide [www.bcs.org/upload/pdf/accessible-technology.pdf](http://www.bcs.org/upload/pdf/accessible-technology.pdf).

#### Support for Enabling Computer Supplies

Problems with the Disabled Students Allowance (see top story opposite) have claimed their first corporate victim. Supplier Enabling Computer Supplies has withdrawn from the scheme. Support for students who have bought goods and services from the company will be continued by other firms including Iansys and Microlink. Tighter rules, processing delays and a price war have been blamed for the demise of the company.



# Web Accreditation Service

## Why is Web Accessibility Important?

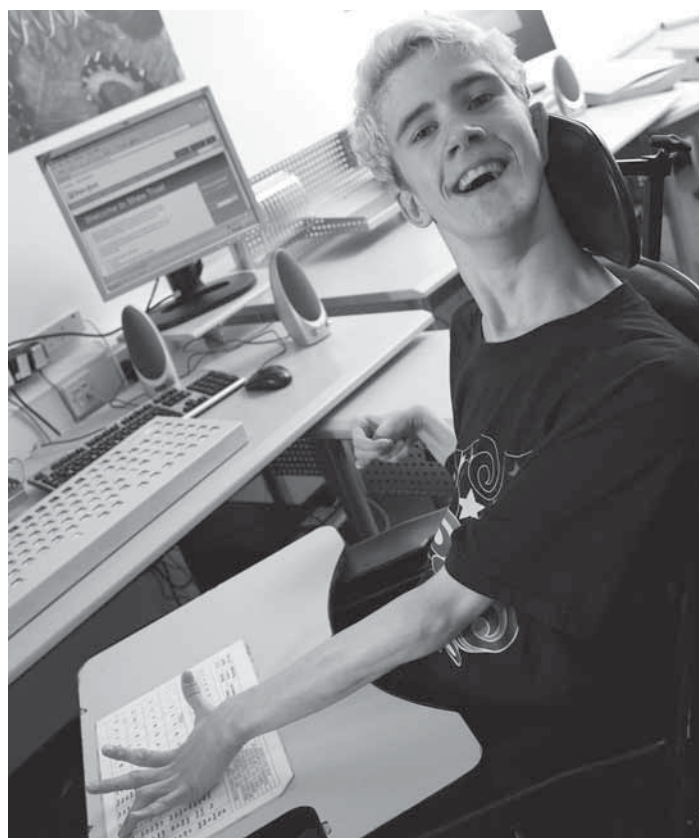
First and foremost, because it is a legal requirement for your organisation's website and intranet to comply with the Disability Discrimination Act (DDA). But perhaps more importantly, it makes good business sense to ensure all your customers can access your goods and services.

**It is estimated that 10 million adults in the UK have a disability and the combined spending power of adults who are disabled is £80 billion annually. How many of these people could be your customers?**

Shaw Trust Web Accreditation Service provides you with peace of mind, ensuring that your website has been tested to the highest possible accessibility standards.

**Shaw Trust is one of the UK's top providers of Web Accreditation. Our Web Accreditation Service is designed to be the most comprehensive service available and is endorsed by The Guild of Accessible Web Designers (GAWDS).**

Our service can audit and accredit websites in line with W3C guidelines against WCAG 1.0, WCAG 2.0 and Section 508. You can be confident of meeting the highest standards of web accessibility in line with PAS78 guidelines.



**The service offers a full technical audit with rigorous user testing. Every member of our testing team is an experienced assistive technology user.**

They understand the frustrations of not being able to access websites that don't consider the needs of people who are disabled. We're passionate, enthusiastic and committed to making it work and we have the experience to make it work for you.

## Meet the Team

We are happy for you to visit and spend the day with our user testing team during the testing of your website – this has proven very popular with our clients as they can see first hand how adaptive technologies can improve disability access to an otherwise non-accessible website or application.

**Contact: Cam Nicholl 07973 234 489**

**[cam.nicholl@shaw-trust.org.uk](mailto:cam.nicholl@shaw-trust.org.uk)**

**or call 0300 30 33 120**

**Visit: [www.healthyworklife.org.uk](http://www.healthyworklife.org.uk)**



# Research could end AAC lottery

Communication Matters, the charity for people with speech and language impairments, has been awarded a grant of almost £1/2m by the Big Lottery to research into augmentative and alternative communication (AAC) in the UK.

The money will be used to establish how many people actually need AAC and how services are supplied in different areas of the country. The project will involve building a searchable database containing the information gathered during the three year study.

AAC includes sign language, the use of symbols to communicate and electronic voice output devices. However, decision makers have lacked hard evidence about the level of need for these products and services and information about the best way to provide them.

In addition, valuable knowledge about how to help people who have difficulties communicating is buried in specialist databases, professional journals, or simply remains unpublished, says Communication Matters.

The latest estimates are nearly 20 years



**Stephen Hawking is fortunate, many people cannot get access to AAC**

old. In 1991, some 0.6 per cent of the population required help communicating, equivalent to over 350,000 people today, according to Communication Matters.

Manchester Metropolitan University, Sheffield University and Barnsley Hospital will work with Communication Matters on a project that will go further than any other in pinning down the need for AAC.

A key aim of the project is to end the

post code lottery that results in widely varying levels of provision around the UK. At present disabled people have no statutory rights to assessments, provision of resources or continuing support.

This despite the fact that AAC is specifically mentioned in the United Nations Convention of the Rights of Disabled People, which was ratified by the UK last year.

"There is an element of luck as to whether or not a person is provided with a communication aid as it is dependent upon where they live rather than what their needs are," says Professor Pam Enderby of Sheffield University.

"This does not happen with other equipment provision. For example, it is accepted that if you cannot walk you are provided with a wheelchair.

"By establishing how many people actually need AAC and how each area currently provides these vital services, we hope to provide crucial evidence that will lead to the eradication of the current post code lottery of provision in the UK." ■

[www.communicationmatters.org.uk](http://www.communicationmatters.org.uk)

## Site aims to compare communication aids

ACE Centre Advisory Trust, a charity that specialises in aided communication, is developing a website that will provide information about communication aids.

Around 1.5 million people in the UK have a communication disability meaning that they require assistive technology to help them interact and stay in touch with people around them.

Matching an aid to the needs and abilities of an individual has become a very complex and fast-moving process, says the Ace Centre.

It is now almost impossible for parents and carers to keep pace with developments and make properly informed decisions about what aid is best for a particular individual.

The SpeechBubble project aims to provide a searchable website through which therapists, parents, carers and users themselves can compare and contrast the key features of the wide range of speech aids available.

Unlike choosing the right camera or washing machine, getting the right aid has an immeasurable impact on quality of life, say the project organisers.

Get it wrong and the aid will have little chance of effectively improving communication, and at costs running into thousands of pounds for some items of specialist equipment, choosing the wrong technology can be an expensive mistake.

The ACE Centre's SpeechBubble project is part-funded by Nominet Trust, a

charitable organisation that provides funding for projects that make a difference to people's lives, particularly in terms of education, safety and inclusion.

"SpeechBubble is an example of how technology and the internet can be used to help improve the lives of the disabled, sick and disadvantaged as well as to promote inclusion in a digital society," says Jonathan Welfare, chair of the Nominet Trust.

"Technology developments and innovative projects such as SpeechBubble open up opportunities for vulnerable groups including social mobility, financial savings, educational attainment and improved social prospects." ■

[www.ace-centre.org.uk](http://www.ace-centre.org.uk)

[www.nominettrust.org.uk](http://www.nominettrust.org.uk)

# Awareness of Access to Work too low, says study

Access to Work (AtW), the scheme that provides technology to disabled workers, needs to be better marketed.

This is the main conclusion of an evaluation of the £80m per year programme carried out by the Institute of Education for the Department for Work and Pensions.

Researchers found there was low awareness of the scheme among customers, employers and Jobcentre Plus staff. Many applicants found out about AtW by accident.

Those who used AtW were positive about the application process, but some complained they had trouble getting staff to understand their disabilities.

Customers also had problems with standardised application formats because some impairments were difficult to categorise.

They also complained about the

amount of paperwork involved, particularly in collating receipts or claiming money back from AtW.

Although disabled people liked the assessment process, it was felt to favour those with stable conditions or who had physical disabilities. It was also considered by some to be influenced by money saving considerations.

Customers who received ongoing support, such as travel to work, were more satisfied with AtW than those who received one-off types of help, such as equipment.

There was dissatisfaction with the quality and usability of some solutions as well as delays in the provision of support.

Employers cited a number of benefits they gained from AtW including increased productivity and an ability to retain disabled staff. Many customers said the scheme made the difference between being in or out of work. ■

# Blow-ups aid a blind photographer

Former computing services director Brian Negus had to give up photography at the age of 30 because of his failing sight.

However, Negus, now in his sixties, has started to take striking pictures such as the one shown below thanks to assistive technology that blows up his images. Using a digital camera, magnifying glasses and magnification software on his computer, Negus has been able to resume his hobby.

Negus describes his sight as like a "low resolution image". He uses shapes and noise to compose a picture, taking as many shots as possible.

Once back home he loads the photographs

onto his computer and uses ZoomText software to magnify the images and to control PhotoShop Elements, the



program he uses. A fountain outside Alton Towers' Splash Landings hotel to edit his work.

Menus on his computer are magnified, without distorting the characters, and they are also read out to him.

"My photography is a demonstration of the fact that an alleged disability can challenge your ability to do something," says Negus, who uses a Fujifilm S100 FS bridge camera for much of his work.

