

# CommunicATor



Summer 2009

601 East 18th Ave.  
Denver, Co 80203  
303-315-1280  
assistivetechologypartners.org

Assistive Technology Partners envisions a world where all persons with cognitive, sensory and/or physical disabilities are engaged in life at home, school, work and play, without barriers and without boundaries.

## Looking Forward to the First Annual AbleGames

Assistive Technology Partners will be hosting the First Annual AbleGames on Saturday, August 29<sup>th</sup>. Children with disabilities from across Colorado will be competing for fabulous prizes and the chance to say they are the gaming champion! Observers will have the opportunity to see and personally experience a number of different technologies designed to promote participation in gaming.

The purpose of the event is to provide a fun environment for children ages 3-18 with significant disabilities to compete in computer, video and other kid-friendly games. Games will be adapted for disabilities such as poor vision or physical difficulties. For example, a Nerf ball game will be switch adapted so children who are unable to activate it can participate. A Wii con-

### INSIDE THIS ISSUE:

Looking Forward to the First Annual AbleGames	1
Check out the new AT Finder Website to Find AT Equipment	1
ATP Early Childhood Program	2
Economic Stimulus for Early Intervention in Colorado	2
SWAAAC Project Launches New Website	2
SWAAAC Sponsored Make & Take Training	3
Grand Junction Satellite Office	3
Sprouts in the Springs	4
Assistive Technology Usability Lab	5
A Process for Selecting Appropriate AT Devices	6
2009 Advanced Personnel Prep Students	7
ATP Offers Free Education to the Public	8



AbleGames

troller will be adapted to allow an individual who is paralyzed to control the game with just head movement. There will be numerous computer games available that can

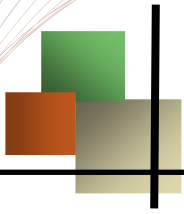
be controlled with virtually any switch. This event helps to show what adaptations and assistive technology can do to enhance the quality of life for children with disabilities. If you know someone who may want to participate or you are interested in volunteering go to

[http://www.uchsc.edu/atp/events\\_AbleGames.html](http://www.uchsc.edu/atp/events_AbleGames.html)

## Check out the new AT Finder Website to Find AT Equipment

AT Finder helps users search for new and used assistive technology equipment on websites such as eBay and Craigslist. By entering a description of the item of interest, the local zip code, and the distance you are willing travel, AT Finder will search eBay, Craigslist, etc. with a single search request. In addition, the results are displayed in an easy to use table format. Go to [www.assistivetechologypartners.org](http://www.assistivetechologypartners.org) for more information.

Assistive Technology Partners  
BREAKING BARRIERS, CHANGING LIVES



## Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



### **Assistive Technology Partners Early Childhood Program**

Assistive Technology Partners recently added a new face to its Early Childhood Program. Brian Burne, an Occupational Therapist who has had a long career in the Denver area, came on board this past September. He is now working hard to raise the awareness and use of assistive technology with the 0-3 population in Colorado.

Brian is working within the existing network of early childhood assistive technology specialists throughout the state who have been trained by Assistive Technology Partners to be a resource on AT for other providers in their local area. The plan is to continue supporting them through ongoing teleconferences, e-mail, direct service and an online group.

New efforts are being put in to improve the integration of assistive technology in the state Part C (early intervention) service delivery system. Assistive Technology Partners is in constant communication with Early Intervention Colorado regarding increased inclusion of AT in the IFSP (Individualized Family Service Plan) process. We are also working on improving AT training for state early intervention service and program coordinators.

Plans for the future include further development of training in AT for early childhood professionals in the state of Colorado and expansion of the provision of early childhood clinical services through Assistive Technology Partners. Contact Brian Burne at 303-315-1287 or [Brian.Burne@ucdenver.edu](mailto:Brian.Burne@ucdenver.edu) for more information.



Brian Burne

### **SWAAAC Project Launches New and Improved Website**

The StateWide Assistive Technology Augmentative Alternative Communication Project (SWAAAC) launched their new website on April 30, 2009. The new website provides valuable information about assistive technology and the SWAAAC teams across the state of Colorado. You can find contact information for all Team Coordinators, helpful PowerPoints, as well as professional development and training information. The website added a new SWAAAC forms and documents page as well as a page on free assistive technology webinars and tutorials. The loan bank catalog is available to everyone visiting the website. This catalog lists all the assistive technology equipment that is available to the SWAAAC teams as well as designated early childhood providers. Go to [www.swaaac.com](http://www.swaaac.com) to check it out!

