

TechnoTalk

The TASC Newsletter

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Editorial

How fast time has flown as we enter the second half of the year with another information filled edition of TechnoTalk.

The TASC Occupational Therapists have continued with the comparison of onscreen keyboards (started in the May edition) with a review of the features of keyboards that have the ability for voice output. This information is presented in a useful table that can be used as a quick reference point.

This month we also welcome a new staff member to the TASC team. Debbie McKie has joined our seating consultants and brings experience from recently working in the UK. Welcome Debbie!

Finally some of the TASC team are preparing to attend the ARATA conference in Adelaide 22nd-24th September 2008. We look forward to meeting you there. See <http://www.e-bility.com/arata/conf.php> for more information on the exciting program.

Until next time...happy reading!

Jo Ford

News...



Website for parents and families; Alliance for Technology Access

<http://www.ataccess.org/>

If you are interested in some research around assistive technology The Alliance for Technology Access (ATA), based in the United States, offers a website for families of children with disabilities who need assistive technology. On their website you can read about accessibility solutions, accessible toys, accessible play ideas, and information on how to integrate assistive technology into schools.

Equipment news from AbleNet

AbleNet is bringing out the *BIGmack* and the *LITTLEmack* with four different coloured caps in each package.

The caps can be used to colour code activities and messages related to the activities throughout the day such as play time, meal times, morning circle.....



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We welcome any feedback, good or bad, that you may have on our service. Please feel free to contact us by phone on 02 9975 8469, email tasc@tascnsw.org.au or by writing to The Spastic Centre PO Box 184 Brookvale NSW 2100

TechnoTalk Newsletter is free and available from www.thespasticcentre.com.au/news/technotalk/



Profile

Hi, my name is Debbie McKie, and I am the new Seating Consultant who has joined the TASC team!

While studying Physiotherapy at The University of Sydney, I worked at Lifestyles and St.Ives CAS as a Program Assistant during my holidays.

I was sad to leave, but when I finished my degree, I was posted to Canberra to begin my career as a Physiotherapist.

With some experience under my belt and the travel bug biting, I headed over to London with a special interest in respiratory and early rehabilitation of acutely ill patients.

It was there I learnt the importance of comfortable and supportive seating, not only from a therapist's point of view, but from the patient who had to sit in it all day!

I discovered that my favourite part of the session was all the fiddling around trying to create a supportive chair out of an assortment of pillows, towels and whatever else I could get my hands on!

I was very excited to be offered the job here at TASC, and I am really enjoying working with such a holistic team!



Main Story:

OnScreen Keyboards with Voice Output Communication

Comparison Review by TASC Occupational Therapists.

This edition of TechnoTalk continues our comparison of onscreen keyboards (see our May edition for the first part of this comparison). The keyboards in the following table all include the ability for voice output communication as well as access to the computer. Most keyboards come with a range of pre-made communication grids, and some have the ability to create new grids from scratch. Some keyboards also have the capability for additional features such as access to email, text messaging (SMS) and environmental control functions (e.g. control of infrared appliances such as a television; additional equipment required for SMS and environmental control). The table includes the most commonly used onscreen keyboards with the best range of features.

sayit™ Orator and sayit™ Scanner and Mouse are onscreen keyboards with voice output, however they have not been included in this comparison as they only work within their own application (text is sent to other applications by cutting and pasting). For more information on the sayit range and to download demonstration copies, see <http://www.sayit.com.au/>

For more information, please contact TASC Consultants or the suppliers listed.