He is a member of online group blindphotographers.com, founded by American Timothy O'Brian. Members include totally blind photographers who take pictures using noise to determine where their subjects are. ■

*See Briefing on p17 for more about disabled photography. For more information on magnification call 0845 6347979 or go to [www.sightandsound.co.uk/visually\\_impaired/zoomtext/](http://www.sightandsound.co.uk/visually_impaired/zoomtext/)*

## Briefs

### Irvine appointed to top EHRC post

Veteran IT accessibility campaigner Dr Jean Irvine has been appointed as a Commissioner for Disability at the revamped Equality and Human Rights Commission (EHRC). Dr Irvine, who is a director of RADAR, was IT chief at the Post Office and has been closely involved with promoting inclusive IT in a number of organisations including the British Computer Society and the Information Technologists' Company.

### Irish ATMs get gift of the blarney

Northern Bank has added talking software to 35 of its ATM machines in Northern Ireland, at almost 30 different locations. Northern Bank,

Yorkshire and Clydesdale and the National Irish Bank in the Republic of Ireland are the only banks in the British Isles to have introduced the software, which allows vision-impaired people to listen using headphones plugged into an ATM.

### Books for All's online library

The Seeing Ear, an organisation that provides electronic books, has launched Books for All, an online library of educational books that is free to vision impaired users. The books, which are distributed in plain text, Word and PDF, are uploaded by teachers and shared among members. The aim of the service is to eliminate the need to convert the same book to an accessible format many times over. [www.books4all.org.uk](http://www.books4all.org.uk)

# Access to Work with Read&Write 9 **GOLD**

**FREE  
30 DAY DEMO  
ON REQUEST At:  
demo@texthelp.com**



**Read&Write 9 GOLD** is Texthelp's award-winning literacy support software designed to assist employees with literacy difficulties. The software works discreetly with all mainstream Windows applications allowing users the opportunity to work in an inclusive manner alongside their colleagues.

**Read&Write 9 GOLD** is easy to use and improves the reading and writing abilities of employees with:

- Literacy Difficulties
- Dyslexia
- English as a Second Language

**NEW Features include:**

- Screen Masking - to tint or mask sections of the window
- Texthelp Voices - new text-to-speech voices
- Translator - translates selected words into French, Spanish, German or Italian
- Enhanced Spelling, Dictionary & Homophone support



**"Read&Write GOLD** is a powerful and flexible software application that has proven to be of real value in my everyday work routine. The software assists me in so many different ways."

Mick South, Workplace Learning and Development Team,  
Kent Fire and Rescue Service

**"Texthelp's Read&Write GOLD** is a tool that gives confidence and assistance to people who suffer with dyslexia. It has allowed me the opportunity to feel more competent in my written work."

Detective Constable Nick Parr, Devon and Cornwall Police

Texthelp Systems Ltd, Enkalon Business Centre, 25 Randalstown Road, Antrim, Northern Ireland, BT41 4LJ  
Telephone: +44 (0)28 9442 8105 Fax: +44 (0)28 9442 8574 Email: info@texthelp.com Website: www.texthelp.com

Microsoft  
GOLD CERTIFIED

IBM  
Business Partner

HP  
Business Partner

Adobe  
Solutions Network

AMITY

NUANCE

## PenFriend audio labeller

At last, a simple and easy way to label items around your home – up to 70 hours of recording time. Whether it's food, letters, CDs or medicines you can label it with the PenFriend.

**Stick** – a PenFriend label onto an item.

**Speak** – Hold the record button, touch the label, and record.

**Listen** – Touch the label again, listen to your recording.

Includes over 100 labels and additional label packs are also available.

**DL76 - £54.99 ex VAT, £63.24 inc VAT**

Call RNIB on **0303 123 9999**

Shop online at **rnib.org.uk/shop**



supporting blind and  
partially sighted people

© RNIB 2009  
Registered charity number 226227



# Mobile industry to target senior citizens

Chris Bignell reports on plans by phone companies to develop products for the over 50s

The mobile phone industry is beginning to take older customers more seriously.

The development of special call plans, handsets and advertising aimed at the UK's 21m people over 50 took a step forward at the first Mobile Phones for the Senior Market conference in October in London.

Some 47% of over 65s in the UK currently own a mobile, compared to virtual saturation among younger people, making this a potentially lucrative market for the mobile industry.

One of the big challenges addressed at the conference was the issue of marketing phones in a relevant way to older people. In the words of Chris Cowpe, of the Caffeine Partnership, "I don't think of myself as old. Old is 15 years from now".

Delegates also debated the revenues that mobile operators could generate from the senior market. The older generation was perceived to be less likely to call and text regularly, although evidence for this is thin on the ground. Common sense would dictate that people are more likely to use something that they can operate easily.

So far, no UK mobile network operator has directly targeted the senior market. However, the success of other European

operators, along with the growing and lucrative opportunity afforded by an ageing population, means that this is unlikely to be the case in future.

Louder ring tones, bigger buttons and larger screens are the most obvious features of mobile phones for the elderly.

Emporia Telecom, which has a range of phones for older people, employs one third of its staff in R&D. This has resulted in a large number of small details that deliver an improved user experience.

For example, the screen font and colour of the backlight on Emporia phones have been developed to suit those with even minor eyesight difficulties.

Furthermore, menu navigation has been created through side keys offering quick access to talk and text functionality instead of the need to browse through multiple menus.

There is even a torch on the phone that flashes when the handset rings, making it easier to locate.

Cambridge University's Engineering Design Centre demonstrated the importance of designing mobiles in an inclusive way.

Researchers there use vision



impairment glasses and gloves that mimic the impact of arthritis to measure the effectiveness of mobile phone design for those with even minor disabilities.

This approach can also deliver benefits to all mobile users. BT's range of big buttoned phones was designed for the needs of one particular group, but proved huge mainstream seller.

The conference signalled the importance of delivering an end-to-end service, providing not only a mobile phone handset but also a relevant tariff and customer service platform.

Delegates heard about Jitterbug, a simple mobile service in the US aimed at the over 50s.

While mobile handsets for the over 50s market are already available in the UK, there is not yet a relevant or targeted calling plan. Several UK network operators attending the event suggested this may not be far away. ■

[www.seniormarket.co.uk](http://www.seniormarket.co.uk)  
[www.jitterbug.com](http://www.jitterbug.com)  
[www.emporia.at](http://www.emporia.at)

## Wheelies nightclub turns a corner

Wheelies, the disability themed nightclub in Secondlife, the online virtual world, is to get a second life itself.

Simon Stevens and Simon Walsh, who founded the original Wheelies in 2006 and sold it off after three years when it ran into financial difficulties, have launched a follow-up club called Wheelies 74.

The club has regular weekly events taking place on a different day of the week

and featuring musicians and DJs.

Wheelies 74 is looking for sponsors to fund the venture, which attracted considerable publicity in its hey day. Sponsorship costs £25 per week.

"After a lot of consideration, I have decided sponsorship is the best way to proceed as it offers a win-win solution for both for the club and the sponsor," says Stevens, who was the first disabled person

to create a wheelchair avatar in Secondlife.

"It offers the club a guaranteed income for a specific branded event for a number of weeks, allowing continuity to be maintained and a crowd to grow. It also allows ongoing investment in the club to ensure the club remains cutting edge in its features and brand." ■

*Stevens can be contacted at [w74@simonstevens.com](mailto:w74@simonstevens.com).*

# Addressing inclusion

Simon Stevens examines the contribution that email has made to enabling disabled people to feel more valued

**T**he last decade has seen major improvements in customer relations in many different types of organisation, which have also changed how they interact with their disabled customers.

It is a trend that has been most warmly embraced by the public sector with the result that interactions between service users and social workers have been transformed.

My own experience is that I feel more valued by others and much more likely to be listened to.

This social change is partly the result of a significant technology advancement: email.

Now the backbone service of the internet, email has only been used properly for around 15 years and only widely used for about half that time. In a few short years emails have become the new primary method of written communication.

But when we talk about emails, we are not just talking about electronic versions of letters or memos – although people do use emails in that way – but a whole new form of communication which has a whole new set of grammatical rules and social norms.

## Relaxed atmosphere

There are a lot fewer dos and don'ts about how to write and present emails and that means that they tend to be a lot less formal, although their attachments may indeed be totally formal in their style.

So far as professional relationships between authors and readers are concerned, the tone of emails tend to be friendly; or more personal even if they are not so friendly!

The reason why emails are so popular and effective is that they are direct. When you send a letter, you have no real idea if it



Simon Stevens is a disability consultant and trainer and has cerebral palsy.  
[www.simonstevens.com](http://www.simonstevens.com)

will be received by the right person and with phone calls it can be hard to speak to the person you want to reach.

With emails, you get a better sense that the email you send to person@somewhere.com has actually reached your intended correspondent.

The first reason for this is that email addresses around the world are unique and can only be sent to a specific individual or to a specific office: only that person from somewhere.com can receive the email.

This feature of emailing has created a unique form of immediate, almost instant and personal connection not previously offered in other forms of communication.

The second reason is that emails instantly change relationships between people. No longer can individuals hide

behind large communication systems designed to keep them from the public.

This is why many websites now prefer webmail as opposed to displaying email addresses, because once you have someone's email address, you have a level of personal relationship with them.

## Fast communication

The third reason is that while people do not always respond to email immediately, there is a general speed about the medium which makes people feel things are being done and that they are a part of them.

This is especially true when you receive emails that have been copied to many other people. It generates a degree of co-production in making decisions.

