abilityNet

Assistive technology at work

Issue 84 Winter 2011

The BETT education show preview

AT for the Arab world

- Portable DAISY player review
- Quicker Clicker 6
- The 15 minute web test
- Exciting mind mapping
- Remote training

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ability

Assistive technology must move off the shelf and into the classroom, argues John Lamb

Aids to learning

Despite ample evidence that programs developed to aid literacy and communications skills can transform children's learning, many schools shy away from using the technology to its fullest extent.

This is partly because of a lack of teacher skills, a perception that using technology calls for extra time in preparing materials and concern that assistive technology will add to already strained school budgets.

These are outdated views. Developers have not only made big strides in enabling students to use assistive software on their own, but they have speeded up the process of creating course materials and greatly improved the availability of ready made content (see our preview of Clicker 6 on p19).

Computers are powerful learning tools for pupils with special educational needs (SEN), opening up the curriculum and engaging them in learning in a way that nothing else does. Colourful graphics and instant rewards motivate children.

Touch screens allow them to draw when they cannot use a pencil and literacy software can read aloud text and help with writing. Alternative means of controlling a computer enable many children with physical disabilities to access technology.

A just published report by Ofsted called ICT in Schools highlights the benefits of adaptations in helping children to study ICT.

The education standards body found that pupils with special needs in the schools it visited were able to make good use of ICT adaptations in school and at home. "In most cases this enabled them to achieve in line with their school peers," said Ofsted.

However, in too many schools assistive technology sits on a shelf because no one knows how to use it. For technology to be effective there has to be better assessment of pupils as well as specific training for teachers and teaching assistants.

These recommendations are among a number made by the British Assistive Technology Association (BATA) in response to a consultation on auxiliary aids by the Department for Education (see opposite page).

BATA advocates a much more proactive approach to the use of assistive technology in schools, arguing that a large number of children in mainstream schools stand to benefit from wider availability of AT.

Schools are concerned that changes to the Equality Act will saddle them with the cost of providing assistive technology from September this year.

They should not be: any extra costs will be small potatoes compared with the savings in staff time and the payback from investment in our children's futures. ■

Tech firms' five point plan for school technology

The British Assistive Technology Association (BATA) has published a five point plan to boost the provision of assistive technology (AT) in schools.

The trade association calls for school-wide licences for literacy support software – to help the one-in-ten students – who are dyslexic and the introduction of accessible concept mapping software, school websites and virtual learning environments.

Schools should make curriculum materials available in accessible formats for students with a reading impairment through services such as the Load2Learn project run by the RNIB and Dyslexia Action.

BATA also wants the Equality and Human Rights Commission to rewrite a draft Equality Act code of practice covering disabled people to strengthen its provisions for assistive technology.

"This must be addressed before it is finalised and sufficient regulation included to ensure that less visible learning disabilities are properly catered for, as well as physical and severe learning disabilities," says BATA.

Assistive technology should not be confined to children who have statements of special education needs, BATA argues, because many children with dyslexia who need help do not have statements.

Finally, the 180-strong association says AT should be seen as an investment that will pay back in the future and calls for better assessments to enable children to realise their full potential, free-up staff time and integrate disabled children into mainstream classes.

BATA's plan is in response to a public consultation by the Department for Education on its proposal to require schools to provide auxiliary aids for children with disabilities from 1 September 2012.

The new Equality Act places the onus on schools to make adjustments and many schools fear they will be required to spend significant extra sums on assistive technology.

Under the old Disability Discrimination Act schools were exempt from having to make reasonable adjustments, because disabled children were regarded as being covered by statements of special educational need.

The Department for Education has tried to reassure schools that "the great majority of disabled children who need auxiliary aids and services will also already be receiving them through SEN statements".

But BATA does not agree. "This is hugely optimistic," says BATA council member Ian Litterick.

"How many schools have sufficient knowledge of appropriate assistive technology to know what the child should have – even assuming that the child has been properly diagnosed?

"Not all special schools have as good a knowledge of AT as they should and too few mainstream schools have enough specialist knowledge to equip them to handle even visible disabilities." ■

RNIB leads international quest for cheaper Braille cell

The RNIB is leading an international campaign to drastically cut the cost of the electro-mechanical cells used to create characters on Braille displays.

The charity is working with organisations such as the DAISY Consortium to find cheaper methods of producing the cells and bring down the cost from $100 per cell to a target of $25 per cell.

At present a Braille display consisting of 32 cells costs around $5,000, putting it beyond the reach of many potential users.

RNIB chair Kevin Carey says the mark-up on Braille cells is too high, there are not enough sources of supply and the components are over engineered – they last as long as 15 years.

The piezo-electric motors that drive each pin in the current range of Braille displays are the main reason for the high prices. There are some 34 projects to find alternative refreshable Braille display technologies, says Carey.

"If we don't have a completely new attitude to Braille over the next ten to 20 years it is going to die," he told *Ability*. "The bottleneck is that there is no reasonable Braille cell designed to go with ebooks."

Kevin Carey wants a 75% price cut

He added that the RNIB will lead the world campaign "because it has got to be done". ■

New for BETT 2012

See us on Stand F40

Clicker 6

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Mention offer code **ABILITY12** on our stand and receive a FREE Clicker 6 travel mug!

Employers' Forum aims to make job hunting easier

Around 20 employers have agreed to do more to remove barriers to recruitment such as inaccessible websites.

The companies have agreed to insist that the recruitment agencies they employ follow a recruitment protocol devised by the Employers' Forum on Disability.

The protocol lays down a list of actions agencies must take in order to make applying for a job easier for disabled people.

A recent survey by the Clear Company revealed that 70% of disabled job candidates who used a recruitment agency said they were not sure they would use an agency again.

"I wasn't happy with the tick boxes on an application form. One financial organisation refused to let me go beyond the opening pages of its website. There was no chance for me to put in mitigating circumstances," explained job hunter Alex Banks of Brunel University.

Graeme Elkin of de Poel said his temp agency was not being sent good disabled candidates by recruitment firms.

The EFD recruitment protocol will:

1. Actively seek and welcome applications from disabled candidates.
2. Ensure that every step of the recruitment process, including online recruitment, is attractive and barrier free for groups of disabled people.
3. Provide disability training to all employees on their legal obligations as a supplier of recruitment services.
4. Check all job descriptions and person specifications to ensure that they concentrate on output rather than process, so that they do not inadvertently discriminate against disabled people.
5. Have checked all assessments and interviews, including by telephone or online ensuring that they are free of bias and that reasonable adjustments can be made to enable disabled candidates to demonstrate their ability to do the job.
6. Offer to facilitate work trials and extended interviews for candidates disadvantaged by traditional assessment techniques, where appropriate.
7. Engage with Access to Work and other government agencies that support disabled candidates.
8. When placing temporary workers have processes in place to ensure on site provision of any reasonable adjustments and support that the individual might need, as required by the Agency Workers Directive.
9. Provide feedback to unsuccessful disabled candidates or candidates from disadvantaged groups more generally.
10. Monitor the number of candidates who tell you that they have a disability, and how successful they are in obtaining work through your agency. ■

Europe's only MSc in accessibility to close

Middlesex University is to close Europe's only MSc course in accessibility after just one year.

No more students will be enrolled once the eight currently on the course have finished the programme.

"Faced with low numbers and difficulties in recruiting, the MSc in digital inclusion is not economically viable for the university," explained Gill Whitney, digital inclusion programme leader at Middlesex.

"Yet again this raises the issue of the business case for accessibility – this time in relation to student numbers and the cost of delivering a specialist programme."

Whitney said that there was a need to raise student awareness of the benefits of qualifications in accessibility in order to convince universities that there is a viable market.

Middlesex hopes to be able to interest other institutions in taking on the course. ■

Natural England gets the all clear

Natural England's website is the first to gain the all clear from an accessibility checking service run by the Employers' Forum for Disability (EFD).

EFD members are entitled to a free web accessibility 'e-check' which was introduced after some of the organisation's 400 members expressed concern about their ability to get their ICT right for disabled people.

The e-check is a short, one-off accessibility and usability health check worth £350 that gives website owners an indication of whether disabled people might experience difficulties in using their websites.

Natural England's site scored highly in terms of web accessibility and usability by disabled people using assistive technology such as text-to-speech applications and magnification software. ■

Disabled Britons need help with net says digital champion

UK digital champion Martha Lane Fox says more needs to be done to allow online access to the 4m disabled Britons who have never accessed cyberspace. She has teamed up with ICT charity AbilityNet to end "increasing isolation" of citizens not on the web.

"Disabled people are struggling either because the devices they are using haven't been adapted properly to allow them internet access or the online services they are trying to use have not been sufficiently adapted," said AbilityNet's Nigel Lewis on Radio 4's You and Yours programme.

Lane Fox – who has also just signed up to become Patron of the charity, along with bestselling fantasy author Sir Terry Prachett – added that disabled people needed to be aware of what she called a "presumption" by commercial providers especially that they will have access to the net.

"If they're haven't, they will be excluded from a lot of the best deals," she told the BBC. "And our figures suggest even a low-income household could save £200 net a year of broadband costs, if they get online, by shopping around for cheaper web-only deals, direct debits and changing utility suppliers."

The pair said that access didn't have to be by an expensive PC and by clubbing together broadband access could be achieved by some households at around £1 a week or perhaps £7.50 a month.

Lane Fox added, "For those with limited mobility, the internet is a vital link with the outside world as I discovered for myself when recovering from a serious accident.

"In the same vein, I have observed the transformative impact that technology (in the form of a smart phone) is having on my tetraplegic uncle's quality of life."

Nearly half of the 8.7m adults in the UK who have never used the internet are disabled. ■

www.abilitynet.org.uk

The Isle of Man weighs up the cost of disability law

The Isle of Man plans to implement a Disability Discrimination Act 17 years after similar legislation was enacted in the rest of the UK.

Discrimination legislation was passed in the island in 2006, but concerns about the cost of introducing the new law have delayed its enactment on the island, whose economy depends heavily on financial services.

Assistive technology company Sight and Sound Technology has been commissioned by the Department of Social Care to assess how much the introduction of a Disability Discrimination Act would cost.

