TechnoTalk

The TASC Newsletter

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Editorial

Hi everyone,

The TASC team have decided to revisit one of our very popular comparison tables this month. With the variety of products on the market it is often challenging to work out which option is going to best meet your needs. This months Onscreen comparison table provides a quick reference tool to the features of a variety of products. We hope that you find it useful.

TASC also has a new RAD powered chair in our pool of equipment and it has been set-up to be easily adjusted for trials. Read on to find out some more about the features of this powered chair.

Finally don't for the registrations are now open for the ARATA Conference. If you are interested in assistive technology application, research and product then this event is not to be missed. See http://www.e-bility.com/arata/conf.php for more information.

Until next time happy reading!

Jo

Inside

News...

Search Engine for Children

by Petra Karlsson

RedZee is a visual based search engine that is appealing especially for children. On the home page the animated red striped zebra is welcoming the user.

After the keyword has been typed in, web pages related to the search are displayed. By scrolling over the web pages the user can view a thumbnail of the page before clicking to select. This enables children and emergent readers to search for their

favourite web pages more independently, than when using other search engines.

RedZee is sponsored by advertisment, however it is regarded to be family friendly as it is excluding explicit images.

Main Story:

Onscreen Keyboard Review by TASC Occupational Therapists.

An onscreen keyboard allows people with disabilities or special needs who cannot use a keyboard to access the computer via a virtual display that appears on the computer screen. Keys are selected using either a mouse or mouse alternative (by moving the cursor over the desired key and selecting it with a mouse click or by momentarily pausing (dwelling) over the item) or via switch scanning. If the user needs to access the onscreen keyboard via switch scanning a secondary switch interface may be required. The type of switch interface needed for each program has been listed in the table. The following list is not exhaustive but does include some of the most commonly used onscreen keyboards available and the ones that have demos which can be downloaded from the relevant sites. The onscreen keyboards work across most Windows based programs. Some literacy skill is required as they come in standard keyboard letter format with some having limited options for customising the display. There are a few onscreen keyboards that work with the Macintosh platform; however these have not been included in the table below. If you would like information about Mac compatible onscreen keyboards, please contact one of the consultants at TASC.

WizKeys is a relatively new onscreen keyboard; this was not included as a demo was not available for review, for more information see: http://www.spectronicsinoz.com/product.asp?product=25823.

Dasher is a free onscreen keyboard that isn't included in our comparison as it only works within its own application (text is sent to other applications by cutting and pasting). It is worth checking out as a completely different type of onscreen keyboard option for users who can access a mouse or mouse alternative (particularly head mouse and eye gaze users). It is an efficient method of text entry as it uses a learning language model to predict the most probable pieces of text by giving them more space on the keyboard and selection of predicted words is 'mode-free' – the user does not have to move between a keyboard and prediction list.

It is driven by natural pointing gestures – a little bit like driving a car, you steer the mouse towards the first letter of the word, then continue 'driving' towards the next letter of the word. You start by driving cautiously and only continue when you know where you are going – if you don't know where you are going, stop going. You don't have to click to select letters or words, you just keep driving forwards and they are selected as you travel over/through them. It can look confusing at first, but it is worth persisting as once you get the hang of it, it is very efficient.

Dasher can be downloaded from: http://www.inference.phy.cam.ac.uk/dasher/Download.html.

The table on the next page is a comparison of some of the features of onscreen keyboards. In the next edition we will continue our comparison of onscreen keyboards and include those that have additional features for voice output communication and environmental control. For more information please do not hesitate to contact TASC.

Features	Windows On-Screen Keyboard	OnScreen for Windows/ OnScreen with CrossScanner v. 1.78	Click-N-Type v. 3.0.3	WiVik 3.0	ScreenDoors 2000 v. 2.3
Platform	Win Me/2000/ XP/Vista	Win 95/98/ME/NT/2000/XP/ Vista	Win 95/98/ME/ NT/2000/XP/ Vista	Win 98/ME/NT/2000/XP (3.2 under development for Vista compatibility)	Win 95/98/ME/ NT/2000/XP/ Vista
Access options					
Mouse or mouse alternatives	Yes	Yes	Yes	Yes	Yes
Switch Scanning	Yes - 1 switch only	Yes - recommended with CrossScanner for range of scanning functions	Yes - 1 switch only	Yes	Yes - 1 switch only
Dwell Option	Yes	Yes – with CrossScanner	Yes	Yes	Yes
Tremor Setting	No	No	No	Yes – in dwell select	No
Switch scanning options					
Type of scanning	Auto	Auto	Auto	Auto Inverse Directed Step Multi switch directional	Auto
Adjust scanning speed	Yes	Yes	Yes	Yes	Yes
Adjust scanning mode	Yes Row/Column (“regular” layout) Row/Column/ Item (“Block” layout)	Yes – Line scan then finger scan, change left to right or right to left	No Quadrant scan then uses cross-hair mouse	Yes Row-Column Row-group-item Column-row Column-group-item Quadrant scan item	Yes – 2 options “regular” and “block” scanning style
Customise number of scanning cycles	No	Yes	Yes	Yes	No