And for disabled people email has another advantage: it is accessible. The writing and reading of emails can be made accessible to a wide range of people with all kinds of impairments in a manner other communications can not.

This is therefore very significant in providing disabled people, especially people with communication difficulties, a new level of equality in how they interact with others.

In my own situation, I have been able to talk to many people in organisations about my health, personal assistance and other matters, who simply would not have seen me as their peer or equal.

I believe email has indeed played and will continue to play an important role in my own and other people's battle for equality and inclusion.

Technology such as email does not only make life easier, but it is also a part of the positive social changes that have occurred in the last century which has seen the human race improve the respect for its own diversity. ■

# Hiding from the written word

Too often, dyslexia goes unnoticed at work. Sandra Howard spoke to a civil servant who eventually got the help she needed

**I**ncredibly Elaine Roper wasn't diagnosed as being dyslexic until she was 45 years old.

Elaine, now 51, shied away from promotion in her job as a civil servant for Her Majesty's Revenue and Customs (HMRC) as she lived in fear of her disability being discovered.

"It's like being an alcoholic – you are ashamed. You end up thinking you are just a bit thick as you haven't mastered what most people take for granted," she says.

A mother of three, from Manchester, Elaine joined the Civil Service at 16 where she started in an administrative job that required very little reading and writing.

## Masking the problem

"I got very used to thinking on my feet and became a master at hiding my lack of literacy skills."

But Elaine did not just hide her problems with reading and writing at work, but she also disguised them at home.

"My husband always dealt with the written communication in our family, right down to writing notes to the children's teachers. I just used to say, 'Oh, could you do it? You are so much better at it than me.'"

"My whole life was one big act. Some days I'd feel so weighed down I could hardly bear to step outside my front door. Then I'd be in the 'written world' and have to start pretending all over again."

Eventually Elaine found the pressure of her 'secret' being discovered at work too much to bear.

She says: "All of a sudden the stress became just too much. Over the years I had regularly visited my doctor and been prescribed anti-depressants, but these were no longer working for me. I'd get so tired with the stress I'd just come home and go straight to bed."



Photo by Professional Images

Roper: no looking back with speech recognition

It was when she took on a more senior role that her problems began to become really noticeable.

She says: "I was doing lots of good quality work. I have excellent communications skills and great empathy with people, but I was finding all the written work a great problem. I had a hidden life. I felt there was nowhere left to hide and that I couldn't carry on."

## Help at last – night classes

At this point, Elaine saw an advert on television about getting help with literacy skills, and found the confidence to pick up the phone and investigate night classes.

She says: "I was given a few simple tests which revealed I was dyslexic. I can't explain the relief – I cried. To have someone tell me I wasn't thick and that it could all be sorted out was just amazing."

Elaine approached her boss at work

and told them about Access to Work, run by the Department for Work and Pensions.

She was given Dragon Naturally Speaking Speech Recognition, so that she could do all her written work by speaking rather than typing. She was also recommended Text Help, which reads text back to her, Read and Write Gold and Inspiration, mind-mapping software, which helps her plan out her work.

She also has a Dictaphone, which converts speech to text that helps her in meetings.

Elaine says: "The speech recognition is just amazing. I can actually say what I want now in emails, rather than keeping to the limited words I can spell. I was given several

days training and my confidence has just soared.

"There's been no looking back for me – I've excelled at work and am going from strength to strength. I've even been promoted again and given a pay rise.

Elaine's boss, a senior civil servant with HMRC, says that for many years she was unaware that Elaine was dyslexic.

She says: "Elaine had to do a lot of case reports that had to be read by others in her team. They were not very good at all and we couldn't understand why.

"At her reviews we used to discuss how she could improve her paper work. She used to think she was being stupid, but that was not the impression we got with every other aspect of her work – she was very good indeed." ■

[www.jobcentreplus.gov.uk](http://www.jobcentreplus.gov.uk)

[www.bda-dyslexia.org.uk](http://www.bda-dyslexia.org.uk)

[www.hands-free.co.uk](http://www.hands-free.co.uk)



# Long live RSI, alas

Musculo-skeletal problems caused by working with IT may seem less prevalent, but Gary Flood finds plenty of cause for concern in our love affair with technology

**R**epetitive strain injury (RSI) may have vanished from the newspapers as an issue for users of computers – but it's far from disappeared in real life. Is RSI in fact set, swine flu-like, for a second and much more disruptive wave than it did in the 1980s when it first began to be talked about?

"The combination of bad posture and cramped laptop use will inevitably increase the number of people with MSDs (musculo-skeletal disorders) and RSI problems in the future," says Paul Goddard, managing director of Southampton-based Keytools. "How come the most common cause of people being off sick is already MSDs?"

To answer that, a short history lesson: why did we spend so much time talking about RSI in the past but so much less now?

At the time it was probably more to do with the fact that IT was being introduced into the workplace and people (and unions in particular) were a bit leery about it. How times have changed; now we can't be separated from our iPhones, BlackBerrys, laptops and home computers.



Paul Goddard: the most common cause of sickness is MSD

As a society we may thus in fact be storing up all kinds of trouble for ourselves as we become more and more IT-centric and spend all that time surfing and internet dating on our home keyboards, after very possibly toiling all day in front of an employer's desktop.

"Working in very small spaces like iPod screens, you can

## The technology that saved my career

Business and finance journalist Tim Cooper has been suffering RSI since 2003, brought on he believes by massive overwork and use of mice getting the online publications he was working for onto the web. "In a way, all RSI is self-inflicted if you look at it, as you're the one doing all the work," he shrugs.

By 2006, he says, he could barely type more than an hour a day without experiencing severe pain – and as he needed to use IT to make his living, things looked very dire. Luckily Tim says that after struggling on his own and with inadequate information, he revolutionised his working habits by getting his workspace totally redesigned by taking the advice of a number of ergonomics consultants and extensive use of both modern speech recognition software, high-end but he feels appropriate microphones, a specialised mouse and the Goldtouch keyboard.

But even now, he says, "It's a daily battle and what I do is to work with the condition, not look for it to ever end." So what is his advice to the readers of *Ability* who might worry about or be living with RSI? "The



technology is finally out there and it does work. Be prepared for a steep learning curve and don't be too proud to seek help. It's worth it; the technology pretty much saved my career."

■ Tom has written his own much longer version of his experiences here:

<http://rsiaction.org.uk/voice-recognition-taming-the-dragon/>

easily see how flickering fingers and gesture techniques are going to be heavily repetitive,” warns Goddard. “No doubt we will be hunching over tiny screens and straining our eyes for quite a while yet.”

## Other factors

As even people in the RSI community of sufferers admit, the medical profession has never been very keen on the phenomenon, some elements going so far as to say it's more a psychosomatic condition than a real workplace injury.

The UK's health and safety watchdog the HSE these days prefers the much more generic term 'WULD', for instance, or Work Related Upper Limb Disorder, a possible sign that some officialdom no longer sees RSI as the pressing issue it once did.

That's something of a worry for not only sufferers of RSI but also for experts in ergonomics and products designed to help us use computers in ways to avoid risking our health in the first place. They say that we may literally be typing and mousing ourselves into great pain and even disability without knowing it.

One way to settle all these doubts, surely, is to look to the statute book. Since the start of 1993 we've had laws to oblige employers to ensure better design and installation of computers so as to prevent RSI/WULD. Good news: no one's been prosecuted for not doing so. Bad news: no one's been prosecuted for not doing so.

“Since the DSE (Display Screen Equipment) law came into force there has not been a single prosecution under it,” says Steve Fisher, an RSI sufferer and leader of a group called RSI Action.

“That's even though 90 per cent of the people I meet with RSI got it from using computers – and in contrast to nearly 5,000 prosecutions for other breaches of the health and safety laws of the UK. That tells me that employers don't care about RSI any more as they know no-one will come knocking on their doors and there is no sanction against letting it happen.”

You can choose to disagree. But what is certain is that if you do get in a state where you feel physically unable to work with conventional keyboards and mice, you could be literally unemployable in today's knowledge-based economy. That's not going to be a comforting thought for anyone living in a country that's having its worst recession for 100 years.

There are, however, two solutions. One, avoid getting RSI in the first place; two, there are now lots of technologies and products to help if you do start feeling you're in danger or even have to start living with the condition.

Want to avoid RSI, asks Goddard rhetorically? Change your behaviour. “It's how you work – not the machine – that is putting your health at risk. It's too easy to adopt bad posture even if you have a good chair. If you can develop the habit of checking what you are doing and then doing something to change it, you are half way there. Your body is not constructed to spend long hours sitting so do it less.”

Other proven best practice is to do things like always working with good posture, taking both small and long breaks, using

keyboard shortcuts as much as possible to minimising your mouse usage and releasing muscle tension.

Still, say the worst happens and you do overwork so much you have to live with RSI? First off, forget a cure: there ain't one. In the words of one of the classic guides to coping with it, *It's Not Carpal Tunnel Syndrome!: RSI Theory and Therapy for Computer Professionals* (Damany and Bellis, 2002), you hear the lesson that your body's changed the rules on you and these new ones are what you're going to be living with from now on.

## Changing bad habits

Instead, look to things like avoiding keyboard use as much as possible with things like speech recognition [see box on previous page], which if you buy a high enough spec microphone have finally started living up to their original hype; alternative mice, like the vertical models or either-hand ones on the market now; and non-standard keyboards, all the way from the Microsoft Natural to the high-end Goldtouch ergonomic device.