Sight and Sound will be reporting its findings in January.

"I am committed to implementing the Disability Discrimination Act in order to promote the interests of all people with a disability in our community," said Chris Robertshaw, Minister of Department of Social Care.

"It should be borne in mind that many departments of government and businesses in the private sector have already identified necessary works and have been undertaking appropriate improvements," Robertshaw told a recent meeting of disabled people on the island. ■

www.sightandsound.co.uk

Kirsty Swain, the deaf finalist in the BBC series So You Think You Can Dance, is able to dance by feeling the vibrations from music and listening to the beat. She uses a high tech Siemens Aquaris hearing aid while performing.

Touchscreen could cut the cost of Braille notetaking

Stanford University Researchers have converted a tablet touchscreen into an eight-key Braille keyboard, opening up the prospect of cheap Braille notetaking.

A team working on a summer school project came up with the idea of making a tablet such as the iPad recognise where a user's eight fingers rested on the surface when they type different Braille characters.

The system calibrates or records the positions, in the same way as a voice recognition system does.

"Instead of having fingers that find the buttons, we built buttons that find the fingers," said Stanford University's Sohan Dharmaraja, one of the researchers on the project.

Dharmaraja points out that touchscreen devices cost a fraction of the price of conventional keyboard-based Braille notetakers which can set users back between £2,000 to £4,000. ■

Training company offers one-to-one sessions online

Chris Quickfall (l) and Lee Chambers of e-Quality Learning

Training company e-Quality Learning has launched a website to teach people how to use assistive software through one-to-one online sessions.

The company has developed courses for 11 programs covering applications that include literacy support, voice recognition, mind mapping, notetaking, screen reading and magnification.

During two to three hour training sessions, trainers talk to their trainees via Skype and demonstrate programs by means of software that allows them to take control of a student's system.

"It's just you and your computer, and us and your computer – connected to each other through the web. Your trainer can see your screen, move your mouse and control your keyboard, everything you can do," says the company's promotional material.

Parts of each session are recorded and can be viewed online after each course has been completed. The videos, no longer than three minutes long, have been stored in such a way that there is no distracting buffering. They are also available in written form.

Additional information on each piece of software is also available from a resource library created by e-Quality Learning. The material is used instead of suppliers' own training documentation.

The e-learning service is aimed at employers, government bodies, universities, colleges and schools that have employees or students with disabilities.

e-Quality Learning, started by entrepreneur Chris Quickfall, has also recruited former Student Finance England accessibility expert Michelle Wickenden, who will work as the company's business development manager.

"The website enables us to carry out the initial assessment with a user to understand the individual's needs and challenges entirely online," said Quickfall, managing director at e-Quality Learning.

"This gives us the foundation to provide a tailored training programme to help the individual overcome their educational or employment challenges.

Courses costing £240 for a three hour session are currently available for Microsoft Word, Read&Write Gold, Dragon NaturallySpeaking, Olympus Sonority, ClaroRead, MindView, Audio Notetaker, MindManager, EndNote, ZoomText and Spellementary. ■

www.e-qualitylearning.com

Free magnifier picks up Vodafone award

A free smartphone app that allows users to magnify text on documents and signs and to adjust font and background colours has won its British inventors £42,000.

Zoom Plus Magnifier, developed by 232º Studios, Ian Hamilton and Digital Accessibility Centre, was among the winners of the first international Smart Accessibility Awards run by the Vodafone Foundation.

Other finalists were communications aid Help Talk; Wheelmap, a crowd source service that provides online information about wheelchair accessibility; and a big button smartphone screen keyboard called Big Launcher for people who have trouble with smaller buttons. ■

http://developer.vodafone.com/smartaccess2011

SPECIAL-NEEDS KEYBOARDS

Following careful assessment Maltron has received a substantial order from the Turkish Ministry of Education for Special needs Schools

The brief called for **"Appropriate for people with motor difficulties, visual, physical and learning disabilities in order to facilitate their typing activities"**

Left-hand model

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Talking guide to web TV

A partially-sighted computer programmer has developed a service that turns the text from programme guides to online streaming TV into real time speech.

The Talking TV Guide was developed by Ian Sharpe (pictured), who is a member of web accessibility group W3C, to convert listings from web TV guides into speech.

It allows users to select a channel, access programme descriptions and record featured listings. The Guide works on Macs, PCs, iPhones, Androids and tablets.

Most electronic programme guides are designed for sighted audiences, says Sharpe. The sliding timelines and tabular layouts are awkward to use with screen readers, particularly on mobile devices.

It's also tricky to access related program information, often located in graphic ads or call-out boxes.

One of the project's biggest challenges, he says, was to provide text-to-speech across a range of modern media devices.

"I found an altruistic firm in Poland called Ivona, worldwide leaders in automated speech software," he said.

"They have been brilliant by providing their services free while the project was being developed."

At present, Talking TV Guides only have channel and programme information for around 70 TV and radio channels, mostly on Sky.

Talking TV Guide also acknowledges there are problems with the quality of speech relayed over the net and conflicts between the virtual reader used by the service and users' own screen readers.

Some mobile handsets also make it difficult to playback speech from the service.

"The Talking TV Guide is a work in progress," says Sharpe in his blog on the site. "We are aware of a number of issues and limitations with the current service which we hope to resolve very soon and will be continually improving it over the coming months.

"In particular we will be adding the ability to:

- Set up programme reminders which will be sent via email.
- Set up your favourite channels to hear listings the way you want them."

Talking TV Guide has approached TV companies with a view to integrate the service with their guides and to increase the number of channels ■

http://paintthemirrorblack.com/blogs/TalkingTVGuide/

BRIEFS

BBC auditions

The BBC is looking for disabled presenters to front programmes on technology, among other subjects. The deadline for applications for the 'presentable' scheme is the end of January. Applicants who are selected will undergo screen tests in Glasgow, Cardiff, Belfast, London, Salford or Bristol. A final group will receive training from the BBC Academy in 2012, to help them develop their on-air skills.

www.bbc.co.uk/commissioning/news/presentable.shtml

Braille codes united

Unified English Braille (UEB) is now the official braille code for the UK, replacing Standard English Braille (SEB) after 70 years. The decision by the UK Association for Accessible Formats (UKAAF) brings this country into line with other English speaking nations such as Canada, Australia, New Zealand, Nigeria and South Africa. The exercise, which has already cost £40,000, will only affect very old forms of software, says UKAAF.

www.ukaaf.org

Sony's accessible specs

Cinema going is set to become a lot more accessible. Sony has demonstrated prototype glasses for hearing and vision impaired cinema goers. Sony's glasses include a receiver and headphones to provide higher volume soundtracks to hearing impaired people and to deliver audio descriptive tracks to vision impaired people.

The glasses can also be used to view caption data. Sony says the caption system is capable of providing a choice of up to six languages and is driven by a wireless transmitter. The company said the technology is adaptable for viewing 3D movies.

Government website aims to improve access to people with disabilities

A new website allowing disabled people to tell Government and business how to make the internet more accessible has been launched by communications minister Ed Vaizey.

Visitors to the eAccessibility Forum site are invited to share their experiences of using websites and other online services.

The site is the online presence of the eAccessibility Forum, a coalition of Government, charity and private sector organisations, who work to improve access to technology.

The new website will help the Forum develop ways to improve online accessibility and develop an eAccessibility Action Plan.

"The internet has changed the world but too many people are excluded from the digital revolution," said Vaizey.

"We need to make the internet more accessible so everyone can share in the benefits the web has brought.

"I urge people to visit the site and tell us what we can do to make the internet more accessible for them."

Common issues that can hinder online accessibility include non-descriptive links such as 'click here' or 'more info', insufficiently highlighted links and blank headings.

A more accessible website helps providers reduce costs and potentially increase business while users can access information quickly and easily.

The website aims to be as useable as possible and has been designed to comply with AAA guidelines from W3C, which sets standards for web accessibility.

Users will be able to debate and comment on five key areas of online accessibility. These are:

- How websites and online services can be made more accessible to people with disabilities
- What support might be needed to make technology more accessible to disabled people, and how this is funded
- How laws and regulations can be improved to make technology more accessible
- How content, from television to eBooks, can be accessed equally by everyone
- How Government and industry can more effectively inform people about online accessibility. ■

www.discuss.culture.gov.uk/eaccessibility/

Turkish schools invest in alternative keyboards

Disabled children in 10 Turkish schools will be using adapted keyboards as part of a major push to improve classroom facilities for pupils with mobility, hearing, sight and learning impairments.

The education ministry has ordered 350 Turkish character keyboards from UK firm Maltron. The contract includes left and right handed models, as well as expanded keyboards and keyboards designed to be used with pointers and key guards that help users locate keys accurately.

The schools will also be getting other devices such as Braille printers and hearing systems under a programme that is 75% funded by the EU.

"The single-handed keyboards have the most commonly used keys close together to prevent a user from having to hunt for them. The strongest digit, the thumb, is used to particular advantage," said Stephen Hobday, chairman of Maltron.

"Head and mouth stick keyboards have been developed using the same key layout leading to minimal stick movement. The expanded keyboard comes in a steel case and has an integral key guard." ■

www.maltron.com

LAPD –
Lewisham Association of People with Disabilities

Works nationally to help people with disabilities.

Experienced advocates can help – Need help with mental health issues?

Advice on access to work – both for companies and individuals.

Up-to-date advice of benefit changes and support in DLA applications all available.

www.lapdonline.org.uk

Minister's site is judged to be the most accessible

The website of Department for Work and Pensions minister Chris Grayling has been voted the most accessible in the House of Commons.

The choice of viewing themes and good labels on images were enough to secure the MP for Epsom and Ewell first place in a competition run by the British Computer Society.

IT charity AbilityNet did the judging. The organisation found that on the whole the evidence of accessibility awareness in MPs' websites was inconsistent.

"On some sites it was apparent that a lot of effort was spent making the site accessible, unfortunately in other cases there were some significant accessibility barriers remaining," said AbilityNet.

"Other sites didn't show much awareness about accessibility at all and over all, many websites fall short of what would be an acceptable level of accessibility and as such many of the websites present numerous barriers to users with disabilities."

