Happy Spring!

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**News from the Device Loan Program**

HeadMouse® Extreme replaces the standard computer mouse for people who cannot use or have limited use of their hands when controlling a computer or alternative and augmentative communication (AAC) device. The HeadMouse translates natural movements of a user's head into directly proportional movements of the computer mouse pointer, so as the user moves their head, the mouse pointer on the screen also moves. The HeadMouse has a wireless optical sensor which tracks a tiny disposable target that is worn by the user in a convenient location on their forehead, glasses, hat, etc. It works just like a computer mouse, with the mouse pointer being moved by the motion of the user's head.

The HeadMouse will track the user's head with the user located in any comfortable viewing position relative to the computer display. Resolution of the HeadMouse is precise to allow a user to control the mouse pointer down to the minimum, pixel perfect, resolution of the computer display. This precision allows a user to perform such tasks as drawing, gaming, graphics work and Computer Aided Design (CAD).

HeadMouse Extreme connects to the computer or augmentative communication device through a USB port and operates using standard mouse drivers. No special software is required. The HeadMouse is powered by the host device, over the USB
connection. The integrated electronic tilt sensor automatically adapts to even the most unusual mounting requirements.

Selections and mouse button operations can be performed using a variety of adaptive switches. When used with an on-screen keyboard, HeadMouse provides head-controlled access to all of the full range of functions for both keyboard and mouse, and to thousands of standard personal computer applications including Internet access.

For more information, contact:
John Morris
Assistive Technology Coordinator
(512) 232-0753
jcmorris@austin.utexas.edu

**New Equipment Available at TTAP Demonstration Centers**

We’ve been busy updating current equipment and delivering new equipment to TTAP Demonstration Centers state wide. New items include:

- iCommunicator
- Intel Reader and Capture Station
- Snap and Read Software
- Smart Pen Bundles
- Mezzo CCTVs (Portable Demo Centers and Device Loan Program only)
- Several new AT apps for iPad

For further information, contact the demonstration center near you. (A list of centers and contact information can be found on the last page of this newsletter)

**Assistive Technology Q&A**

Q: Can Play Station, x-box and other video games be accessible?

A: Yes. There are many adaptations for controllers. Do an internet search for accessible video games and you’ll find a lot of options.

**Tech Corner:**

From *eSchool News:*

**New Text to Speech Reader – “Voice Dream”**
What is it? It’s an iOS text-to-speech application that is giving students a more effective way to access text. Apple’s iOS text-to-speech features don’t provide a seamless listening experience. Students using iPads can’t make their devices read out loud an entire novel with the tap of a finger; pause, rewind or fast forward when using voice over to take a test; or easily jump to different sections of the text. Voice Dream Reader allows for these functions and offers a number of other text-to-speech customizations.

Requirements: Compatible with iPhone 3GS, iPhone 4, iPhone 4S, iPhone 5, iPod touch (3rd generation), iPod touch (4th generation), iPod touch (5th generation) and iPad. Requires iOS 5.0 or later. This app is optimized for iPhone 5.

Features: 60 voices in 20 languages from Acapela and NeoSpeech, available through in-app purchase. Multiple languages. Text extraction from PDF files; eBooks in DRM-free ePub format; plain text, MS Word, MS PowerPoint, Apple Pages, RTF and HTML files; Dropbox integration; Bookshare and Gutenberg integration; pocket and Instapaper integration; built-in web browser to extract text from web pages; copy-paste via clipboard; play-pause with remote control enabled; remembers where you stopped in each book or article; fast vertical scrolling; synchronized word and line highlighting; table of content for ePub and DAISY books, and much more.


Yes I Can!

Incredible Artists:

Lisa Fittipaldi is visually impaired. Lisa not only learned to paint after losing her sight, she wrote a book about it. Her inspiring use of color and her ability to tell which color she is using just by feeling the texture of the paint are just two remarkable facets of her story.

-Photo of one of Ms Fittipaldi’s paintings. (Outdoor street scene with multicolored flowers and people looking at them.)-

Michael Monaco is Quadriplegic and paints with his mouth. His work has been featured in global exhibitions and he is a member of the Mouth and Foot Painters Association.

-Photo of Mr. Monaco’s paintings. (Beautifully colored pond and trees)-
Dennis Francesconi is a mouth painter that excels at adding a high level of detail in his works, especially considering his method of painting them. He has participated in over 75 exhibitions around the world.

-Photo of Mr. Francesconi’s paintings. (large castle with rolling green hills)-

**Spotlight on TTAP Demonstration Centers**
**Coastal Bend Center for Independent Living**

The Center for Independent Living is a consumer controlled, non-residential, non-profit, cross disability, independent organization providing a wide variety of services to persons with disabilities in the Coastal Bend.

Centers for Independent Living also offer a number of other services, generally depending on specific needs of their consumers and lack of availability elsewhere in the community. Among the most frequently provided services are community education and other publication services, equipment repair, recreational activities, and home modifications.