Although the powers that be don't seem as interested in RSI these days, that may be a harsh judgement. In fact the HSE is backing a major conference in London next March (<http://rsiaction.org.uk/rsi-awareness-day/>) to bring together the latest thinking on the syndrome and get the main issues an airing.

That may be good timing. Ask around your own office, your wired-up friends and acquaintances or check your own body. Those little aches and pains in your wrist and arms you ignore? They could be the first warning sign of a very unfashionable but very real problem that could cut you out of the entire computer-using loop if you're not careful so take steps now to head any problems off at the pass.

“Unless dealt with quickly and properly, RSI can and does lead to permanent disability. It's that serious,” says Ian Litterick, founder and executive chairman of a company called iAnsyst that provides a range of assistive technology for disabled people ([www.iansyst.co.uk](http://www.iansyst.co.uk)). ■

## Resources

- RSI fighting keyboards, software and other products:  
[www.goldtouch.com](http://www.goldtouch.com)  
<http://www.microsoft.com/hardware/mouseandkeyboard/productdetails.aspx?pid=043>  
<http://www.nuance.com/naturallyspeaking/>  
[www.keytools-ergonomics.co.uk](http://www.keytools-ergonomics.co.uk)
- Data on RSI:  
Health and Safety Executive resources on RSI:  
<http://www.hse.gov.uk/msd/uld/index.htm>
- NHS web guide to RSI:  
<http://www.nhs.uk/Conditions/Repetitive-strain-injury/Pages/Introduction.aspx>
- An independent organisation's view:  
[www.rsiaction.org.uk](http://www.rsiaction.org.uk)

# Snap happy

Tom Molloy of the Disabled Photographers' Society zooms in on some of the fascinating technology used by members in pursuit of the perfect image

**T**here are many ways for disabled photographers to overcome impairment in order to take up or continue with photography.

The techniques used by members of the Disabled Photographers' Society are as individual and varied as their disabilities. And while there are common ways around things, there is no one size fits all solution.

For a vision impaired photographer, the answer may be to use a laptop as a camera screen or viewfinder. Nikon produces a LAN Adaptor, which connects to the base of a camera and transfers an image via IEEE 802.11b/g technology to a laptop.

As the wireless link is bi-directional, with appropriate software, this also allows the user to set most of the camera operating parameters from the laptop screen and even focus and shoot at the touch of a button.

The image is displayed in real time and stored onto the laptop's hard drive. The software works well under Dolphin's Lunar computer screen magnification software. This system has meant that at least one of our members has been able to continue with photography, despite failing eyesight.

A wireless link is not a cheap option however, but most camera manufacturers produce software that allows the user to trigger their camera from a computer, via a lead, and for the images to be stored directly on the computer. Canon usually provides such software free with its cameras, but other manufacturers may make an additional charge.

Another useful gadget is something called a Zig-View. This is essentially a small camera that fits over the viewfinder of a camera with a separate small screen that can be detached and used as a remote shutter release.

A video out lead comes as a part of the kit and can be used, with a TV, to give a much larger viewfinder image. This gadget is useful to those with a visual impairment, but also to those with physical problems, particularly wheelchair users.

One very common question, which we are asked regularly, is one that affects amputees and stroke victims: "Is there a left handed camera?". The loss of the right hand or arm presents a unique problem, how do you operate the shutter?

Well, the answer is simple and cheap, if the left hand or arm is intact and functions – turn the camera upside down and use the left thumb to operate the shutter. This works especially well with the smaller digital cameras that are now available.

So what if a person can not use either arm? There are various tripods and clamps available that can support the camera and a standard remote release can be modified to be triggered by the mouth, when gripped in the teeth.

The image below was shot by John Miller, a tetraplegic, using just such a system. John can hold the camera but has no function in his fingers. He triggers his camera, a Canon 10D SLR, via a standard Canon remote release with an additional piece of grooved plastic glued to the button. With his teeth in the groove, he just bites to take the picture.



Flipping heck: John Miller FDPS LRPS took this picture of aerobatic planes by biting on the shutter release of a Canon EOS 3

OK, he was helped into the aircraft and the manoeuvre was practiced several times before they got the shot, but that's half the secret and the fun. By the way, there is no digital trickery in that image, it was shot on good old film, in a Canon EOS 3, they just got the timing spot on.

If needed, cameras can be mounted on a wheelchair, scooter or even a walking stick. You just need to ask or think a little laterally sometimes – and to keep persevering.

We are currently trying to develop a system with a motorised camera mount linked to a small touch-screen computer. This is not a cheap option, but what price do you put on the joy that a photograph can bring and the feeling you get when you capture 'that image'? Priceless, as they say! ■

*Tom Molloy is chairman of the Disabled Photographers' Society.*  
[www.disabledphotographers.co.uk](http://www.disabledphotographers.co.uk)



# High fives for better web pages

Chris Mounsey explains why the latest draft of HTML5, the language for describing web pages, is going to make sites a lot more accessible

**M**any of the enduring strengths of HyperText Markup Language (HTML) – the code that structures web pages – have lain in its semantic simplicity, and HTML now forms the backbone of billions of pages across the World Wide Web (WWW).

With the development of HTML5, however, this venerable language is about to become a lot more powerful – and a lot more accessible.

Already, the web has improved the lives of millions of disabled people: instant messaging allows the deaf to communicate with fluency; screen readers enable the blind to navigate websites and take advantage of the facilities delivered through them; switches and retina-trackers have allowed those with severe mobility problems to engage with the world at large.

These customised devices and pieces of software have been able to take advantage of HTML's ordered structure. But the limited scope of HTML, which has not been revised since 2001, has prevented such devices from delivering to their full potential.

All this is about to change – for the better – with the advent of HTML5.

The HTML5 Working Draft was published in January 2008 by the World Wide Web Consortium (W3C), and the specifications laid out in the document entail major improvements in the language's capabilities.

## Standardised structure is the key

The most significant of these changes, from an accessibility point of view, is the standardisation of the structural elements of web pages.

As its name implies, HyperText Markup Language has only been used to define the style of textual content within a page. As such, HTML has relied on a very few 'tags' – code identifiers for text elements – such as headings (H1, H2, H3, etc) and paragraphs.

As a result, the layout of web pages has relied upon coder-defined hooks to allow Cascading Style Sheets (CSS) to be deployed. The trouble is that the names of these hooks have never been standardised: one coder might refer to the main navigation as 'main\_nav', another as 'nav' and yet another as 'menu', for example.

HTML5, however, includes a range of tags that allow website coders to define the actual structure of the page using a standard set of HTML names. In other words, instead of defining their own names for a menu, website coders now have a standard to follow.

So, how can this help in the fight to ensure that websites become – and remain – accessible?

First, the codified tags replace the plethora of proprietary names, ensuring that screen-readers and other assistive technologies can understand the areas delineated on the webpage.

Second, these areas can be far more comprehensive than

before. HTML5, for instance, allows for the designation of sections, articles, titles, asides and footer tags within the content itself, as well as for headers, footers and navigation areas in the main page.

Third, using the defined tags, assistive software can empower users to navigate any page with far more control. To cite just one example, in order to avoid having to listen to all the navigation options, a blind user has hitherto relied on the website coder

putting a 'skip\_nav' link into the page or arranging the page structure so that the menu links come last.

With HTML5 areas, however, the screen reader software will be able to distinguish between the navigation and the content: as such, users will be able to jump to whatever area of the page they desire – users will be empowered because they no longer have to rely on the thoughtfulness of the website coder.

The potential of this change cannot be underestimated.

Although HTML5 is still in draft form (and will remain so for some years), and although Internet Explorer still lags behind, many of the more advanced browsers – such as Firefox and Safari – have started to implement HTML5 features.

With the ease of development that HTML5 offers, it will not be long before coders too begin to incorporate this advanced structure within their web pages; with the commensurate development of assistive technologies, we will finally be able to achieve true web accessibility. ■

*Chris Mounsey is an information architect with VerseOne Technologies, a company specialising in the building of accessible websites and web applications.*



Until now, hooks have not been standardised

# Opportunity for all

At UBS, we are committed to developing diverse talent and ensuring disability is no obstacle to success.

It starts with you:

**[www.ubs.com/careers](http://www.ubs.com/careers)**

Wealth Management | Global Asset Management | Investment Bank

You & Us



# Beyond the fringe

Across the tracks from the giant BETT exhibition, the Special Needs Fringe is an oasis of calm and free coffee

**A**ssistive technology for special needs education has received several shots in the arm over the past year.

More teachers will be trained to identify and support children in England with dyslexia following a review by Sir Jim Rose. Children's Secretary Ed Balls has announced £10m for extra help, including training for 4,000 teachers.

Next year, Home Access, the £300m scheme to provide children with computers to use at home, gets underway in earnest. Low income families will be able to apply for a grant to purchase a Home

Access computer and internet package.

The systems will come with a suite of assistive software as standard. Children with more complex needs will also be catered for.

Keytools has won a contract from the education technology agency Becta to provide assistive technology to Home Access learners needing adapted hardware devices such as mice, keyboards and keyboard stickers.

Visitors to Bett and the Fringe will see that the assistive technology industry continues to innovate with software and access methods such as touch screens and

eye gaze. Late last year, a large group of companies set up the British Assistive Technology Association to promote the assistive technology sector and lobby for greater recognition from government.