Grayling, whose department is responsible for the Equality Act, said he had considered the importance of making his site accessible for everyone and he was "really proud our efforts have been rewarded".

The runners up in the competition were Jim Fitzpatrick, MP for Poplar and Limehouse; Tony Cunningham, MP for Workington; and Rt Hon John Bercow, MP for Buckingham and Speaker of the House of Commons. ■

http://www.chrisgrayling.net/grayling.htm

Chris Grayling – DWP minister

uScreen film website bags AMI award

Cutting edge accessible film website uScreen was among 20 winners of a Leonard Cheshire Ability Media International (AMI) award.

The YouTube-style service from Screen South aims to provide young deaf and disabled people with an opportunity to collaborate on making films.

The uScreen site has three accessible film-making tools: a 3D Storyboard tool, Cutting Room and a Player Accessibility tool, which allows disabled people to customise accessibility features.

The site is also supported by events, expert mentoring, workshops and film festivals, so young people can "meet new friends and make contacts with film-makers and specialists across the region".

uScreen is part of Accentuate, a transformational programme of 15 projects which seeks to change perceptions and offer opportunities to showcase the talents of deaf and disabled people.

The 20 winners at the AMI ceremony in London received awards for their part in making the arts and media industry more inclusive. ■

http://uscreen.co.uk/films/view/1271

BRIEFS

IT Can Help moves home

IT Can Help, the group of volunteers who provide computer assistance, has become part of e-accessibility charity, AbilityNet. Formerly the responsibility of BCS, The Chartered Institute for IT, IT Can Help's 250 strong volunteer network provides free IT support to nearly 2,000 disabled people each year at home or in care facilities. IT Can Help will join AbilityNet's existing volunteer programme – IT4Communities – which supplies professional IT consultancy to third sector organisations.

www.itcanhelp.org.uk

Accessible vending machines

An EU-funded project is aiming to make self-service terminals, such as ticket vending machines, information kiosks and cash dispensers, more accessible for the one in six Europeans who has a disability. The APSIS4All project is funding the development of accessible interfaces, including contactless cards, to help people use the machines. A three-year trial of the new interfaces has begun in Spain.

www.apsis4all.eu

Dancing giraffe

Disabled people in Essex will be able this month to log on to a website called Dancing Giraffe to find information about products and services in their area. Backed by a £9,500 Big Lottery grant, the site is the brainchild of local businessman Shaun Moffat, who is registered sight impaired. Dancing Giraffe, which is free to use, will be run by volunteers.

www.dancinggiraffe.com

Singing from the same hymn sheet

How One Voice's Nigel Lewis is replacing competition with collaboration

IT is not an industry renowned for its spirit of collaboration: newspaper business pages are more often than not reporting the latest boardroom spat or battle for market supremacy.

But in one area peace and love seem to have broken out. For the past two years a group of companies, charities and trade associations having been working together in an organisation called the One Voice for Accessible ICT Coalition.

"As the name implies, One Voice is a forum for organisations who believe that by sharing resources and speaking as one we can do better," says chairman Nigel Lewis (pictured), who is also the high profile chief executive of the IT charity AbilityNet.

So far, Lewis has persuaded leading campaigners from 18 organisations to join him in singing from the same hymn sheet including companies such as BT and Lloyds Banking Group; charities RNIB and Leonard Cheshire; and the Intellect and BCS IT associations.

"When I first joined AbilityNet I came across individuals in the disability space who I saw could be much more powerful if they got together," he told *Ability*. "Luckily I didn't have to work too hard to get them to buy into the idea."

Since early 2010 One Voice, says Lewis, has been taking practical steps in "promoting what is already out there, campaigning to improve accessibility and professionalising the IT industry so that it embeds accessibility in its products".

Early on, One Voice published a report called Accessible Information and Communications Technologies: a Business Case, which drew on the best practice of large organisations. With contributions from the chief executive of Barclays Bank and the

minister for digital Britain, the report was packed full of practical examples to back up the business case for accessibility.

The messages of the report have been rammed home at two E-Access conferences which featured several One Voice speakers including representatives from Lloyds Bank and the Post Office, who gave frank accounts of their efforts to cater for disabled employees and customers.

One Voice followed up its E-Access debut by organising an event at the BCS to launch the UK's first web accessibility standard, BS 8878.

One Voice members

AbilityNet, IT Can Help, BCS, The Chartered Institute for IT, Bloor Research, BT, Business Taskforce on Accessible Technology (BTAT), City University London, Employers' Forum on Disability (EFD, Intellect, Leonard Cheshire Disability, Lloyds Banking Group, Phoneability, RADAR, Society of Information Technology Management (SOCITM), Trinity Expert Systems, Worshipful Company of Information Technologists (WCIT)

There is no doubt that One Voice represents a powerful lobby. The organisation has been working to shape the government's thinking on IT for disabled people, working with culture minister Ed Vaisey's e-Accessibility Forum, which this year drew up an action plan to improve how organisations serve people with special needs online.

Lewis is particularly proud at having persuaded the influential Financial Times Bowen Craggs Index of corporate web effectiveness to consider accessibility as a criterion in rating the websites of some of the world's largest companies.

The latest project for One Voice is the 'step programme', a series of easy to follow guides that introduce accessibility in simple steps. The initial guide – First Seven Steps to Accessible Websites – sets out to answer the question "My website was not designed with accessibility as a consideration; I would like to improve the accessibility of my site how should I start?"

Author Peter Abrahams of Bloor Research, who wrote the 15 minute test for accessibility featured in this issue on page 23, says the first step guide will be the first of many with plans for similar publications for TV, games, Windows, Mac and Linux.

"What we must do is introduce more people to accessibility, it's a constant quest: how do we grow and get the message across," said Lewis. He has recently appointed Sophie O'Connor of financial advisor Meryll Lynch as executive director.

To that end Lewis is determined to get more people engaged in the programme. "If you are doing anything in the ICT accessibility world come and join us," is his message to *Ability* readers. ■

www.onevoiceict.org

AT for the Arab world

Ability visits the Mada Centre (Qatar Assistive Technology Center) in Doha, which has ambitions to become a model for assistive technology for Arabic speakers

An estimated 26m disabled Arabic speakers stand to gain from an ambitious project to boost access to ICT in the Gulf state of Qatar.

The desert country, rich in gas and oil and with a population of just 1.7m, is set on becoming a regional hub for assistive technology.

The Qatar government is funding the development of Arabic language software, distributing free systems to disabled residents and raising the level of technology skills among disability professionals.

Accessibility is one of the main planks of Qatar's national plan for ICT which calls for much easier access to the government's 160 online services by disabled people.

And last year ictQatar, the body responsible for regulating ICT in the country, published an e-accessibility policy.

Under the policy public sector organisations are expected to make kiosks that provide online information and services accessible. Government owned banks, for example, are installing ATMs that can be used by people with vision, hearing and physical impairments.

Digital media companies in Qatar have been encouraged to increase the accessibility of their content by offering accessible ebooks, online information and captioning for video programming.

Assistive ICT was little known in the country until Qatar signed the UN Convention on the Rights of Disabled Persons in 2009. But within a year ictQatar had set up an assistive technology facility called the Mada Centre (Qatar Assistive Technology Center) tasked with providing the country with accessible technology.

The Mada Centre (mada means horizon in Arabic) occupies two floors of ictQatar's 22-storey headquarters building in Doha. The light, airy offices not only house Mada's 20 or so staff, many of whom come from abroad, but also act as a resource and training centre.

The organisation was founded as a public private partnership, so it wouldn't get bogged down in the intense decision making of government agencies. The chief executives of QTel, the country's telecommunications provider, Vodafone, Microsoft and the Qatar National Bank sit on Mada's board.

The organisation acts as a one stop shop for assistive technology. Its' experts carry out assessments of disabled people, provide them with technology and also support teachers and medical staff who work with them.

When Ability visited, small family groups were clustered around the computers and assistive devices that line the walls of the main hall; trying out the equipment and undergoing assessments.

Upstairs, in another part of the building special needs teachers were being instructed by deputy director David Banes in how mind maps and flowcharts can be used to help students with learning difficulties.

It is an international effort. The training course has been designed by an Irish organisation called Enable Ireland, while Mada has forged links with similar organisations in Singapore and India.

"We are committed to reshaping assistive technology in the region, we are not just serving residents of Qatar," said Banes.

With 280m native Arabic speakers in the world and an estimated 26m to 30m of them who are disabled, a sizeable group of people stand to gain from Mada's work.

The centre also has the job of promoting awareness of accessible IT more widely in Qatar. For example, web experts are auditing public sector websites and helping owners to up their game.

Workers from the centre have set up a series of 'mini-Madas' in schools, hospitals, care homes and rehabilitation facilities. Visiting them regularly to train staff and carry out assessments.

On the road with the Mada team

A broad grin slowly breaks across Hiba's face as the young girl bursts a balloon on the large flat screen monitor in front of her.

Reward enough for the three professionals who have been busily trying to engage her attention for the past few minutes.

Hiba is in the assistive technology room of Shafallah (Centre for Special Needs) special school on the outskirts of Doha. As a new pupil at Shafallah, her motor skills, concentration and ability to reason are being assessed with a view to finding the right technology for her.

With an imax 3D cinema, sensory room and swimming pool, Shafallah must be one of the best equipped schools in the world. Not surprisingly, places on the 600-strong school roll are much in demand.

The school is convinced that assistive technology has an important role to play in the curriculum: it facilitates communication by students, increases their self-confidence and social integration and allows them to express their needs.

Shafallah has set up the technology room so students and staff can try out the latest systems. And the institution is also adapting technology for use by Arabic speakers; staff are creating a depository of Arabic voices for use on text to speech systems.

On the Clicker 5 project the school devised extra symbols more appropriate for Arab speakers. Shafallah is also working with Widget to create new symbols for the company's software.

I am accompanying Aejaz Zahid, head of Mada's assessment services on his rounds. Next stop after Shafallah is a visit to talk to a cheerful 61-year-old man who had a stroke four months ago.

He still has difficulty using his right hand but wants to get back to work. The question is 'what is the right solution?'