Features	Windows On-Screen Keyboard	OnScreen for Windows/ OnScreen with CrossScanner v. 1.78	Click-N-Type v. 3.0.3	WiVik 3.0	ScreenDoors 2000 v. 2.3
Scanning display					
Type of scan highlight	Fill scan	Fill scan	Border highlight	Fill scan	Border highlight to select between keyboard and predictor windows and then Fill scan
Ability to change scan highlight	No	Yes – with CrossScanner	No	No	No
Switch interface					
Compatible switch interface	Interface for serial, parallel or game port OR interface that emulates keyboard key	Interface that emulates left mouse click or keyboard key	Interface that emulates left mouse click	WiViK USB interface recommended	Madentec's switch input interface for serial, parallel or game port OR any interface that emulates a left mouse click.
Display					
Range of onscreen displays / keyboards built-in	Standard QWERTY or enhanced (with numeric keypad), block style for scanning, US or Universal keyboards or a keyboard with additional Japanese characters	200 US and International keyboard with 101 and 104 key layout. Other layouts; ABCD Alphabetical, QWERTY, 3 DVORAK'S with Edit and Numeric panels.	Custom alphabet Normal keyboard (ABC or QWERTY) Speed keyboard (frequency of use) Scanning keyboard	Standard international, macro, quadrant macro and standard prediction keyboards	Standard QWERTY, alphabetical, frequency of use, block style for scanning, European and Japanese keyboards
Graphic support					
Inbuilt symbol library	No	No	No	Yes	No
Graphics imported	No	No	No	Yes	No

Features	Windows On-Screen Keyboard	OnScreen for Windows/ OnScreen with CrossScanner v. 1.78	Click-N-Type v. 3.0.3	WiVik 3.0	ScreenDoors 2000 v. 2.3
Customising keyboard or display design					
Ability to resize keyboard / display	No	Yes	Yes	Yes	Yes
Ability to customise size, number, position of cells	No	Yes	Yes	Yes	Yes – can alter size of cells only
Ability to modify or create new keyboard / display	No	Yes – with Build-a-Board software	Yes	No	No
Other features					
Ability to modify font size, colour, type	Yes – font size and type	Yes – size and colour	Yes	Yes – font size and type	Yes
Ability to move and minimise keyboard	Yes	Yes	Yes	Yes	Yes
Ability to link or branch keyboards from one to another	No	No	No	Yes – in scanning keyboards	No
Programming Options					
Ability to have cell display different to cell command	No	Yes – through macros	Yes – through macros	Yes – in macro keyboards	No

Features	Windows On-Screen Keyboard	OnScreen for Windows/ OnScreen with CrossScanner v. 1.78	Click-N-Type v. 3.0.3	WiVik 3.0	ScreenDoors 2000 v. 2.3
Programming Options					
Ability to have cell display different to cell command	No	Yes – through macros	Yes – through macros	Yes – in macro keyboards	No
Auditory Features					
Auditory scanning	No	Yes – beep only or speech / recorded sound	No	Yes – beep only	No
Auditory feedback of selection	Yes - click only	Yes – click or speech / recorded sound, speaks Word Complete selections	Yes – click only or requires additional speech package	Yes – Text-to-speech options in WordQ when prediction enabled	Yes – click only
Ability to customise auditory cue (for scanning) and feedback	No	Yes – one speech / recorded sound only	Yes – with additional speech package	No	No
Rate Enhancement Features					
Are rate enhancement features available?	No	Yes - Word Completion	Yes - Word Completion	Yes - Word Prediction with WordQ	Yes - Word Prediction
Mouse Access					
Does software enable mouse emulation?	No	Yes - with CrossScanner	No	Yes	No
Additional Features					
Environmental Control	No	No	No	No	No
Voice Output	No	No	No	Yes	No

Features	Windows On-Screen Keyboard	OnScreen for Windows/ OnScreen with CrossScanner v. 1.78	Click-N-Type v. 3.0.3	WiVik 3.0	ScreenDoors 2000 v. 2.3
Supplier Information					
Demo available	Included with operating system	Yes www.rjcooper.com/onscreen/index.html http://www.imgpresents.com/demo.htm	Freeware	Yes www.wivik.com	Yes www.madentec.com
Supplier	Microsoft	Online purchase from IMG http://www.imgpresents.com/onscreen/onscreen.htm RJ Cooper http://rjcooper.com/onscreen/index.html	Lake Software www.lakefolks.org/cnt/	Ability Technology Ph (02) 9907 9736 NovitaTech Ph 1800 243246 Technability Ph (02) 9975 8419	Ability Technology Ph (02) 9907 9736 Spectronics Ph (07) 3808 6833 Technability Ph (02) 9975 8419
Cost estimate	Free	Onscreen - $119 USD With CrossScanner $299.95 USD	Free	$578.00	$499.00 full copy or $289.00 to upgrade to ScreenDoors 2000 from standard Windows onscreen keyboard (Me, 2000, XP, Vista)

News Flash!

The RAD has arrived at TASC! by Natalie Carden

If you were wondering whether or not to try powered mobility with a little person, you will be pleased to hear that the RAD is here and ready to go!

The RAD is a Rollerchair powered wheelchair with growth adjustment and tilt-in-space, to accommodate children aged from around two to seven years old. The RAD is part of the assessment equipment held by TASC for powered mobility evaluation. It is used by the seating team and is available to other therapy departments to use for assessments and trials.

The RAD is set-up with MAG (multi-adjustable growth system) seating which has growth components, thoracics, pelvic belt, thigh guides, harness and head support. The MAG is fully adjustable and very supportive.

The aim of powered mobility evaluation is to match available technology, in the form of alternate controls to suit the skills of the individual. Some of the alternate controls available at TASC are: the head array, switch systems, scan drive, multi-switch systems, e.g. the wafer board, mini joystick, heavy duty joystick and the finger control. The equipment can be set up in just about any position required, using commercial mounts or customised for the session using technical assistance.

Send the seating consultants an email at tasc@tscnsw.org.au along with your enquiry or to make a referral to TASC or discuss loan arrangements telephone 02 9975 8469.

the spastic centre
For people with cerebral palsy

The Spastic Centre
321 Mona Vale Road, Terrey Hills NSW
PO Box 184 Brookvale NSW 2100
T: 02 9479 7200
F: 02 9479 7233
E: scnsw@tscnsw.org.au
www.thespasticcentre.com.au