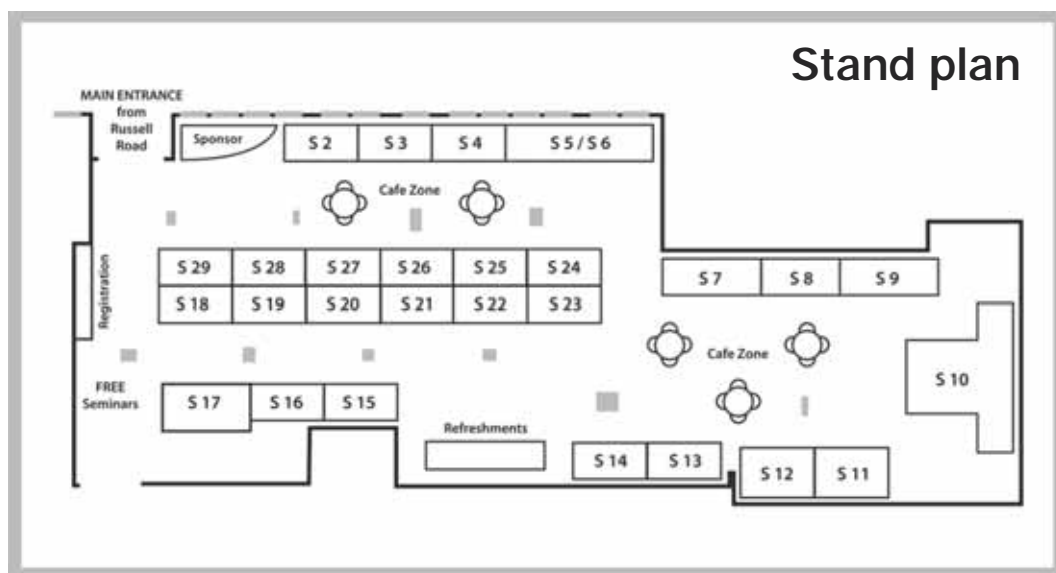
So, despite tighter budgets, there are still reasons to be cheerful and plenty of new ideas at the Special Needs Fringe exhibition and seminars.

## When and where

13-15 January 2010

Olympia Hilton, Kensington, London

Open from 9.30 to 5.00pm



## Key to the stand plan

S26	Ace Centre Advisory Trust	S10	Inclusive Technology	S24	Smartbox Assistive Technologies
S11	AMDI and News-2-You	S21	IntelliTools Inc	S15	Soundfields
S01	Atomic Learning	S28	Yettools	S19	SpaceKraft
S27	Attainment Company Inc	S23	Liberator	S22	Special Children
S25	Chatting Independently	S29	LifeTool	S08	Techcess
S17	Crick Software	S07	Penfriend	S16	The Advisory Unit
S5/S6	DynaVox/Mayer-Johnson	S18	Possum	S04	The Aidis Trust
S14	GameLab London	S02	Pretorian Technologies	S20	The Signalong Group
		S12	Quality Enabling Devices (QED)	S09	Toby Churchill
		S3	SEMERC	S13	Traxsys Input Products





## Tobii C-Series

Two new touch screen, weather resistant communication aids.

The C-Series comes in two models: the C8 has an 8 inch screen, and the C12 has a 12 inch screen (pictured with optional CEye eyegaze module).



We supply the C-Series with The Grid 2, providing symbol and text communication and control of other Windows applications.



### Features

- Windows PC with Core Duo processor
- Touch screen
- Switch Ports
- Environment control
- Loud, clear speakers
- Camera
- Integrated stand

### Options

- Text messaging module
- Wireless Internet
- Wheelchair mounting
- Protective soft case
- CEye for eye gaze (available for C12 only)

Smartbox Assistive Technology

www.smartboxAT.com - info@smartboxAT.com - 01684 578868

# TechReady

TECHNOLOGY FOR EVERYONE

[www.techready.co.uk](http://www.techready.co.uk)



### TechReady Disability Solutions

- \*Over 2000 different products from 300 manufacturers
- \*Free consultation with trained and friendly professionals
- \*On-site assistive technology training

### Contact Information

Phone: 0208 532 6142

Fax: 0208 532 6140

Email: [sales@techready.co.uk](mailto:sales@techready.co.uk)

Visual Impairment \* Ergonomics \* Dyslexia Support \* Mobility



GINGER  
The write solution

textHELP  
Writing • Language • Learning

DRAGON  
SOFTWARE

claro  
SOFTWARE

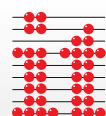
## The New Inclusive One Touch

*the all-in-one touch PC designed for education*

- With free educational software and MyZone - a new configurable desktop.
- Screen has adjustable height and tilt.
- Robust design.
- Extra tough touch screen.



Call for our new catalogue on 01457 819790  
or see [www.inclusive.co.uk](http://www.inclusive.co.uk)



Inclusive Technology  
*All the help you need*



Height  
adjustable  
screen

## One Touch from Inclusive

At the Special Needs Fringe Inclusive Technology will feature the Inclusive One Touch, a touch screen model developed for educational use with computer company RM.

The PC, which features capacitive touch screen technology, has an integrated webcam and microphone and front-facing USB ports.

The guts of the One Touch is the RM One school computer, to which Inclusive has added a touch screen. The collaboration represents the first fruit of RM's purchase of a 25% stake in Inclusive.

The system comes with a collection of free educational software. It also includes MyZone – a configurable desktop from Inclusive that provides a personal workspace for each pupil.

Teachers can create individual zones for each learner with access to their programs, activities and games. The system also allows access to selected websites and web pages.

Pupils can enter their zone using touch, a mouse or switches. Each screen can have up to 12 icons to choose from.

MyZone includes 12 simple games including Colouring In, Making Music, Tops Middles and Bottoms and Make a Pizza.

[www.inclusive.co.uk](http://www.inclusive.co.uk)

## Speaks4me flexes its PECS

Speaks4me is an electronic speech communication aid that has been designed for students who are familiar with the Picture Exchange Communication System (PECS) system.

The system uses a drag and drop display that allows users to select images and drag them into a composition area where they can assemble a sentence.

They then play the words on a speech synthesiser using either male or female human voices. Speaks4me is programmed with over 2,000 images from the PECS 2009 CD-ROM.

The user interface can be adjusted to show single images or category tabs that can be expanded to show a number of images. The communications aid is available in four hardware formats.

The Portable (£1,850 including VAT) is based on a Microsoft Windows Portable Media Player. The Tablet (price not available) is a touch screen device with a seven inch screen and built-in webcam.

The Convertible (£1,750) is based on a laptop, while the Speaks4me Rugged (£4,000) has a touch screen and is resistant to shock, water and dust.

Speaks4me was originally developed for company founder Stephen Lodge's young son Callum. A share of the profits from the new venture will be donated to



communications-related charities.  
[www.speaks4me.com](http://www.speaks4me.com)

## Smartbox debuts Tobii communications systems

Smartbox, the company that distributes Tobii systems in the UK, will be demonstrating the recently launched Tobii C8 and C12 communication aids based on a touch screen PC.

The C-Series communication devices come with either an eight inch screen (C8) or a 12 inch screen (C12).

Users communicate via text or symbols that generate synthesized speech. They can also connect with others through email, text message or chat.

The Tobii C12 can be controlled in several ways including the built-in touch screen, keyboard, mouse, headmouse, switches, or the optional eye control unit, the Tobii CEye.

The CEye tracker unit docks with the Tobii C12 and can cope with users who use glasses or contact lenses and it is not affected by eye colour or light conditions.

It is also able to re-detect a user's eyes and start tracking again automatically if the user should move out of range, or if the device is temporarily removed from the mount.

The Tobii C12 comes with Tobii Communicator software that allows users to communicate using text or the more than 15,000 SymbolStix symbols.

The system has ready-made page sets that help therapists set up an individual's language. ■

[www.smartboxat.com](http://www.smartboxat.com)





## Digital hearing device reduces interference

Gordon Morris has launched the DigiSystem Combo DM-30, an assistive hearing device for students that can transmit and receive speech digitally.

The system is designed to be used by groups in a classroom setting with a teacher using a master unit coordinating the activities of students.

Traditional radio systems limit deaf students' ability to follow lessons and discussions, because when more than one microphone is activated they interfere with one another causing time delays and irritating drop outs.

The DM-30 Combo's digital transmitter has a built-in microphone and can be used either as a teacher's microphone or as a receiver for students, with a push to talk function.

Digital technology not only provides a clearer transmission without time lags, but also enables conversations to be encrypted.

Encryption prevents unauthorised people from accessing a network and stops networks interfering with one another. DM30 users are issued with a four digit PIN that they key in to enter their own network.

[www.gordonmorrisshop.co.uk](http://www.gordonmorrisshop.co.uk)

## Braille notetaker from HumanWare is a lightweight

HumanWare has launched a portable Braille notetaker, the BrailleNote Apex, which the company describes as its thinnest and lightest notetaker.

The device is 2cm thick and weighs 812 grams. It features KeySoft Version 9, a suite of productivity applications.

The machine, which HumanWare says has been ergonomically designed, offers a full-size Braille or QWERTY keyboard.

The BrailleNote Apex, which costs £4,195 exclusive of VAT, has 8GB of internal memory and support for high capacity SDHC cards, along with four high-speed USB 2.0 ports, built-in Wi-Fi, Ethernet and Bluetooth.

The BrailleNote range was introduced almost 10 years ago and the BrailleNote Apex is the ninth notetaking device HumaneWare has produced.

[www.humanware](http://www.humanware)

## 2010 sees upgrade for Dolphin's software

Dolphin Computer Access will be overhauling its range of access software – SuperNova, Hal, Lunar and LunarPlus – to make the programs more usable.

The company, which plans to launch its upgrade early in 2010, has focused on improving documentation so it is based around tasks a user might use Dolphin software for.