He is pretty adept with his left hand, so Zahid suggests trying a keyguard and taping a splint to his right hand so that he can use it more effectively to hit the keys.

The man's physician looks doubtful, but he does agree to try it.

In the centre itself some 200 people per year attend training courses.

"Working with ictQatar has meant that we can play an active role in ensuring that the country's ICT infrastructure is accessible to people with disabilities," said Ahmed Habib, head of communications awareness and outreach.

Mada has played an important role in bringing down the cost of communications for disabled people in Qatar. QTel and Vodafone have cut the cost of services to disabled people by 50% in a project called Connected.

In a move to provide assistive technology based on Arab language and customs, Mada is also funding the localisation of assistive products developed by foreign companies.

"One gaping hole is the lack of Arab speaking solutions," explained Habib. "We said we would financially and logistically support the small manufacturers to fill in what was missing for Arab users.

"Mada is a vendor neutral organization that allows people with disabilities to make choices based on expert advice, as opposed to solely relying on information provided to them by companies.

"In the absence of that the use of AT becomes dependent on marketing materials from companies. That makes it very difficult for people to make the right decisions."

The first agreement involved Crick Software, whose Arabic version of its Clicker 5 literacy support software is now being distributed to Qatari schools.

Other UK companies that are talking to Mada include Claro Software, Dolphin, Sage, Sensory Solutions, Therapy Box, Widget and the University of Southampton.

The firms are being offered funds to produce Arabic versions of their software in return

for providing free licences to Qatari institutions.

Localisation is not a trivial matter. Apart from translating menus, software designers must ensure text and symbols read right to left. There are also cultural issues to be resolved.

This January, Mada will be spreading its net wider still by talking to American assistive technology companies at the ATIA conference in Chicago.

Three gaps in applications for Arabic speakers that Mada is particularly keen to fill are optical character recognition, speech recognition software and word prediction.

Arabic is a particularly difficult language to cater for in these applications, said Mada's head of research Eril Zetterstrom. One reason is that that the same character can change its sound depending on its position in a word.

But it is crucial that new Arabic technology is developed, said Habib. "Without it, people in the region will continue to face tremendous challenges in connecting to the world of ICT, and opening a world of opportunities to them."

Parents are the primary caregivers in family-minded Qatar, so raising their awareness of assistive technology is vital. Mada has run advertising campaigns and puts on social events aimed at kids including summer camps, games nights and it plans to organise a series of digital creation courses on applications such as Photoshop and Twitter.

"It is important to persuade people that technology is not an obtuse, uninspiring part of our lives," said Habib. "Technology is not just a serious thing." ■

www.mada.org.qa

Microsoft and Vodafone join accessibility drive

Mada's sponsors are also involved in a number of projects with the centre.

Microsoft is working on one called Imkaan (Arabic for possibility). Under the programme, the company has supplied memory sticks which are used to provide disabled people with information about accessibility features on Microsoft products.

"The idea is to ensure that digital learning is accessible as possible," explains Asad Ahmed, Microsoft's business development manager for Qatar.

The company is also planning to run an upgrade clinic in the Mada Centre with free operating software for people whose systems need updating.

At the Hamad bin Medical Centre, disabled older people have been given access to an internet lab and an X-Box media centre as part of the refurbishment of a lounge.

Children on ventilators at the hospital have also been supplied with laptops. In March, webcams and LCD screens will be attached to their beds so that they can keep in touch with their families.

But the most ambitious effort involves a children's day care centre at the Rumeilah hospital. There, staff are using X-Box Kinect systems to enable children with cerebral palsy to interact with computer games. Staff plan to develop their own material for the Microsoft games software.

Vodafone is aiding ICT Qatar in framing new regulations that will require employers to allow disabled employees to work at home.

The mobile phone company is also studying technologies that could be used to monitor patients' medical conditions such as diabetes remotely. Vodafone acknowledges that it will have to win over health professionals to the idea.

"There is resistance to new technologies, particularly those that are complicated," says Dana Haidan, Vodafone's head of corporate responsibility.

Customers too will benefit from efforts to promote accessibility in the company's phone shops. For example, older people will be offered easy-to-use handsets. The new-style accessible shop will be tested in the Mada Centre itself.

Vodafone is also mulling over the idea of launching an award for accessibility designed to encourage researchers to develop products in this area.

But the company doesn't want to be too hasty. "We are focussing on doing one thing at a time and doing it well," says Haidan.

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What's new for schools

The BETT 2012 show runs from January 11 to 14 at Olympia, London. Here is some of the latest technology you will be able to see on the exhibition floor

Apps the answer to rise in pupils with special needs?

The numbers of children with special educational needs (SEN) in England is growing, according to the Department for Education.

Pupils with SEN rose from 1.53m in 2006, when they accounted for 19% of the school population, to 1.67m or 21%, of all pupils in 2011, says a report published in October providing data under the Special Educational Needs Information Act.

Just 20% of children with SEN leave school with five decent GCSEs, including the key subjects of English and maths, in comparison with 66% of their classmates, the study reveals.

Boys in secondary schools were three times more likely than girls to be diagnosed as having SEN. However, the number of children with SEN statements, which includes more severely disabled pupils, remained steady during the five year period.

"With these findings and the estimation that one in six people in the UK are dyslexic, it is now more important than ever to recognise the products that are available to help people with learning difficulties," said Mark McCusker, chief executive of software firm Texthelp Systems.

Texthelp has recently launched a series of apps for smartphones, iPhones, iPod touch, iPads and tablets based on their existing literacy products.

"The apps are beneficial in a number of ways, assisting with studies as well as day-to-day activities such as sending emails or text messages from a mobile phone," said McCusker.

Stand SN70 www.texthelp.com

Nuance moves to the top of the class

At BETT 2012, Nuance will show how Dragon NaturallySpeaking for PC and Dragon Dictate for Mac help to propel students of all abilities to the top of the class. Dragon makes it easier for students to capture their thoughts and share their work with their teachers and peers, by talking to their computer.

Whether students want to spend more time studying and less time typing, or if a student has a specific learning requirement, Dragon is an ideal learning companion.

In fact, Dragon's benefit to students was recently recognised by *Macworld* magazine, which named Dragon as the 'Best Education Software Product of the Year' in 2011.

Even teaching staff can benefit from using Dragon to get more work done, faster.

Dragon is a multifaceted solution, well suited to learning environments, and it helps teachers and administrative staff work more efficiently and effectively through their everyday tasks, and assists in reaching teaching goals.

Stand SN64 www.nuance.co.uk

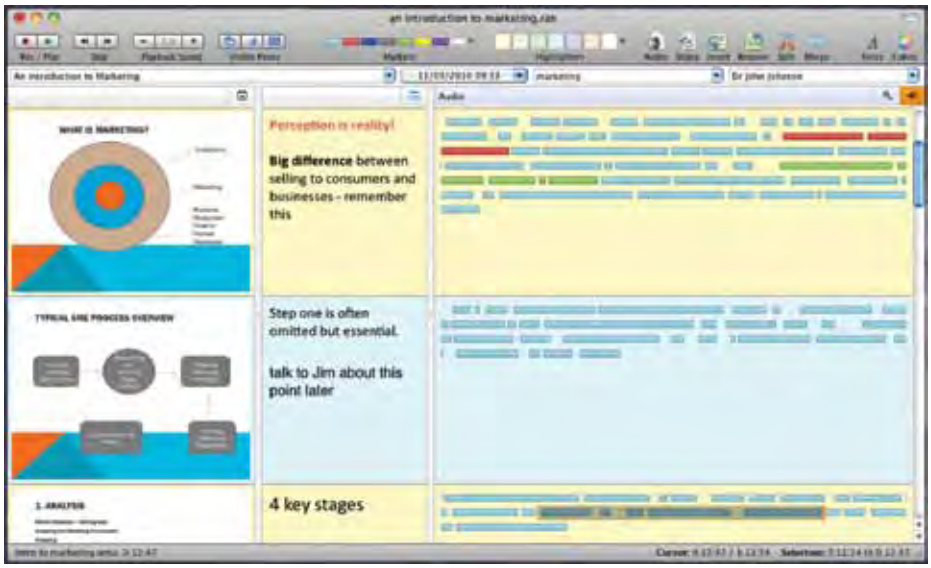
Sonocent debuts Audio Notetaker for the Mac

Audio is a good way of recording information, but is so hard to work with when used with traditional media players.

Launching this January for Mac, Audio Notetaker is a tool that displays a visual representation of a recording and makes navigating, editing, annotating and organising audio easier.

Users can take notes from lectures or meetings, give feedback on presentations, extract the best bits from interviews, or use as a better way of working with audio. Audio Notetaker for the Mac is almost identical to its Windows counterpart, which has over 18,000 users. ■

Stand SW8 www.sonocent.com



Audio Notetaker for Mac presents recordings visually

New Clicker is slicker

Updated literacy support program from Crick Software is a hit with special needs teachers

Crick Software has redesigned its Clicker literacy support program for five to 11-year-olds to make it easier to use.

Clicker 6, the first revamp of Clicker for six years, allows pupils to get working on documents quicker than previous versions and cuts down the amount of time teachers have to spend developing material for lessons.

"Clicker is used by 90% of primary schools in the UK and it is changing the way children read," said John Crick, the former special needs teacher who founded the company with his wife Ann in 1993.

"We focussed on two things in redesigning Clicker: greater pupil independence and less teacher time."

Clicker uses a whole-word reading strategy, in which children are presented with written words that can be linked to corresponding pictures and spoken names.

Words, identified by pictorial cues, are highlighted when spoken aloud by a narrator to help children with their reading. In addition, the program is designed to reinforce sentence structure, grammar, fluency, vocabulary and comprehension.

Crick has added a 'quick start' feature which allows pupils to start working on a document immediately, combining photographs taken on a webcam with graphics created by painting software.

Pupils are helped in writing by a new word prediction module developed from Crick's WriteOnline program for secondary schools that vocalises words in a more fluent style than Clicker's earlier speech feedback software. Words can also be identified by symbols including Widgit, Meyer Johnson PCS and SymbolStix (sold as add-ons).

Crick Software has developed wizards to help teachers set up activities and edit them afterwards. "The intuitive interface makes tailoring these activities to pupils' needs quicker than before," said the company.