### **Economic Stimulus for Early Intervention in Colorado**

Assistive Technology Partners is pleased to announce a collaborative project with the Colorado Department of Human Services, Division for Developmental Disabilities, Early Intervention Colorado. This two-year "Teaming through Technology" Proposal was developed to target American Recovery and Reinvestment Act (ARRA) economic stimulus funds and provide a statewide Early Intervention Assistive Technology Technical Assistance and Training Infrastructure for the state.

Priorities include:

- increased awareness of assistive technology (AT);
- increased documentation of AT on IFSP (Individual Family Service Plan);

(Continued on page 3)



# Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



(Continued from page 2)

- increased requests for AT assessment and implementation services;
- increased supply of qualified providers with AT expertise;
- increased access to AT equipment through a loan bank.

The activities center around the child and family with the ultimate goal of increasing independence in natural environments and a long term goal of positive outcomes (such as employment) for individuals with disabilities. A three tiered approach is proposed to increase awareness of AT, while at the same time developing an infrastructure, and building local capacity that can sustain itself once the funding ends.

### SWAAAC Sponsored Make & Take Training Met with High Enthusiasm

The StateWide Assistive technology Augmentative Alternative Communication Project (SWAAAC) hosted their Spring Make & Take training this past April. Innovative projects such as the LocLine Switch Mount and the Adapted Book Activities sent attendees home with AT solutions ready for classroom application. Given the tight budgets so many service providers work within, individual costs for each of the projects presented was taken under careful consideration and ranged from \$0 (opensource software and resources available on the internet) to \$20.00. Here's what just a few participants had to say at the end of the day:



Make & Take

"It fits exactly with my student's curriculum."

"Very applicable. Great suggestions for implementation strategies."

"I loved the computer technology options around exposing kids to writing and drawing."

"...introduction to new, inexpensive material for mounting switches. Great Idea!"

Everyone who attended received a resource CD containing detailed instructions and replication resources for each project, as well as implementation strategies and techniques for the classroom. If you would like to attend the next Make & Take training, be sure to watch the ATP and SWAAAC websites ([www.assistivetechologypartners.org](http://www.assistivetechologypartners.org) and [www.swaaac.com](http://www.swaaac.com)) for new training announcements.

### Grand Junction Satellite Office Provides Assistance to Local Veteran

The WesTAC office was approached by the Denver VA Medical Center to assist with an AT evaluation of one of their veterans living in Grand Junction. They were planning a telemedicine evaluation with the Grand Junction VA Medical Center and needed a variety of AT devices to trial with the veteran. The veteran is unable to use his arms; keeping him from being able to access a computer. Currently he is dependent on another person to control the computer and he can only read the screens. WesTAC provided a laptop with the following hardware/software programs loaded: Dragon NaturallySpeaking, a voice recognition program; Tracker Pro 2000, a hands free mouse; and Quad Joy an orally-controlled mouse. The Veteran is excited about the prospect of being able to surf the Internet by himself.



## Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



### **Sprouts in the Springs**

Assistive Technology Partner's regional office in Colorado Springs is growing! Heather Lyons, speech-language pathologist/instructor/AT specialist, has relocated to the area and is branching out in the south-east corridor of our state, meeting vendors, service providers, and clients who are interested in assistive technology. The first learning lab, **Understanding Access Features of Vista**, will take place on Tuesday, July 28, from 2:30-4:30. This hands-on demonstration is free and open to the public. Please call (800)255-3477 or (719)380-6229 or email [SETACinfo@at-partners.org](mailto:SETACinfo@at-partners.org) to reserve a seat and be added to the mailing list for upcoming events and trainings. The Southeast Technical Assistance Center (SETAC) is open Monday-Friday from 8 a.m. to 5p.m. For more information on clinical services, visit our website at [www.assistivetechologypartners.org](http://www.assistivetechologypartners.org).



Spring is a time for planting; flowers, vegetables, trees, shrubs, and many other types of plants. The Denver Botanic Gardens offers free admission on the following dates:

- Denver Botanic Gardens July 20, 2009 9:00a.m.-5:00p.m.
- Denver Botanic Gardens at Chatfield August 7, 2009 9:00a.m.-5:00p.m.