In particular, the company has overhauled Word support making it quicker for users to find the help they need. Dolphin is also introducing a new Scottish voice to its range. The changes will appear in version 11.5, which will be made available as a free upgrade to users who already have version 11.

"In the access market many products are over complicated," says Dolphin managing director Noel Duffy. "We have gone back to first principles to improve the user experience."

[www.dolphinuk.co.uk](http://www.dolphinuk.co.uk)

## Portable Intel Reader turns text to speech

Intel, the company that invented the microprocessor, has turned its hand to assistive devices with the development of the Intel Reader, a handheld optical character recognition system.

The purpose-built Intel Reader (£999 excluding VAT) takes photographs of text, uses OCR software to decipher it and then reads the results aloud, enabling people with vision or reading impairments to decipher books, documents, labels and so on.

The Intel Reader is the size of a paperback book and has a five megapixel camera. The reader's 2GB of memory is enough to hold up to 600 processed pages or 500,000 text-only pages.

The system supports Daisy, MP3, WAV

and ASCII text formats and can be used in conjunction with an Intel device for scanning books called the Portable Capture Station (£249 excluding VAT), which can be connected to the reader via a USB cable.

"For someone who has difficulty reading standard print, the ability to quickly and easily access information, such as a job offer letter or even the menu at a favourite restaurant, can improve quality of life and help them reach their full potential," said Louis Burns, vice president and general manager of Intel's Digital Health Group.

The Intel Reader joins three other portable OCR readers on the market: knfbReader, TextScout and the Abbyy Fine Reader. The Intel product, distributed in the UK by HumanWare, is the only one with purpose built hardware.

[www.humanware.com](http://www.humanware.com)

## RNIB site gives easier access to SharePoint

The Royal National Institute of Blind People (RNIB) has revamped its website [www.rnib.org.uk](http://www.rnib.org.uk).

The organisation says the makeover means it is one of the most accessible SharePoint 2007 sites in the world. SharePoint 2007 is a collaboration and content management system from Microsoft.

Developed in collaboration with web agency Content and Code and software

developer Telerik, the website is designed to improve the experience for website visitors and also to enable staff who rely on access technology to edit or upload content without support.

"These pioneering developments ensure that RNIB's website conforms to the strictest 'Surf Right' standards at both the front and back end," says RNIB, "and make [www.rnib.org.uk](http://www.rnib.org.uk) one of the most accessible Microsoft SharePoint websites in the world."

[www.rnib.org.uk](http://www.rnib.org.uk)





## sight village

**unmissable for****end users employers professionals public sector****QAC Sight Village  
Edinburgh 2010****— Venue: —****The Assembly Rooms  
54 George St  
Edinburgh EH2 2LR****2 March 10.30 - 4.30****3 March 10.30 - 3.30****Sponsored by:  
Sight and Sound Technology****QAC Sight Village events are  
the UK's leading exhibitions of  
technology, equipment and  
support services for people who  
are blind or partially sighted.**

## Texthelp updates Browsealoud

Texthelp, the software company based in Northern Ireland, has updated its BrowseAloud web reading software that speaks text out loud when a user's cursor moves across a screen.

The application now appears on-screen as a floating toolbar where the user can easily access the features of BrowseAloud.

The program now has translation facilities that will provide word for word translations between five languages: English, French, German, Italian and Spanish.

Users can look up definitions from a database dictionary and website owners can add words and definitions to this dictionary for their own site.

In addition, a screen masking feature helps users focus on a particular area of the screen. BrowseAloud can also alter the appearance of a screen by adding a colour filter with a letterbox reading window or an 'electronic ruler'.

BrowseAloud has the ability to convert from a web page into a sound file. Website owners can make MP3 files to host and stream directly from their website.

[www.browsealoud.co.uk](http://www.browsealoud.co.uk)

## Amplipower 50 phone is 'world's loudest'

Geemarc Telecom's Amplipower 50 is the loudest ringing phone in the world, according to RNID.

The receiver on the phone, which retails at £99, can increase its volume by 1,000 times (a range of 60db) – and rings out up to a level of 81db, which is three times more than a standard phone.

The decibel levels are adjustable, with a safety mechanism so the phone can be used by people without a hearing loss.

The Amplipower 50 also incorporates technology that prevents feedback and howling when used at the highest levels of volume.

The RNID, which also sells the phone, says that not hearing a phone ringing or not hearing the person on the end of the

line is one of the biggest frustrations of people with hearing impairments.

In another move, Geemarc has joined forces with north west residential property management firm, Jordan's, to launch the country's first property rental and communication service for deaf and hard of hearing people.

The company has agreed to supply an amplified telephone or textphone into any house rented by a deaf or hard of hearing resident throughout the Jordan's network.

[www.geemarc.com](http://www.geemarc.com)

## Global Autocorrect keeps ideas flowing

Global Autocorrect is a new spelling correction program from Lexable aimed at people with dyslexia.

The software, which costs £49.95 including VAT, will correct spelling errors on any program including email clients and social networking sites such as Facebook.

Global Autocorrect also acts as a learning tool. It compiles a list of errors that users can consult in order to improve their spelling. The program comes with over 6,000 entries pre-loaded. The number of spellings is constantly growing as Global Autocorrect uploads and collates entries from all users (with their permission).

Lexable says it vets all the common entries and distributes unambiguous corrections automatically to each user via the internet. This way, users don't have to add their own entries for their

spelling to be corrected.

The company's founder Neil Cottrell, who is dyslexic, developed the software after struggling with spell checkers.

"One of the problems I had was that I was always half thinking about ideas and half focusing on spelling," says Cottrell.

"This meant the flow of my ideas was interrupted. Global Autocorrect sits between the keyboard and a program and allows you to focus on your ideas."

[www.lexable.com](http://www.lexable.com)

## Online information about older people

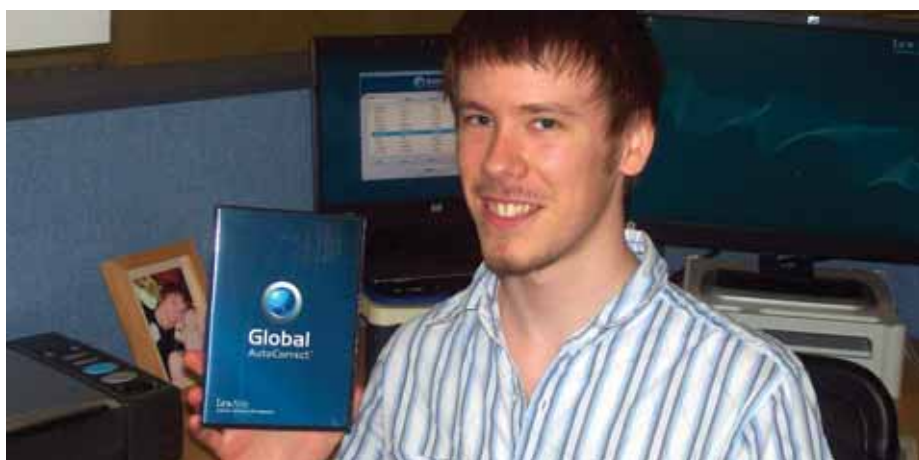
The Office of Disability Issues has launched a website to help public sector staff better understand the needs of older people. The Independent Living and Older People Resource is for staff who commission or develop services for older people.

The website is intended to help professionals tailor their work so that older people have greater choice and control over the support they receive.

It explains the concept of independent living and includes tips on how to plan, commission and provide appropriate support for older people.

The service was developed by the Office for Disability Issues, working with the Centre for Policy on Ageing and the National Development Team for Inclusion.

[www.independentlivingresource.org.uk](http://www.independentlivingresource.org.uk)



Neil Cottrell developed Global Autocorrect after struggling with spell checkers



# 100% compatible



It takes skill and experience to find the right mix of technology, training and support to make IT totally accessible. AbilityNet's reward is knowing the people we help find life has got better in all sorts of ways, from meeting challenges at school to new work opportunities, or simply being able to communicate effectively and take more control of their lives.

## Sharing knowledge

AbilityNet is a totally independent national charity, working directly with thousands of people every year to find accessible IT solutions, no matter what their age or disability. We know from practical experience what works and what doesn't, and the real problems people face. As a result we now help and support a wide variety of professionals who wish to extend their knowledge or solve difficult issues. For informed, impartial advice it makes sense to contact AbilityNet.

AbilityNet's one-stop shop includes free information and advice; individual assessments, installation, training and support; accessible IT kits for public access centres; courses, seminars and practical workshops; accessible web design and audit service; consultancy.