For example, the edit mode in Clicker has been remade to make it easier for teachers to find editing options: they are presented in a ribbon at the top of the screen.

The system allows teachers to create word banks related to particular topics. Word banks can be generated automatically from text with the software ignoring duplicated words. New words are immediately added to Clicker 6's predictor and documents produced in Clicker 6 can be saved in various formats including Clicker, Word and HTML.

Teachers can create grids of words drawn from several word banks and associated with a particular sentence. Children can select the words to build a sentence and are prompted by small pop-up screens.

Crick Software has provided additional support for touch screens and whiteboards, enabling words to be read out by touching a button.

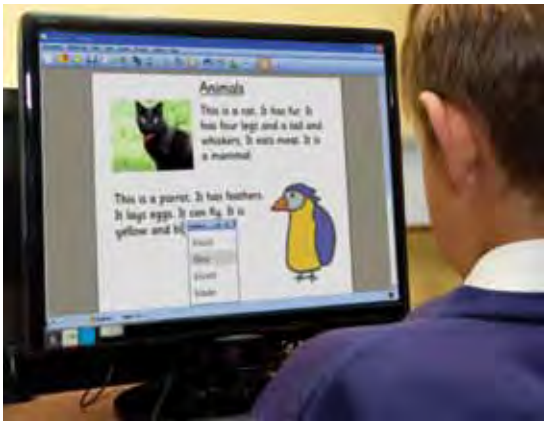
Preferences can be set up for each pupil that come up whenever that person logs on. Teachers can also access learning resources without having to log in online.

Teachers and education advisors who attended a demonstration of Clicker 6 in December were impressed with the new features. "I won't be spending an hour each evening preparing lessons, and it's ideal for use by classroom assistants," said one.

"There's a huge amount we could do but we haven't got the money or resources to do it," said independent education consultant Ros Henshaw. "With Clicker 6, children can work independently. I'm very keen on children taking control. This software allows you to make resources sitting next to a child."

Henshaw pointed out that Clicker 6 helped teachers by recording activities and provided evidence of whether a child had understood a concept or not.

"A growing body of research suggests multimedia software can support different aspects of literacy skill, including written word recognition, phonological awareness, fluency, and reading comprehension," said Dr Arjette



Karemaker from the University of Nottingham.

Crick Software had considered adopting a subscription model like the one for secondary schools who use its WriteOnline software, but the UK's 28,000 primary schools are under increasing financial pressure and are reluctant to commit to subscriptions they may not be able to afford in future, said the company.

Clicker will be launched at the BETT Show in January. Standard versions cost from £150 for a single user licence up to £1,800 for a school site licence. Upgrades are available costing from £100 to £1,200. Existing Clicker users can only use their upgrade discount once. ■

www.cricksoft.com/uk/home.aspx

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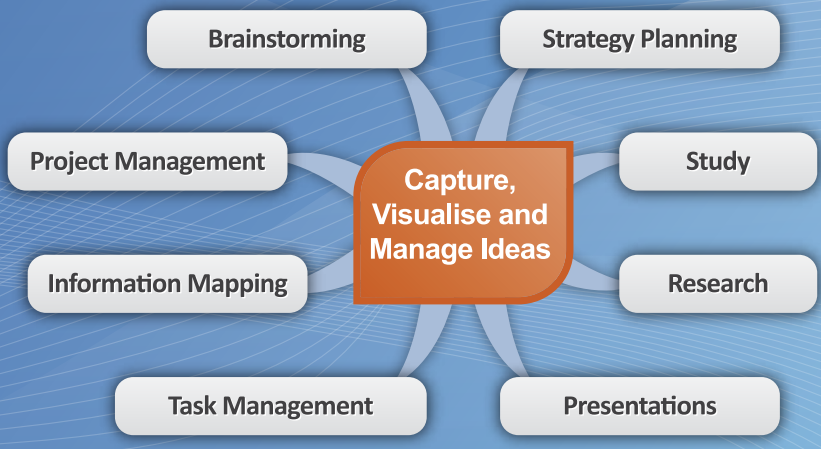

Download a 30 day free trial from **www.mindgenius.com**

Mind games

The bells and whistles of mind mapping that make learning more exciting

Mind mapping has changed a lot since Tony Buzan wrote about the idea back in 1974.

What was originally a paper-based way of helping people to organise their thoughts first became computerised and then sprouted an orchestra of extra bells and whistles.

Mind mapping has embraced the web and, more recently, social media to help people get easier access to background material and to work with others.

Software for creating mind maps has been integrated with allied programs so that users can import and export files from Word, PowerPoint and similar applications.

And mind mapping programs have rapidly gathered their own features, such as calendar and scheduling routines, that are designed to enable students and other users keep to the plans they have devised.

There are mind mapping apps available online, many of them free, even an app called Mind Tweet that integrates mind mapping software with Twitter.

Mind mapping has also been married up with voice input; in an application for iPhones and iPad called iThoughts. iPhone 4S owners can use the handset's Siri voice input facility to dictate and paste topics into the software.

Despite this rapid development, enthusiasts complain that there is not enough training of teachers and other professionals in how to use mind mapping software.

So, it is not surprising that templates are widely used to inspire people new to mind mapping and help them come to grips with the technology.

But these innovations haven't changed Buzan's original idea of expressing a topic as a central image with main themes radiating from it like branches, with smaller branches connecting them to create a network structure.

For school and college students with special needs, mind mapping is very useful. In fact, in many schools it is regarded primarily as an SEN tool.

"It can be hard for some students with dyslexia to start using something different because it takes a lot of energy to change their developed learning patterns," says Nicky Williams, a tutor in dyslexia at West Kent College.

"However, the more the software is used the more opportunities can be discovered."

Her students use Mind Genius to classify information, sort out what to include in essays and presentations, form logical arguments, and group facts together.

Mind mapping may not be for the very youngest pupils. "Mind mapping is a useful technique for organising ideas among more experienced writers," says Paul Gardner, a senior lecturer in education at Bedford University, who researched the use of mind mapping to help 'reluctant' writers in 10 Bedford lower schools.

"But on children in the younger groups of years one and two (five to seven year olds), mind mapping is not a quick and easy panacea. Teachers found it was extremely time consuming for the children to master the technique."

The use of colours, lines and symbols for representing ideas in mind mapping makes helps students who struggle to understand and organise their thoughts.

Page after page of information can make someone's brain go to sleep in the same way a long car journey can cause a driver to drift off.

Mind maps look exciting so they keep a user's brain switched on. Students can illustrate their maps with pictures, clipart and web links gathered from the web and elsewhere.

With the ability to zoom in and out of a larger map, mapping software makes it easier to hold ideas and to maintain concentration by making the connections between them much more apparent.

Note taking gets a boost too. The abbreviations and arrows hold notes together, while spell checkers and text to speech software are available on some mind mapping programs to help users who have problems with reading and writing.

Special needs students are by and large visual learners who have trouble concentrating on large quantities of text. Mind maps break topics up into digestible chunks and keep students engaged by being more appealing and that has got to be a plus. ■

Companies to talk to about mind mapping at BETT: ■ British Dyslexia Association SN03, ■ Crick Software F40, ■ Claro Software SN64, ■ Dyslexia Foundation SN57, ■ iansyst SN05, ■ Matchware H46, ■ Microlink SN90, ■ Remtek SN17.

A game of tag

Making a PDF accessible may not exactly be child's play, says Shaw Trust Accessibility Services, but it is a lot easier than you think

It is 20 years since Adobe first began talking about its idea for a portable document format (PDF) that would allow printed material to appear the same on screen as on paper.

The PDF meant that for the first time it was possible to create a digital image in a standard format that could be distributed to computers running any operating system.

It was a breakthrough: brochures, magazines, newspapers, and all manner of commercial documents could be passed around electronically.

"PDFs are so easy to create that millions of them are produced each day either by exporting them from applications or by scanning paper documents," explains James Townsend (pictured), web developer at Shaw Trust.

However, most are inaccessible because their creators have not taken the trouble to make use of the tools that are available.

"Originally PDFs were geared to the print industry," says Townsend. "Even today, the main use of PDFs is for scanning documents, which means one can see the documents but can't interact with them.

"They are a bitmap image, so people who use a screen reader, for example, can't access them.

"To make a PDF image file accessible, the document needs to be captured using Adobe Acrobat Capture 3 or the paper capture facility provided with Acrobat 6."

It wasn't until 2001 that Adobe began to make PDFs accessible, largely because of the introduction of section 508, US regulations requiring public sector systems usable by disabled citizens.

Acrobat 5, Adobe's program for making and editing PDFs, introduced the concept of tagging.

Tags indicate the structure of a document, telling assistive software the order to read it in and flagging the presence of figures, lists, tables and so on. Initially a manual exercise, tagging is now automated.

The ability to read out screens came in with Acrobat 6, while the latest iteration of Acrobat – Acrobat X – has a wizard to check if a document is accessible or not.

Tagged PDF files work better with the screen-reader devices used by many blind and other disabled users.

But unless a document is very simple indeed, automated tagging alone will not give the best result. Human intervention is needed to make sure the tagging is good enough to make sense of a document.

"But it is not necessarily complex or time consuming," says Townsend. "Tagging takes a few seconds, but as with a website you need to start thinking about accessibility right at the beginning."

He stresses that authors should make sure that the reading order of their content is clear, logical and easy to follow.

The TouchUp Reading Order tool allows a user to quickly add and edit PDF tags and view the reading order of elements on the page. Although it can speed up the tagging process, it does not take the place of the other tools.

"It is important to make sure that all images that convey useful information, such as a photograph or a diagram, rather than just being decorative, have text alternatives, or 'alt text'," says Townsend.

Purely decorative images or repeated headers and footers should be removed from the reading order so that users of screen readers and other assistive technology are not troubled by repetitive or unnecessary announcements.

"An accessible PDF must include correctly formatted structural elements such as headings, a table of contents, links and bookmarks," explains Townsend. "Text should be formatted in such a way that it will be readable by people with vision impairments or cognitive disabilities such as dyslexia."

"It is important to specify which human language the document is written in, to allow assistive software to work properly," Townsend points out.