Features	DiscoverScreen	DiscoverPro (with IntelliSwitch)	EZ Keys XP	REACH Interface Author v.5	The Grid 2	Skeleton Key	VS 4
Platform	Windows 2000 / XP / Vista	Windows 2000 / XP / Vista	Windows 2000 / XP / Vista	Windows 98 / ME / 2000 / XP / Vista	Windows XP / Vista	Windows 98 / 2000 / XP	Windows / XP / Vista
Access options							
Mouse or mouse alternatives	Yes	No	Yes	Yes	Yes	Yes	Yes
Switch Scanning	No	Yes	Yes	Yes	Yes	Yes	Yes
<i>In-built mouse access options</i>							
Dwell Option	Yes	No	Yes	Yes	Yes	Yes	Yes
Tremor Setting	No	No	Yes - "Stabilizing time and size" features	Yes - "Wobble" feature	Yes - "Jitter" setting	No	No
Change mouse cursor size, type, colour	No	No	No	Yes	No	No	No
<i>Switch scanning options</i>							
Type of scanning	None	Auto Step Inverse	Auto Step Inverse "Directed"	Auto Step Inverse	Auto Step Inverse 2/4 Way Elimination	Auto Step Inverse	Auto Step Inverse
Adjust scanning speed	N/A	Yes	Yes	Yes	Yes	Yes	Yes
Adjust scanning mode	N/A	No - Row column only	Yes - Linear Row column Half Scan	No - Row column only	Yes - Linear Row column Over scan Block scan	Yes - Row column Column row	Yes - Linear Row Column Group



Features	DiscoverScreen	DiscoverPro (with IntelliSwitch)	EZ Keys XP	REACH Interface Author v.5	The Grid 2	Skeleton Key	VS 4
Customise number of scanning cycles	N/A	Yes	Yes	Yes	Yes	Yes	Yes
<i>Scanning display</i>							
Type of scan highlight	N/A	Frame highlight	Fill scan	Fill scan	Frame highlight	Fill scan	Frame highlight Invert button Fill scan
Ability to change scan highlight	N/A	No	No	No	Yes - colour	Yes	Yes
<i>Switch interface</i>							
Compatible switch interface	N/A	IntelliSwitch	SoftKey which connects to USB port	Any interface that emulates a left mouse click Joystick	Joy Cable 2 or JoyBox USB Switch Adapter	Any interface that emulates the mouse functions	Crick USB Switch Interface JoyCable 2 USB Switch Adapter
<i>Display Options</i>							
Range of on-screen displays / keyboards built-in	A variety of keyboards specifically designed to access a variety of programs It also has onscreen communication set-ups for simple communication support	A variety of keyboards specifically designed to access a variety of programs It also has onscreen communication set-ups for simple communication support	Includes 9 scanning "keyboards" 5 include word prediction	Over 400 keyboards	Range of computer access and communication keyboards	QWERTY with or without word prediction Scan Word Mouse-dwell with or without word prediction	QWERTY ABC Scan Pointer
<i>Graphic Support</i>							



Features	DiscoverScreen	DiscoverPro (with IntelliSwitch)	EZ Keys XP	REACH Interface Author v.5	The Grid 2	Skeleton Key	VS 4
Inbuilt symbol library	Yes	Yes	No	Yes	Yes - basic symbols plus 60 day Rebus/PCS demo included. Purchase PCS metafiles as additional/or separate version	No	Yes
Graphics imported	Yes	Yes	No	Yes - plus can purchase PCS Add-On to import into communication grids	Yes	No	Yes
<i>Customising keyboard or display design</i>							
Ability to resize keyboard / display	No - depends on the number of cells / keys chosen on the keyboard / setup	No - depends on the number of cells / keys chosen on the keyboard / setup	Yes	Yes	No - depends on the number of cells / keys chosen on the keyboard / setup	Yes	No - depends on the number of cells / keys chosen on the keyboard / setup
Ability to customise size, number, position of cells	Can only make from pre-designed templates ranging from 2 cells upwards	Yes - using <i>Template Maker 2</i>	Spacing between characters only	Yes	Yes	Spacing and shape of keys only	Yes
Ability to modify or create new keyboard / display	Yes - modify only Purchase <i>Template Maker</i> to create new keyboards communication support	Yes - includes <i>Template Maker 2</i> to create new keyboards support	No	Yes - with <i>REACH Keyboard Author</i> (included)	Yes	Yes	Yes
<i>Other features</i>							
Ability to modify font size, colour, type	Can modify background colour only	Can modify background colour only	Yes	Yes	Yes	Yes	Yes