### For further information please contact:

AbilityNet • PO Box 94  
Warwick • CV34 5WS

\*Tel: 01926 312847 • Fax: 01926 407425  
(\*Minicom accessible)

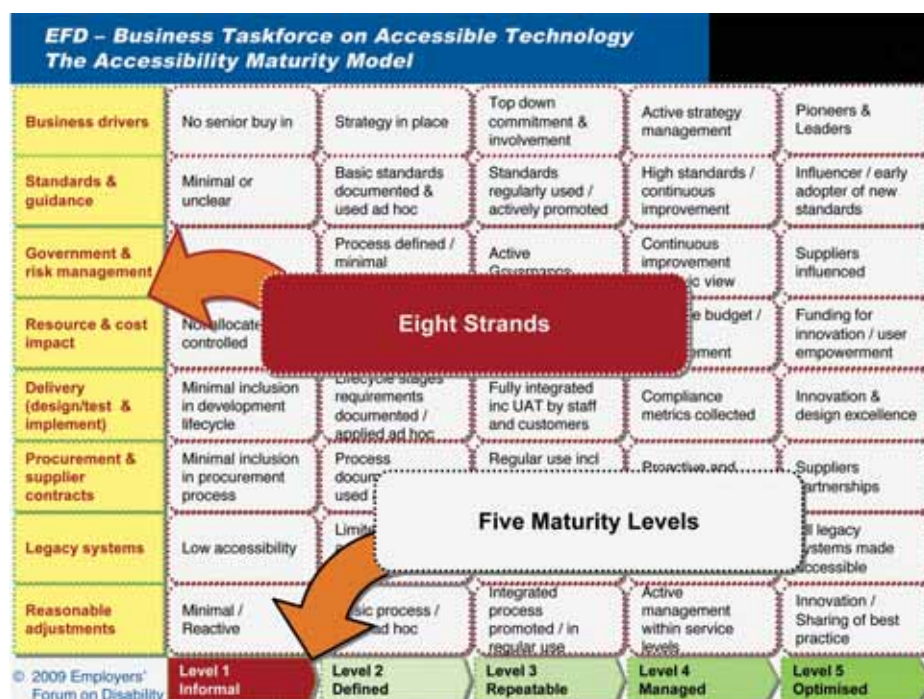
Email: [enquiries@abilitynet.org.uk](mailto:enquiries@abilitynet.org.uk)  
<http://www.abilitynet.org.uk>  
Charity no. 1067673



Adapting Technology ■ Changing Lives



# Reports aim to put the business case



The Accessibility Maturity Model has eight strands and five levels of maturity

The early part of 2010 will see a strong push to put the business case for investing in accessible IT.

The OneVoice for Accessible ICT Coalition, which represents 14 organisations, will be publishing in January a report entitled *Accessible Information and Communication Technologies (ICT): Benefits to Business and Society*.

At the same time the Employers' Forum on Disability's Business Taskforce on Accessible Technology is launching its Accessibility Maturity Model.

The Model is a template that will allow managers to work out how good a job they are doing at accessibility (see table above) and help them improve on their performance.

Not to be outdone, the British Computer Society published its own guide in November called *Accessible Technology: a Guide for IT Professionals*, which aims to give those who work in IT an insight

into accessible technology.

"Our business case report is unique in that it reflects the experiences of the ICT industry, business, government, the third sector and academia," says Nigel Lewis, chair of OneVoice.

"Executives from some of the UK's principal employers, procurers and producers of ICT have participated, discussing their business rationale for making diversity and inclusion core business values and how they have invested in accessible ICT and reaped commercial benefits." ■

## Where to find those guides

- [www.bcs.org/upload/pdf/accessible-technology.pdf](http://www.bcs.org/upload/pdf/accessible-technology.pdf)
- [www.onevoiceict.org](http://www.onevoiceict.org)
- [www.efd.org.uk](http://www.efd.org.uk)

## EMPLOYER'S FORUM ON DISABILITY EVENTS

Visit [www.efd.org.uk/events](http://www.efd.org.uk/events) to find out more about these events and to make a booking.

### JANUARY

**Scottish Forum: Mental Health**  
Edinburgh 26 January 10am-4pm  
Free to attend

### FEBRUARY

#### DDA Pt II Masterclass

London 4 February 10am-4pm  
£299 (member/charity) £420 (non member)

#### Roundtable - Non-visible disability

London 11 February 9am-11am  
Free to EFD Members

#### Webinar - Technology swap shop on accessible websites

23 February 3pm-4pm

£75 (member/charity) £125 (non member)

#### Workshop Regional: Recruitment

Manchester 25 February 10am-4pm  
£275 (member/charity) £399 (non member)

### MARCH

#### North East Forum MegaQuiz

Newcastle 4 March 6pm-8.30pm  
Free to attend

#### EFD Live!

10 March 2pm-3pm  
Free to EFD Members

#### Webinar: Non-visible disability

16 March 3pm-4pm  
£75 (member/charity) £125 (non member)

#### Workshop: Beyond Big Type 2010

London 18 March 10am-4pm  
£275 (member/charity) £399 (non member)

#### Afterhours

London 25 March 6pm-8pm  
Free to EFD Members

### APRIL

#### Welsh Forum

Cardiff 1 April 10am-4pm  
Free to attend

#### Webinar: People Networks

14 April 3pm-4pm  
£75 (member/charity) £125 (non member)

#### Roundtable: Disability and broadcasting

London 21 April 9am-11am  
Free to EFD Members

#### Workshop: maintaining accessible legacy systems

Venue TBC 29 April 3pm-4pm  
£275 (member/charity) £399 (non member)

EFD member & charity rates and non-member rates are displayed exclusive of VAT. All events include refreshments. Event delegate packs are available to purchase if you are unable to attend an event. For full details and to book, visit [www.efd.org.uk/](http://www.efd.org.uk/) events or call 020 7403 3020.

ability  
Accessible IT at work  
Issue 67 Autumn 2007



World in your hands  
Issue 68 Winter 2007

ability  
Accessible IT at work  
Issue 68 Winter 2007



ability  
Accessible IT at work  
Issue 69 Spring 2008



ability  
Accessible IT at work  
Issue 70 Summer 2008

ability  
Accessible IT at work  
Issue 71 Autumn 2008



ability  
Accessible IT at work  
Issue 72 Winter 2009



ability  
Accessible IT at work  
Issue 73 Summer 2009



ability  
Accessible IT at work  
Issue 74 Autumn 2009



# ability

Keep abreast of the latest developments in  
IT for disabled people: get *Ability Magazine*

## 2010 SUBSCRIPTION RATES FOR *ABILITY* MAGAZINE

There are two subscription options:

1. The institutional subscription comprises five copies of each print edition of *Ability* magazine per year and a licence to distribute an ebook edition (PDF and HTML versions supplied). The annual subscription fee is £160 (members of National Association of Disability Practitioners £144).
2. The personal subscription consists of either a print or ebook edition (PDF or HTML). The annual subscription fee is £60 (members of National Association of Disability Practitioners £54).

Name .....

Job Title .....

Organisation .....

Address .....

Postcode .....

Telephone ..... Email .....

Signature ..... Date .....

I wish to take out (please tick as appropriate):

- ☐ An institutional subscription
- ☐ A personal ebook subscription (state whether PDF or HTML format is required)
- ☐ A personal print subscription
- ☐ I am a member of the NADP

Please send me an invoice made out to .....

Address: *Ability Magazine*, John Lamb Media, Pellingbrook House,  
Lewes Road, Scaynes Hill, Haywards Heath RH17 7NG  
Telephone: 01444 831226  
Email: [john.lamb@abilitymagazine.org.uk](mailto:john.lamb@abilitymagazine.org.uk)  
Website: [www.abilitymagazine.org.uk](http://www.abilitymagazine.org.uk)

# Diary of events

## BETT 2010

13 - 16 January

Olympia, London

BETT is one of the biggest tech shows in the UK, attracting over 600 educational suppliers and 30,000 visitors. Special educational needs software and hardware can be seen in the Olympia exhibition halls and at the nearby Special Needs Fringe at the Olympia Hilton, two minutes away from the main show.

**Fees:** Free.

**For further information:**

[www.bettshow.co.uk](http://www.bettshow.co.uk)

## SPECIAL NEEDS FRINGE

13 - 15 January

Olympia Hilton Hotel, London

Sited just round the corner from BETT, the Special Needs Fringe is a breakaway event organised by Inclusive Technology. The Fringe is an oasis of calm compared with the main show. It features leading specialists in assistive technology and a seminar programme. The show opens at 9.30am, half an hour before BETT.

**Fees:** Free.

**For further information:**

[www.inclusive.co.uk/exhibitions](http://www.inclusive.co.uk/exhibitions)

## ASSISTIVE TECHNOLOGY INDUSTRY ASSOCIATION CONFERENCE AND EXHIBITION

27 - 30 January

Caribe Royale Conference Centre, Orlando, Florida

The Assistive Technology Industry Association's (ATIA) conference and exhibition in Orlando provides networking opportunities with disability professionals and consumers. Attendees can choose from a wide variety of educational sessions and try AT products and services showcased by leading suppliers. In a sign of the times fees for the event are lower than last year.

**Fees:** Standard registration from 16 January is \$525.

**For further information:**

Contact the ATIA office at via email at [info@atia.org](mailto:info@atia.org) or visit [www.atia.org](http://www.atia.org)

## TECHSHARE INDIA 2010

15 - 16 February

India Habitat Center, New Delhi

Over 500 international delegates are expected at Techshare India, a pan-disability conference for technology

professionals to share experiences, products and research in assistive technology. The organising committee includes RNIB.

**Fees:** Corporate and public sector, 6,067 rupees. Disabled delegates and non governmental organisations, 3,033 rupees.

**For further information:** email [techshare@barrierbreak.com](mailto:techshare@barrierbreak.com) or visit <http://techshare.barrierbreak.com>

## DYSLEXIA SOLUTIONS DEMYSTIFIED

26 - 27 February

Liverpool City Centre Holiday Inn

The two-day conference is an opportunity to find out about the latest research and best practice for supporting individuals. Victoria Crivelli will be talking on technology for supporting dyslexics.

**Fees:** One day standard rate £150. Two day standard rate £250. Discounts for members and students.

**For further information:** Call

08452519005 or go to [www.bdadyslexia.org.uk](http://www.bdadyslexia.org.uk)

## SIGHT VILLAGE EDINBURGH 2010

2 - 3 March

The Assembly Rooms, George St, Edinburgh

Queen Alexandra College's well-attended series of exhibitions aimed at those with vision impairments and people who work with them moves to Scotland.