"The document's security settings (if any) must not exclude users of assistive technologies. It is possible to lock a document to protect copyright material. However, this can prevent some disabled people gaining access to it."

Making PDFs accessible is not very difficult, if you follow these simple steps, but it can make a big difference to the millions of people around the world who use assistive technology. ■

Web Access is sponsored by

Shaw Trust
Ability at work

Take the 15 minute test

Peter Abrahams, Bloor Research's accessibility expert, explains his quick test for accessibility

There are many occasions when I want to be able to do a quick evaluation of a website or a group of sites. To enable me to do this quickly and consistently I have developed a set of tests that I can complete in a quarter of an hour.

The test indicates the level of accessibility of a website. It will not show every wrinkle in the website but give a good view of the level of intent of the owner to make the site accessible.

There are two types of tests: manual and automated, they are described below.

MANUAL TESTS The following tests can be done when reviewing any page, even when reviewing the pages for other web site features.

ACCESSIBILITY LINK Is there a link to a page that describes accessibility on the site? This may be at the beginning of the page or in the page footer. It should be repeated on every page.

ACCESSIBILITY REPORTING Is there a way to report accessibility issues found? This could be from the accessibility page or a feedback/contact us page.

JUMP TO If the tab button is pressed on a new page does it offer the user the option 'to jump to' or 'skip to' a specific area of the page. Common jump to targets are: main content, menu and accessibility. More than four suggests a misunderstanding of the function.

ALT TEXT Any image on a page, that is not just 'eye candy' should have a text description of it (the alt text). If you hover the mouse over a picture do you get a reasonable text description? This can also be reviewed using the automated test tool.

TAB ORDER If you repeatedly press the tab key can you see the focus moving and does the focus move around the page in a logical order?

CLOSED CAPTIONS If there is a video on a page then start playing it, does it include captions for people who are hard of hearing?

FORMS Are forms on the site laid out in a logical way; can they be completed just using the keyboard, does this process take you through the form in a physical and logical order?

CAPTCHA Does the site use CAPTCHAs, if so can they be completed by a user of a screen reader without help?

FAST FLASHING Are there pages which have fast flashing images?

PDF If the website includes PDFs are they accessible? Download one and run the Adobe Reader accessibility quick check.

AUTOMATED TESTS These tests can be carried out using WAVE from WebAim (http://webaim.org/). Other tools are available and can be used to carry out the same tests; use these if they are your organisation's standards.

The easiest way to run these tests is using the WAVE Firefox Plug-in http://wave.webaim.org/toolbar. You should run the automated test on the home page of the web site you are analysing and a random page or two. Run the 'Errors, Features and Alerts' report and check.

ACCESSIBILITY ERRORS Did Wave identify any accessibility errors (see the message at the top of the page) and see if there any red Wave icons?

ALT TEXT Any image on a page, that is not just 'eye candy' should have a text description of it (the alt text). WAVE will identify all alt text. Check that descriptions are relevant to the image.

TABLES WAVE will identify data tables. Check that the table has a caption and that the column headings and row headings are identified.

LINKS Links should have descriptions that make sense without having to read the surrounding text. Does WAVE report suspicious alternative text or problematic link text?

HEADINGS A web page should have one level 1 heading and multiple level 2, 3 and maybe 4 headings. Run the Wave 'Outline' test and check that there are headings and they are in the right order. ■

DAISY players

Ability's reviewer Allana Grant puts five portable ebook players through their paces

Digital Accessible Information System (DAISY) is an audio standard developed by the DAISY Consortium to allow print disabled people all over the world to access talking books. It is a digital reading format that combines audio, text and graphical information.

This article provides an overview of five of the world's leading portable DAISY players: BookSense T50 XT, iPhone 4S, Milestone 312, Plextalk Pocket PTP1 and Victor Reader Stream.

Exploring key features such as accessibility, functionality and portability, it will help you make the right choice to enhance your reading experience.

Accessibility

The layout of BookSense keys is very accessible. The keys are flat and quite close together yet tactile enough to be distinguishable. Additionally, keys on the number pad alternate between raised square and flatter square.

The iPhone has only four buttons: Home, Volume, a silencing switch and key lock.

The Apple iPhone 4S

So, the tactile keys are simple enough to navigate. The Qwerty keyboard, however, is another matter. You can bring up a touch screen keyboard by moving the phone's opening screen to the right.

I would suggest using a Bluetooth keyboard for lengthy typing though: it is frustrating being unable to judge the distance between keys. Typing is manageable using the Voiceover feature, but progress can be slow.

Voiceover is Apple's own variation of a screen reader. Once it's enabled, it is completely controlled by the phone's touch screen.

There's no actual menu structure on the iPhone; every function is based around Apps, which are ranged across home screens in grids of 16. You swipe left and right to browse through them and tap on an app to open it.

Milestone keys have tactile symbols on them making them easy to distinguish. As they are few in number, spacing isn't an issue. Using a set pattern of keystrokes to try and carry out a task in a particular time frame can be difficult though.

If you don't get the timing right you can end up in a muddle, which is one drawback of having a device with such a minimalistic design.

Milestone's voices work to a high standard. Reading documents in a foreign language is also possible. You can also easily customise speed, volume and pitch.

The player is set up around a system of applications, including audio and radio, that is not dissimilar to BookSense.

The select key cycles to the application you want where you can access its menus. Each application has a menu with three internal options: information, local settings and basic settings.

I found Milestone to be fully accessible but a little slow at times.

The Plextalk's key layout is fairly simple. All keys are large and tactile. Users who have some vision can order the device in black or white with contrasting buttons.

Unlike Milestone, carrying out tasks is always effortless even with some keys performing multiple functions.

You have a choice of two voices. You can customise speed, volume and pitch. The guide voice gives you clear and precise instructions at all times.

The Plextalk's structure is different again. You have a title button that cycles to the type of media you want, SD card, USB etc. The folders and files are contained within these options.

Cycle through these with the up and down arrows to get from one level to another, then select your chosen destination using the left and right arrows.

Victor Reader Stream's keys are well spaced, large and easy to identify. For example, fast forward and rewind are shaped like arrows.

The Victor Reader Stream is different in that all functions are carried out using the number pad. Seven accesses the menus and you move around using 2, 4, 6 and 8 as navigation keys.

Again I found navigation to be simple, although it does take a while to become accustomed to navigating with the number pad.

Audio/DAISY books and music

You can access audio/DAISY books and music tracks from all five players, provided they are in a supported format.

You can use the navigation keys to choose a level on each player with the exception of the iPhone, which requires you to use your finger to move around parameters and double tap to select them instead.

Elements differ in each book but typically level 1 means chapter, level 2 means section, and level 3 means sub-section and so on. Page and phrase elements may not be present on all books.

Enter bookmarks in three different formats: a simple bookmark, a recorded voice bookmark or a highlighted section of audio.

In addition, you can customise voice rate, pitch, tone and volume settings.

Navigation of music is much the same as with audio or DAISY books: the levels have different names though and you have extra equaliser settings.

Radio

BookSense and Milestone have an inbuilt FM radio and both allow you to have preset channels for your convenience. You can also record broadcasts without any background interference. The recordings are immediately saved to the SD card.

In order to get clearer reception, connect earphones to the player as they act as an antenna.

iPhone and Plextalk have an option to listen to web radio as they can connect to Wi-Fi.

Podcasts

BookSense, Milestone and Victor Reader Stream players can play any podcasts that you have downloaded on to them from your PC.

iPhone allows you to simply download podcasts from the web address of your choice.

Plextalk plays podcasts on the web as long as you've saved the URL to the route of the SD card. You can record broadcasts on Plextalk with one press of a button.

Victor Reader Stream

Text to speech

Four of the players function in virtually the same way. Aside from a few specific features, they only differ in the file types that they support.

BookSense supports: TXT, RTF, DOC, DOCX, HTML, XML, BRL, BRF, Bookshare Braille files, EPUB (unprotected ebook) and Archive unprotected ebook (open library)

Milestone supports TXT files and DAISY 2.02 talking books.

Plextalk supports the following: TXT, HTML, DOX and DOCX files as well as DAISY talking books.

Victor Reader Stream supports: TXT, HTML, XML, RTF, BRA and BRF files and DAISY 2, 2.02, NISO Z39.86 2002, /2005, NIMAS 1 talking book formats. You need to purchase a Soft Pack to access DOCX files or EPUB books.

Recording

Recording is a feature common to all five players, but recording methods do vary significantly.

BookSense records your voice, lectures, meetings and FM radio using the internal mic. In addition, recording from other audio players is managed via an audio cable.

The quality of recordings is decent but is much better when using an external mic. Note: the recording settings are limited so the quality depends on the specifications of the mic.

With the iPhone, the possibilities seem endless. Four free recording apps as well as many others for sale.

Using the app italk, I was able to make high quality recordings with almost no background noise. Recordings are made using the built-in mic.

Again you have a range of settings which you can customise to enhance your recording experience.

Plextalk Pocket PTP1

A feature which I particularly rate is the option to attach your recording to an email.

Milestone's integrated mic allows you to record your voice as well as FM radio.

For higher quality, connect an external microphone and customise the recording settings to suit your requirements.

Milestone has the ability to minimise background noise as it is set to home in on your voice.

Plextalk records voice memos and bookmarks to an SD card in the

Milestone 312

All-in-one, simply ingenious.

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- Professional **Voice Recorder** in MP3.
- **Text To Speech Player**, 31 voices in 14 languages available.
- **Appointment Calendar, Clock, Alarm** & Sleep Timer.
- Integrated **RFID Labeling System** & **Radio FM Tuner.**
- Expandability: **Color Reader, Barcode Reader** & **CD Drive**.
- Easy handling with **6 buttons**. SD memory cards up to **32 GB.**

Milestone 312 is fully accessible due to its audible guidance and tactile buttons.
It is the smallest accessible player on the market. With its 1.9 ounces you can take it wherever you go and have packed an all-inclusive unit that guarantees fun.

www.bones.ch

PLEXTALK® Pocket PTP1

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www.plextalk.eu

Interested in a hands-on demonstration of the Plextalk Pocket?
Visit the booth of Sight and Sound Technology (SN40) during the BETT Show in London on 11-14 January 2012!