Features	DiscoverScreen	DiscoverPro (with IntelliSwitch)	EZ Keys XP	REACH Interface Author v.5	The Grid 2	Skeleton Key	VS 4
Ability to move and minimise keyboard	Yes	Keyboard disappears off the screen once a selection has been made - a switch activation brings it back or the user can set it to ongoing in the preferences and it will come back automatically	Yes - can move to any 4 corners of screen	Yes	Minimise only	Yes	Yes
Ability to link or branch keyboards from one to another	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Programming Options							
Ability to have cell display different to cell command	Yes	Yes	No	Yes	Yes	Yes	Yes
Auditory Features							
Auditory scanning	Yes - Beep or speech	Yes - Beep or speech	Yes - Audible click or speech	Yes - Speech, inbuilt sound file or recorded sound	Yes - Speech or sound	Yes - Beep or recorded sound	Yes - Speech or recorded sound
Auditory feedback of selection	Yes - Beep or speech	Yes - Beep or speech	Yes - Audible click or speech	Yes - Speech, inbuilt sound file or recorded sound	Yes - Speech or sound	Yes	Yes - Speech or recorded sound
Ability to customise auditory cue (for scanning) and feedback	It is possible to attach a sound to each cell - digitised or an imported sound	It is possible to attach a sound to each cell - digitised or an imported sound	No	Yes	Yes - Speech or sound	Yes	It is possible to attach a sound to each cell - digitised, recorded or an imported sound



Features	DiscoverScreen	DiscoverPro (with IntelliSwitch)	EZ Keys XP	REACH Interface Author v.5	The Grid 2	Skeleton Key	VS 4
Rate Enhancement Features							
Are rate enhancement features available?	No	No	Yes - Word Prediction Abbreviation Expansion Macros	Yes - Word Prediction <i>SmartKey Add-on</i> <i>SmartLists Add-on</i> <i>Dynamic Labels Add-on</i> Abbreviation Expansion AutoType AutoEdit	Yes - Word Prediction Abbreviation Expansion Macros	Yes - Word prediction Word expansion Automatic punctuation Macros	Yes - Word prediction Abbreviation Expansion Macros
Mouse Access							
Does software enable mouse emulation?	No	Yes	Yes	Yes - with <i>ScanBuddy Add-on</i>	Yes	Yes	Yes
Additional Features							
Environmental Control	No	No	No - compatible ECU system is not available in Australia	No	Yes - GEWA ECU additional	No	Yes - Premium version. GEWA ECU additional
Voice Output	Yes	Yes	Yes - when "voice" option purchased	Yes - 120+ AAC keyboards	Yes	Yes	Yes
Other			Morse Code input	Zoom Feature <i>Sound-it-out Phonetic Keyboard Add-On</i>	Email Text messaging with compatible phone and BlueTooth adapter		Email Text messaging with compatible phone and BlueTooth adapter with Premium version