**Fees:** None.

**For further information:** email

[sv@qac.ac.uk](mailto:sv@qac.ac.uk) or visit [www.qac.ac.uk](http://www.qac.ac.uk)

## CALIFORNIA STATE UNIVERSITY, NORTHRIDGE (CSUN) 25TH ANNUAL INTERNATIONAL CONFERENCE

22 - 27 March

Manchester Grand Hyatt Hotel, San Diego

The annual CSUN conference is the largest event in the world covering assistive technology. Organised by CSUN's Centre on Disabilities, the show runs over four days. The keynote speaker is Captain Ivan Castro, the only blind member of the special forces serving in the US army.

**Fees:** The regular fee is \$500, \$450 before 8 February and \$545 after 26 February.

**For further information:**

<http://csunconference.org> or email [conference@csun.edu](mailto:conference@csun.edu)

## Contacts

### Ability magazine

Editorial, advertising and other enquiries: [john.lamb@abilitymagazine.org.uk](mailto:john.lamb@abilitymagazine.org.uk)  
[www.abilitymagazine.org.uk](http://www.abilitymagazine.org.uk)

### AbilityNet

Charity advising disabled people, employers and others on assistive IT. 0800 269545  
[www.abilitynet.org.uk](http://www.abilitynet.org.uk)

### Directgov

Government site with help on employment, training, education, financial support, transport, rights and other issues for disabled people.  
[www.direct.gov.uk/en/disabledpeople/index.htm](http://www.direct.gov.uk/en/disabledpeople/index.htm)

### Employers' Forum on Disability

Claims to be the world's leading employers' organization focused on disability as it affects business, including recruitment and retention of disabled staff and serving disabled customers.  
[www.efd.org.uk](http://www.efd.org.uk)

### Emptech

A database that provides information resources on assistive technologies, which are designed to help those with specific disabilities work and study. Emptech includes product descriptions, links to manufacturers, suppliers' addresses, as well as other related resources.  
[www.emptech.info](http://www.emptech.info)

### IT Can Help

Volunteers offering disabled people free local help with computers. 0800 269545  
[www.itcanhelp.org.uk](http://www.itcanhelp.org.uk)

### Leonard Cheshire

Disability care charity providing support services for people with physical disabilities and learning difficulties. 020 3242 0200  
[www.lcdisability.org](http://www.lcdisability.org)

### Shaw Trust

Charity that champions the abilities of disabled people, enabling over 60,000 people per year experiencing all types of disability to make the most of their skills, abilities and employment opportunities. 01225 716300  
[www.shaw-trust.org.uk](http://www.shaw-trust.org.uk)

### Remploy

Employment services for disabled people and employers, plus other business services, including IT equipment recycling.  
[www.remploy.co.uk](http://www.remploy.co.uk)

### U Can Do IT

A charity that provides computer training for blind, deaf and disabled people in their own homes. 020 7730 7766  
[www.ucandoit.org.uk](http://www.ucandoit.org.uk)

### Workability

Services to help employers fill vacancies and disabled people to get jobs. Part of charity Leonard Cheshire Disability. 0845 671 7173  
[www.workability.org.uk](http://www.workability.org.uk)



# Life in the slow lane

Even with technology, disabled workers can't keep up with their non-disabled colleagues. The answer is to match the work to the people, argues Kevin Carey

Recently I attended yet another debate about the relationship between disability and information technology. If I said it was profoundly depressing, I would be exaggerating the pleasure I gained from it.

There were the same old suspects drawing salaries for saying the same old things. The focus was on what the technology industry might be able to do to narrow the 'digital divide' for disabled people.

But most of the time was spent in complaining about prejudice, the cost of access technology, the limitations of Access to Work, non compliance with web accessibility and the shortcomings of the Government's procurement policies.

All very good points in their way, but hardly relevant to the issue.

If all the above problems were overcome, if we had a perfect world with no prejudice and perfect, free access technology, there would still be one, central problem, processing speed.

## Non-competitive

When I arrived to work with blind people in the Caribbean, the major occupation was basket-making. I soon found out that blind people, lacking hand-eye co-ordination, made baskets more slowly and with more faults than sighted peers, so they were non-competitive; they were being subsidised to make goods they could not sell.

Much the same applies to people with disabilities who use ICT at work. I know, you can always find exceptions but in general people with visual and physical impairments and intellectual disabilities process data more slowly than their peers.

I don't know about people with hearing impairments. No amount of



Kevin Carey is head of eInclusion Consultancy at ATcare and chair of RNIB

technological acumen can free blind people from the need to access information in a linear format because they can't scan a whole page at a glance. Information architecture will help people with switches but the bigger the database, the greater the number of operations.

But perhaps most difficult of all – and hardly mentioned in the debate – are the problems of those with intellectual disabilities who find the accumulation of options bewildering.

What this means is that if we are in competition in a global labour market, we need to work out where processing speed doesn't count and, incidentally, where automation isn't likely to flourish. We need to work out what we do better than fast processors and better than machines.

At the 'top end' of the market, the real premium is on wisdom, the ability to add deep experiential value to data aggregations. When it comes to people with low skills levels, the objective should

be to identify parts of procedures that require minor but subtle variations that are comparatively expensive to automate.

But in the medium-term the great liberator will be the development of hybrid systems such that the system itself will diagnose user difficulty, triggering human help. This means that a large group of people with disabilities could all rely on one or two specialists to get them out of trouble.

Of course, matters would be much simpler if we switched to thin clients with our access technology software on the server side; but to do this we have to break the near monopoly Microsoft client-side model.

Not for the first time, I have to say that the real problem is not the technology but the people.

At the debate I attended, it was so much easier for people to take refuge in familiar arguments, delivering messages to the wrong doors. The best we can expect of technology companies is that they do their job, obey the law and keep an open mind about market opportunities to tackle the accessibility problem; but it isn't their job to rid the world of prejudice, they aren't vicars or legislators.

## Missing the point

As long as we go on with this line of behaviour, we will not focus on the real problem. Nobody wants to know that there are areas of activity where disabled people can't be competitive; it's much better to complain that the world is an unfair and cruel place.

The problem is that this stops us facing the non-competitive problem honestly. As long as we can shift the blame onto somebody else, we don't have to do anything ourselves. ■



## VoxEnable – Speech Enabling your Applications

VoxEnable together with Dragon Naturally Speaking allows you to talk to your favourite applications. Open, create, format, edit, manipulate and search using only your voice, reducing reliance on a keyboard or mouse.

### Current VoxEnable applications include...

**The complete Adobe Suite including:** Adobe® Reader®, Acrobat, After Effects, Contribute, Dreamweaver, Encore, Fireworks, Flash, Illustrator, InDesign, OnLocation, Photoshop®, Premiere Pro and Soundbooth

**Mapping Applications:** Inspiration®, MindManager Mindjet, Matchware Mindview, MindGenius

**Accessibility Tools:** Zoomtext and ClaroRead

**Lifestyle applications included free:** Adobe® Reader®, Window Live Messenger™, Outlook Express, Yahoo! Messenger, Notepad, Skype™, Thunderbird and iTunes!

**Other applications include:** Paperport, Omnipage, PDF Converter, Audio Note Taker, Olympus DSS Player, EndNote, Open Office, Star Office

**Coming soon:** Wynn, Kerzweil, Supernova, Final Draft, Quark, Roxio, Nero, Sibelius and more!

**Visit [www.voxenable.com](http://www.voxenable.com) or your favourite reseller for availability, pricing and information on site licencing**

Online demonstrations are available on the VoxEnable YouTube channel at [www.youtube.com/voxenable](http://www.youtube.com/voxenable) email [sales@voxenable.com](mailto:sales@voxenable.com) , visit the website [www.voxenable.com](http://www.voxenable.com), or call 01453 827899

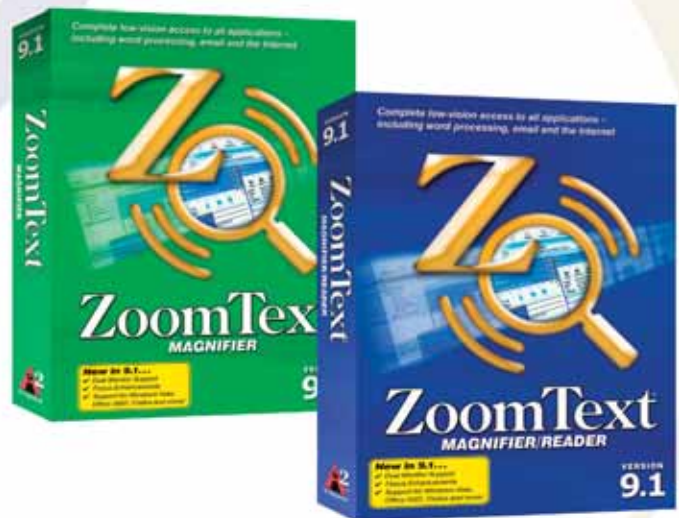




# ZoomText Keyboard Ease of use at your fingertips can be yours **FREE!**



Purchase any  
boxed copy of  
ZoomText and  
receive a ZoomText  
Keyboard **FREE!**  
(RRP £75.00)



## LIMITED OFFER!

Telephone **0845 634 7979** or email  
**[info@sightandsound.co.uk](mailto:info@sightandsound.co.uk)**  
for more information.