Milestone 312

DAISY format. This is unfortunately the only format available.

Basic recordings are possible using the inbuilt mic but if you want to enhance the quality, attach an external mic or an audio cable. Plextalk also offers a variety of mode and recording settings that further improve the clarity of your recording.

Victor Reader Stream voice recordings are called audio notes. These notes are saved on the SD card.

The number of audio notes you can record is only limited by the space on your SD card.

You have to purchase the Victor Reader Stream Soft Pack separately in order to record in MP3 or WAV formats. Yet another expense.

Portability

BookSense is a compact and lightweight player, not unlike one of the older Nokia mobile phones. It measures 4.8cm x 10.8cm x 1.8cm and weighs 115 grams.

The battery provides up to 12 hours of continuous use.

The iPhone is slim, small and light and, therefore, easily portable. It measures 5.86cm x 0.93cm x 11.52cm and weighs 140 grams. Audio playback of up to 40 hours is possible.

The phone may look classy but it is extremely fragile. Drop it and you will be left with nothing but fragments of broken glass. A carrying case is a must.

Milestone is the smallest and lightest of the players. It is, again, very compact and slick. It measures 5.4cm x 8.5cm x 1.4cm and weighs 85 grams.

Its battery gives you around 15 hours of run time.

Milestone's body is made of impact-resistant plastic. So you can carry it around without worrying too much about damaging it. A carry case is included in the original purchase, which also helps protect the player.

A lightweight, pocket sized player, the PlexTalk is not dissimilar to a mobile phone in shape. It measures 5.5cm x 11.2cm x 1.6cm and weighs 110 grams.

The battery allows for approximately 10 hours listening time.

Although this device is an ideal size for carrying around; I'd suggest doing so with a strap attached or inside the pouch which is supplied. The slick plastic casing could quite easily slip out of your hand.

The Victor Reader Stream is a compact and portable player about the same thickness as a pack of playing cards. It is undoubtedly the bulkiest device though. It is 6.6cm x 11.7cm x 2.2cm, and weighs 180 grams. This doesn't inhibit its portability much but it is a feature which could be improved upon in the future.

The battery allows for around 15 hours playtime.

Prices

BookSense T50 XT £315, iPhone 4S £415 (16 GB version from the Apple Store), Milestone 312 £273, Plextalk Pocket PTP1 £250 and Victor Reader Stream £235. Except for the iPhone, prices are from the online RNIB store. All prices quoted exclude VAT.

Conclusions

In the course of my review I discovered that some devices are dedicated to playback of books, while others focus more on other functions.

You really do have to ask yourself what it is you actually need to get full enjoyment of your reading experience.

Victor Reader Stream is a quality, fully accessible, portable book reader; its other functionality is very limited however.

BookSense performs well in most areas except for playing music.

Booksense T50 XT

Milestone is a very neat little player with excellent functionality in all areas. The minimalistic approach sometimes goes against it though and you have to purchase a Soft Pack to activate colour detector or agenda applications

Plextalk is another excellent performer and it has the additional bonus of Wi-Fi. However, the manufacturers do need to simplify the wireless settings as it was extremely difficult to connect.

In another dimension entirely is the iPhone with its all singing, all dancing applications. It is so much more than a DAISY player. This review has merely touched on its capabilities so you must ask yourself how many of its features you actually need.

And do you really want to use touch screen technology? Voice Over is an efficient accessibility solution but it does take a lot of getting used to.

Whatever player you choose, rest assured, there are plenty of sources for DAISY and audio books to keep you occupied. Happy reading. ■

The purpose-built DAISY players Allana Grant reviewed were loaned by the RNIB. The iPhone 4S was made available courtesy of Vodafone.

Care phones protect vulnerable people

A clutch of accessible phones have come onto the UK market including two new care phones that provide tracking and emergency response services for vulnerable people.

This autumn saw the introduction of two very similar systems: the Carephone and the Sologic Caresystem.

The Carephone consists of an accessible mobile handset with big buttons, hearing aid compatibility, loud speaker and a separate waterproof panic button, which connects users with a 24 hour-a-day emergency centre.

The device is equipped with GPS so that call centre staff can locate the handset and an accelerometer which detects sudden movement that might indicate a fall and makes an alarm call.

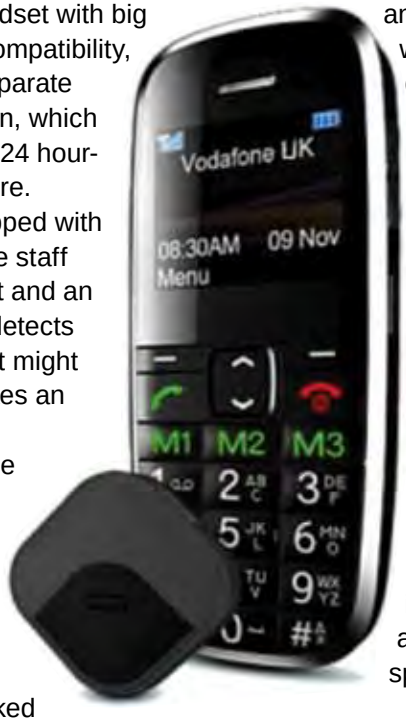
A loudspeaker in the phone turns on if an emergency call is made automatically. The Carephone also has a 'no motion' sensor.

"Handsets are tracked 24/7 and are supported by a 24/7 emergency response centre, who know the user's medical details, key issues and vulnerabilities and their exact position so they can take appropriate action after talking to the user," says Carephone manager Stephen Wesley.

The phone sells for £199 plus VAT on a pay as you go basis. Some users will be exempt from paying VAT as the device is classed as a medical phone.

There is also a charge of £19 per month for the tracking and emergency response service. The Carephone is available from mobility care shops and mobile phone stores.

Belgian communication company Topcom's Sologic Caresystem consists of two new care phones, the cordless Sologic Caresystem C500 and the corded C100 with an integrated digital personal voice alarm voice.



The handsets allow people to call for help whether they are indoors or outdoors (up to 300 meter range) and hold a normal phone conversation via the digital pendant, worn around the neck or on a clip. The portable alarm unit is equipped with a microphone and speaker.

The Sologic also has a busy tone detector that detects when a phone line is busy and frees it up for callers. Unintended busy lines due to a fall or a false manoeuvre can prevent alarm systems getting in touch with victims.

"The ageing population and the fact that more and more people continue to live independently, means that in emergency situations at home, they are often unable to call for swift help," says Jean Volders, chief executive of Topcom.

"We are therefore convinced that many elderly associations, healthcare insurance funds, tele alarm centres and of course family and friends will welcome this new solution for any emergency situation."

The cheaper Carephone has a number of advantages over the Sologic. According to Westley the system does not replace the existing landline system and the emergency pendant is waterproof.

"There is nothing like a bit of competition and we do like the Topcom products," he added. "We may even use one of them in the future as we [are discussing] different projects. We have the advantage that the support will be UK based as will the warranty."

www.thecarephone.com
www.topcom.net

A zoomier ZoomText

Sight and Sound Technology has released ZoomText 10, a new version of the magnification software from AI Squared.

ZoomText makes computers accessible for Windows users by magnifying and speaking what appears on the screen.

The latest release has new features that allow users to multitask and navigate around the web faster. ZoomText 10 also has a HD webcam magnifier.

New features include ZoomText Camera, which allows users to have a webcam instead of CCTV; Background Reader, which lets users listen to text spoken aloud in the background; Enhanced Web Finder, for browsing the web and finding information; and ZoomText Recorder, which lets users create audio files from text on screen.

"It's imperative that the visually impaired have the tools that let them surf the net as quickly as their sighted colleagues," says David Wu, chief executive of Ai Squared.

"Not to mention the need to have access on the go – ZoomText 10 offers so many new and robust features that it's really going to be a game changer."

Sight and Sound is offering ZoomText 10 magnifier and reader for £495, the same price as the previous version of the software. ■

www.sightandsound.co.uk

Revamped UltraCane mimics bat's echo location

A high tech white cane for blind people that can detect objects at a distance has been re-introduced in the UK by Sound Foresight Technology.

The £625 UltraCane sends out high frequency sound waves that bounce off objects, including leaves and curtains, in front of a user and are detected by sensors in the cane.

Two vibrating buttons in the handle warn users of objects ahead that are between ground level and head height. The strength of the vibration indicates the proximity of an object, helping the user to walk around it.

The UltraCane, developed by researchers at Leeds University, mimics the echo location of bats which use ultrasound to build a spatial map of their surroundings, allowing them to see in the dark.

A team of entrepreneurs led by electronics engineer Dr Paul Clark redeveloped the electronics and software of the UltraCane, which was originally sold worldwide until 2008, when the previous company went bankrupt.

The old business sold 1,200 units around the world and patented the UltraCane in 17 countries.

"It is particularly gratifying to be able to be part of an all British

invention with the potential to improve the lives of blind and visually impaired people around the world," said Dr Clark.

"UltraCane is an all round British success story – it has been developed, manufactured and brought to market in this country and we are very proud to be a part of it."

www.ultracane.com/ultracane

Humanware extends Stratus range of DAISY players

Humanware has launched the Victor Reader Stratus M range of players for DAISY talking books as a successor to its Victor Reader Classic products.

The Stratus4 M model features a simple 4-arrow keypad providing sequential navigation such as next/ previous chapter, section, page, line, sentence, word, and character.

The player has been designed

to make listening to DAISY books or music CDs easier for users. The device, which has large tactile buttons and an improved layout, plays books and music automatically. It is also supplied with a button cover to hide lesser used buttons.

The Stratus12 M model has a 12-key telephone style number pad allowing direct navigation such as go to page and go to heading. The keypad features high contrast keys with tactile features. All key presses return audio feedback for the non sighted user.

The Stratus4 costs £214 plus VAT.

www.humanware.com

Tobii launches software that turns symbols into speech.

Tobii Technology has introduced Sono Flex, a multi-platform communication application.

Developed for preliterate users, Sono Flex is augmentative and alternative communication (AAC) software that turns symbols into speech.