Five are essential to efforts of people with disabilities to live independently, including:

**Advocacy**

- **Peer Counseling and Support**
- **Information and Referrals**
- **Independent Living Skills Training**
- **Community Programs**

The Coastal Bend Center for Independent Living is happy to answer any questions, receive any comments or list an upcoming event that you might have to offer.

Phone: 361-883-8461
Toll Free: 877-988-1999

**Postal Address**

CBCIL
1537 Seventh Street
Corpus Christi, TX 78404
Device Helps Children with Disabilities Access Touch Screen Devices

Information by Georgia Tech - Published: 2012

(Citation: Disabled World News (2012-2013) - Researchers are trying to open the world of tablets to children whose limited mobility makes it difficult for them to perform the common pinch and swipe gestures required to control the devices.)

Imagine not being able to touch a touch-screen device. Tablets and smartphones—with all their educational, entertaining and social benefits—would be useless.

Researchers at Georgia Tech are trying to open the world of tablets to children whose limited mobility makes it difficult for them to perform the common pinch and swipe gestures required to control the devices.

Ayanna Howard, professor of electrical and computer engineering, and graduate student Hae Won Park have created Access4Kids, a wireless input device that uses a sensor system to translate physical movements into fine-motor gestures to control a tablet.

The device, coupled with supporting open-source apps and software developed at Georgia Tech, allows children with fine motor impairments to access off-the-shelf apps such as Facebook and YouTube, as well as custom-made apps for therapy and science education.

“Every child wants access to tablet technology. So to say, ‘No you can’t use it because you have a physical limitation’ is totally unfair,” Howard said. “We’re giving them the ability to use what’s in their mind so they have an outlet to impact the world.”

The current prototype of the Access4Kids device includes three force-sensitive resistors that measure pressure and convert it into a signal that instructs the tablet. A child can wear the device around the forearm or place it on the arm of a wheelchair and hit the sensors or swipe across the sensors with his or her fist. The combination of sensor hits or swipes gets converted to different “touch-based” commands on the tablet.

Children with neurological disorders such as cerebral palsy, traumatic brain injury, spina bifida, and muscular dystrophy typically suffer from fine motor impairments, which is the difficulty of controlling small coordinated movements of the hands, wrists, and fingers. They tend to lack the ability to touch a specific small region with appropriate intensity and timing needed for press and swipe gestures.

The impact of Access4Kids could be significant. More than 200,000 children in the U.S. public school system have an orthopedic disability and have been excluded from tablet and touch screen devices. Current assistive technology, such as Augmentative and Alternative Communication devices, is available to those with
motor impairments for traditional computer platforms but not tablets or smartphones.

“We can’t keep it in the lab,” Howard said. “It doesn’t make sense for me to have one child, one at a time look at it and say ‘Hey that’s really cool’ and not have it out there in the world. The real goal is to make it safe and efficient so someone can make it into a commercial product.”

Howard is creating a second prototype that aims to be more flexible. It will include wireless sensors that can be placed anywhere a child is capable of hitting them, such as with a foot or the side of the head. User trials for the second prototype will begin soon. Howard says she hopes to have the device through clinical trials starting next year.

What’s on TTAP for Spring

March 5-9, 2013
RESNA International Seating Symposium
Nashville, Tennessee
For information, contact Joseph Ruffing at ruffing@pitt.edu

April 8-10, 2013
Deaf & Hard of Hearing in Government 2013 National Training Conference
Washington, D.C.
Contact: Deaf & Hard of Hearing in Government
(202) 618-3009

Just for Laughs

-Photo of a living mouse giving CPR to a computer mouse with second living mouse standing behind him. Mouse giving CPR is saying “breathe, darn you, breathe!” Second living mouse saying “give it up Jim, he’s dead.”-

The University of Texas at Austin
Texas Center for Disability Studies
Commons Learning Center
10100 Burnet Road
Austin, Texas 78758-4445
http://techaccess.edb.utexas.edu

Any suggestions, comments, or article you would like to have included in our newsletter, please contact us:

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**TTAP Demonstration Centers**

- Brazos Valley Center for Independent Living, Bryan
- Paso Del Norte Children’s Development Center, El Paso
- Ability Connection, Dallas
- Goodwill Industries of Fort Worth
- Easter Seals of Greater Houston
- Coastal Bend Center for Independent Living, Corpus Christi
- RISE Center for Independent Living, Beaumont
- East Texas Center for Independent Living, Tyler
- Goodwill Industries of Central Texas, Austin
- Brazoria County Center for Independent Living, Angleton
- Helping Hands, Amarillo
- Not Without Us, Abilene

**Portable Computer Demonstration Centers**

- REACH Center for Independent Living, Plano
- Houston Center for Independent Living, Houston
- Heart of Central Texas Independent Living Center, Belton
- VAIL – Valley Association for Independent Living, McAllen