Features	DiscoverScreen	DiscoverPro (with IntelliSwitch)	EZ Keys XP	REACH Interface Author v.5	The Grid 2	Skeleton Key	VS 4
Supplier Information							
Demo available	Yes www.madentec.com 30 Days	Yes www.madentec.com 30 Days	Yes www.words-plus.com Need to use keyboard keys instead of switch. No time limit, however each time will terminate after 20 Enter keys or 100 keystrokes	Yes www.ahf-net.com/reach.htm 30 days	Yes CD from supplier 60 days	Yes www.myskeletonkey.com 30 days	Yes Evaluation CD from supplier
Supplier	Spectronics Ph 1800 999 718 Technability Ph 02 9975 8419	Spectronics Ph 1800 999 718 Technability Ph 02 9975 8419	Technability Ph 02 9975 8419 NovitaTech Ph 1300 855 585 Technical Solutions Ph 03 9737 9000	Spectronics (v.4) Ph 1800 999 718 (v.5) order from US manufacturer www.ahf-net.com/price.htm	Spectronics Ph 1800 999 718 Technability Ph 02 9975 8419 Zygo Ph 1800 818 353	CataLaw Inc. www.myskeletonkey.com	Spectronics Ph 1800 999 718 Technability Ph 02 9975 8419
Cost estimate	\$299.00 <i>Template Maker</i> is \$129.00	\$699.00 for DiscoverPro, however <i>IntelliSwitch</i> is also needed <i>IntelliSwitch</i> is \$495.00 Package of DiscoverPro and <i>IntelliSwitch</i> \$1,190.00	\$1,100.00 <i>EZ Keys XP</i> with No Voice is \$2,090.00 <i>EZ Keys XP</i> with Voice is \$770.00 <i>DECtalk Speech Software</i>	\$549.00 (v.4) <i>PCS Add-on</i> \$129.00 - \$249.00 With <i>SmartKeys</i> is \$799.00 With <i>SmartLists</i> is \$1,050.00 <i>ScanPlus</i> version with <i>SmartKeys</i> , <i>SmartLists</i> and <i>ScanBuddy</i> is \$1,150.00	\$950.00 with <i>PCS Metafiles</i> \$1,220.00	\$99.00 USD	\$890.00 - Standard \$1,150.00 - Premium

News Flash!

Scott Marfilius AT support for students struggling with Maths

Scott Marfilius is an assistive / educational technology consultant with a focus on areas such as computer access and technologies that assist those with cognitive and learning difficulties. Scott Marfilius was one of the key note speakers at the Inclusive Learning Technologies conference held in May 2008 by Spectronics.

Scott shared some of his experience and research in students struggling with maths. He said that research had shown that the root of experiencing math problems often is informational gaps. These gaps happen when instructions have not been sufficient or efficient enough for the learner. We all learn differently, so learning differences, difficulties and or disabilities need to be addressed and taken into consideration when presenting the student with a task.

Areas to consider when identifying where extra support is needed:

- Auditory perception and processing
- Handwriting
- Memory
- Organisation skills
- Attention
- Reading
- Right / Left Discrimination
- Sequencing

Accessibility Strategies to Consider:

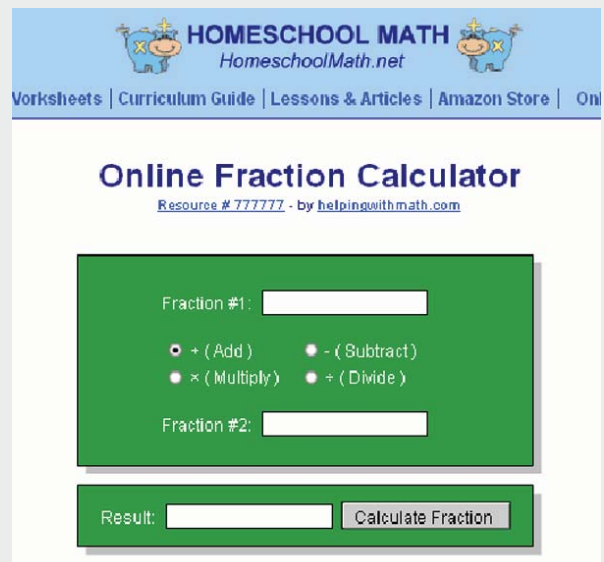
- General Instruction Strategies
- Curriculum Adaptations Strategies
- Classroom Environment

Math Resources - Websites

Ask Dr. Math <http://mathforum.org/dr.math/>
WebMath <http://webmath.com/>

The Tech Matrix <http://www.techmatrix.org/>

This is a nice site where you can match the students need with equipment/software available. Please note that all equipment / software may not be available in Australia.



Free online fraction calculator http://www.homeschoolmath.net/worksheets/fraction_calculator.php

This website had other online math resources for all levels.



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