Tobii claims it is the first major AAC company to offer a vocabulary for iPhones, Android smartphones, iPads and PCs, as well as for speech generating devices.

Sono Flex can be used as a stand-alone solution, or as a compliment to a dedicated communication device for example in social settings such as travelling or meeting friends.

The company believes that some people will start with Sono Flex on their smart phone, tablet or a reader, and then move on to more sophisticated language products.

For others, Sono Flex on a standard consumer electronic device will be enough.

The software comes with more than 11,000 SymbolStix symbols, a mix of core vocabulary and more than 50 pre-installed contextual communication categories, such as 'birthday party' and 'playground'.

Newer platforms such as iPhone, iPad and Android have opened up immense possibilities for AAC users," said Oscar Werner, president of Tobii. "Now it is time that the AAC players stop talking about technology and focus on what is truly important – the development of communication."

Apple versions of Sono Flex cost £65 from the iTunes store, while for Android the software costs £60. ■

www.tobiisonoflex.com

Smartphone app teaches basics of BSL

Sign language interpreting agency Sign Solutions has launched a new app, enabling people to learn the basics of British Sign Language (BSL) using their smartphones.

The BSL Sign & Spell app is a step-by-step guide through the finger-spelling alphabet, to help people communicate with BSL users. The app has been developed by e-learning Studios, in partnership with Sign Solutions.

The app will enable smartphone users to broaden their communicative capabilities, says Sign Solutions. Those who buy the app will also contribute to the improvement of children's lives across the UK: 50p of each £1.50 sale will be donated to the charity Children in Need.

BSL is the first language of an estimated 70,000 people in the UK. Its grammar is completely different from English, which means that Deaf people whose first language is BSL can struggle with written English.

Writing information down is therefore not always an option, and having a basic knowledge of BSL, such as finger-spelling, can be a huge help when communicating with a deaf person.

BSL Sign & Spell takes the user through each letter of the alphabet with the help of two videos showing the front and side view of each sign. Quizzes after every few letters allow the learner to check his or her progress.

Sean Nicholson, co-founder and CEO of Sign Solutions, explains how the idea for BSL Sign & Spell came about: "I remember getting a finger-spelling card at Scouts and being fascinated by this new language.

"This app does exactly the same thing, but with the added convenience of having the finger-spelling played out on videos on our smartphones, in our pockets."

www.signsolutions.uk.com

iPhone's AssistiveTouch goes beyond gestures

Apple has introduced an iPhone feature called AssistiveTouch.

When this feature is turned on a white circle appears at the bottom of the screen. It stays there all the time.

When a user taps the circle, an on-screen palette appears. Its buttons trigger motions and gestures on the iPhone screen without requiring hand or multiple-finger movement.

All a user has to do is tap the palette with a single finger or other object.

Tap Device and a sub-palette appear with six functions that would otherwise require a user to grasp the phone or push its tiny physical buttons.

Commands such as Rotate Screen, Lock Screen, Volume Up and Down, Shake and Mute/Unmute can all be executed by tapping.

Gestures involving up to five fingers are carried out on the phone by selecting icons representing fingers and dragging them. Using this technique, users can operate apps that require multiple fingers dragging on the screen.

Users can also define their own gestures substituting single taps for double taps and so on.

"I doubt that people with severe motor control challenges represent financially significant number of the iPhone's millions of customers," says David Pogue, *The New York Times* technology correspondent.

"But somebody at Apple took them seriously enough to write a complete, elegant and thoughtful feature that takes down most of the barriers to using an app phone."

Panasonic develops family of hospital robots

Panasonic has demonstrated a communication assistance robot called Hospi-Rimo and new versions of a hair washing robot and a robotic bed.

These robots are designed to be used by people who need help to live comfortable and safe lives, says the company.

The Hospi-Rimo acts as a communicator between bedridden people and their health care providers using video-chat links. People with limited mobility or communication skills can also benefit, says Panasonic.

The Hospi automatic delivery robot, which has 27 ultrasound sensors and four laser range finders, is already used in hospitals in Japan.

Panasonic officials said that the robot can move on its own to a specific place; recognising its surroundings and avoiding obstacles in its path.

The entire process of hair washing including shampooing, rinsing, conditioning, and drying can be completed with the new hair washing robot.

Panasonic's robotic bed has the ability to transform into a wheelchair and back into a bed depending on a patient's needs. ■

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Diary of events

BETT 2012
11-14 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. Education Secretary Michael Gove will be the opening speaker at this year's show.
Fees: Free.
For further information: www.bettshow.co.uk

ASSISTIVE TECHNOLOGY INDUSTRY ASSOCIATION CONFERENCE AND EXHIBITION
26-29 January
Caribe Royale Convention Centre, Orlando, Florida, USA
The Assistive Technology Industry Association's (ATIA) conference and exhibition features more than 200 educational sessions spanning the breadth and depth of assistive technology, and an exhibition hall where visitors can see assistive technology in action. Professionals, teachers, users and parents will all benefit from this empowering new conference, says ATIA.
Fees: Standard registration from January 16 is $525 for three days. Various discounts are available.
For further information: Contact the ATIA office via email at info@atia.org or visit www.atia.org

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE (CSUN) 26TH ANNUAL INTERNATIONAL CONFERENCE
27 February to 3 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 six days.
Fees: Early Bird: $455 (by January 12, 2012). Regular: $510 (after January 12, 2012). Late: $550 (after January 31, 2012 & On-Site).
For further information: http://csunconference.org or email conference@csun.edu

NADP SPRING CONFERENCE 2012
23 March
Austin Court, Birmingham
The theme of this one day event is Fitness to Practice – Disability Equality into the Professions. The conference is intended to give participants an overview of the current developments in discrimination law as applied to employment, as well as an opportunity to hear from representatives of the General Medical Council, Law Society and other professional bodies relating to teaching and health.
Fees: Booking before 20 January: member £135, non-member £160. Booking after 20 January: member £165, non-member £190.
For further information: email info@nadp-uk.org or visit www.nadp-uk.org

SIGHT VILLAGE EDINBURGH
24 April
Grosvenor Hilton Hotel, Edinburgh

SIGHT VILLAGE GLASGOW
25 April
Marriott Hotel, Glasgow
Queen Alexandra College's well-attended series of exhibitions aimed at those with vision impairments and people who work with them takes place in two venues in Scotland.
Fees: None.
For further information: email sv@qac.ac.uk or visit www.qac.ac.uk

Contacts

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Editorial, advertising and other enquiries:
john.lamb@abilitymagazine.org.uk
www.abilitymagazine.org.uk

AbilityNet
Charity advising disabled people, employers and others on assistive IT.
0800 269545
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

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

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

IT Can Help
Volunteers offering disabled people free local help with computers.
0800 269545
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

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

Suitability
Services to help employers fill vacancies and disabled people to get jobs. Part of charity Leonard Cheshire Disability.
0845 671 7173
www.lcdsuitability.org.uk

Remploy
Employment services for disabled people and employers, plus other business services, including IT equipment recycling.
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

Market forces

Kevin Carey believes that the market will deliver more standard, low cost services

At the Braille 21 meeting in Leipzig in September I made a proposal to the gathered braille producers and librarians. I suggested that braille production should be democratised by putting tools into the hands of consumers who could choose to scan and produce their own books or wait for the fine products of the braille printing houses.

I thought this would be particularly welcome to that vast majority of blind people who do not work and have the time to produce for themselves.

I thought a member of the audience rather gave the game away when he said: “But if your proposal goes through, half the people in this room would lose their jobs”.

Naturally, the debate was deeply divisive, pitting the two alternatives against each other – the curse of dichotomy is particularly oppressive in the disability sector – until I pointed out that what I was proposing was a market in braille with different quality and modus operandi at different prices. In food retail we’ve largely opted for self service but it doesn’t stop us going to an expensive delicatessen.

This brought me to the whole subject of services and markets. The disability sector – I know this is a gross generalisation – was born out of well intentioned philanthropy where goods and services were supplied to people with disabilities with no choice and with no money changing hands.

Strangely – and you might argue that this is a blatant case of doing the right thing for the wrong reasons – the Government’s initiative on personalised budgets puts it ahead of the disability sector.

The sector’s reaction to these proposals has been instructive: first, there is an almost universal assumption that all disabled people are poor,

Secondly, this assertion is not supported, particularly with a breakdown of acquired disability and occupational pensions.

Kevin Carey is Chair of RNIB (www.rnib.org.uk), and Director of humanITy (www.humanity.org.uk)

Thirdly, there is a terribly wasteful tendency to prescribe appliances by brand rather than generically; and, finally, I have heard the rather shameful argument that people are not capable of making their own decisions.

The talking iPhone, the listening iPad and cheap digital photography are only the beginning of the shift away from assistive technology to the generic market.

The next important development will be simplifying tools to accommodate the cosmopolitan market where English will be almost everyone’s second, not first, language and this will be of enormous benefit to people with learning, cognitive and developmental difficulties.

The tactile gesture of the iPhone will soon be complemented by the ability to read physical gestures and then facial expression. And all this will be supplied by the generic market.

As for services, the new market situation will at least generate a plurality of suppliers and an increase in competition. The sector argues that this will lead to a reduction in quality by which, I think; it means that the market will not be able to supply a Rolls Royce service.

True, but one aspect of quality that the sector frequently ignores is the ratio of cost to reach; my definition of quality is a family car that is fuel efficient and only needs an annual service. I hope that the market will deliver more standard, low cost services, perhaps accorded kite marks by specialist agencies.

The core fallacy of the specialist, professionalised approach is that disability is a cause rather than a series of concrete problems.

Far too much energy has been spent on issues such as the medical versus the social model and the need for adequate representation by people with disabilities on boards and commissions. Consequently, not enough energy has been spent on solving practical problems.

Personally, I don’t want to sit on the board of any major retailer but I’ll move my custom if the quality of the goods and services falls.

Half a century since main-streaming entered our vocabulary it is, too often, still rhetoric. I’ve just been in Scandinavia, the cradle of mainstreaming, where they are building massive residential rehabilitation centres.

I suspect we would do the same if we had the money but, as we don’t, the economic downturn might force us to do the right thing at last. ■

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