Infinite Potential through Assistive Technology ([www.infinitec.org](http://www.infinitec.org)) has listed some great resources on their website for adaptive gardening including the following books and websites:

#### **Books**

Accessible Gardening for People with Physical Disabilities: A Guide to Methods, Tools, and Plants, by

- Janeen R. Adil, Woodbine House 1994; ISBN: 0-933149-56-5.
- Accessible Gardening: Tips & Techniques for Seniors & the Disabled, by Joann Woy, Stackpole Books 1997; ISBN: 0811726525.
- Backyards and Butterflies: Ways to Include Children With Disabilities in Outdoor Activities, by Doreen Greenstein, Brookline Books 1997; ISBN: 1571290117.
- Container Gardening for the Handicapped, by Frank J. Schweller, 1990; ISBN: 096247200X.
- Enabling Garden: Creating Barrier-Free Gardens, by Gene Rothert, Taylor Publishing Company 1994; ISBN: 0-87833847-0.
- Green Nature/Human Nature: The Meaning of Plants in Our Lives (The Environment and the Human Condition), by Charles A. Lewis, University of Illinois Press 1996; ISBN: 0252065107.

#### **Web Sites**

- The American Horticulture Therapy Association <http://www.ahta.org>
  - The Chicago Botanic Garden <http://www.chicago-botanic.org>
  - Gardening with Ease <http://www.gardeningwithease.com>
  - Gardenscape Ltd. <http://www.gardenscape.on.ca>
  - The Standup Gardens <http://www.standupgardens.com>
  - Gardener's Supply Co. <http://www.gardeners.com>
- (Adaptive Aids and Garden Tools)  
Enjoy your spring. See you soon!

### **Assistive Technology Usability Lab**

As consumers, when we decide to make a significant product purchase – say, a major appliance or power tool – we often research our options to ensure that the product we choose will efficiently, effectively and dependably meet our needs. We can do this because there are companies that conduct testing and

*(continued on page 5)*



## Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



*(continued from page 4)*

evaluation of the consumer products we buy, and other companies that gather this testing data, organize it, and provide it to us (the consumer) in usable formats through various media.

Unfortunately, for those purchasing assistive technology (AT) devices and software, such information is not readily available. And while the consumer buying the microwave oven may be dependent on it for much of his/her meal preparation, how much more critical is the need for a dependable means of communication for the AAC user, or screen-reading software for the computer user who is blind? Assistive Technology Partners is working to address this problem.



At Assistive Technology Partners, work has started on the development of the Assistive Technology Product Testing Laboratory (ATPTL). Its primary purpose will be to test assistive technology devices and software – both existing products and those under development – to identify strengths and deficiencies in product design, functionality, and dependability. The Laboratory will consist of three primary testing programs each focusing on generating and organizing different types of data and information on AT products.

Testing starts with the Expert Review Program. This involves an initial gathering of publicly available product specific data and information provided by the manufacturer. Then an individual – typically a clinician – that has extensive experience specifying and training others on the product to be tested is identified and asked to fill out a structured questionnaire. The expert is questioned regarding product strengths, weaknesses, how well it works with complimentary equipment or software, etc. The information is used in part to guide what is studied in the next evaluation

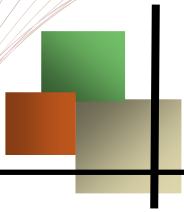
phase. This is usability testing.

The Usability Testing Program will evaluate human factors issues pertinent to specific products through a process of data gathering on ‘real people’ performing ‘real tasks’. In essence, people with disabilities that would normally use the type of product to be tested will be asked to perform tasks for which the product was designed. These sessions will be digitally recorded along with pre and post task interviews to gather structured data and feedback from participants on the product.

Another component of the Lab is the Environment and Usage Testing Program. This program is designed to evaluate how AT devices function when exposed to environments and stresses they may experience during usage. Here, for example, a product might be operated in a chamber that simulates high altitude or rain. Test methods for these and many other environments are spelled out by the Department of Defense in the MIL-STD-810F Environment Test Methods manual. Assistive Technology Partners will be working with our UC Denver colleagues in the College of Engineering and Applied Sciences and the Colorado Advanced Photonics Technology (CAPT) Laboratory to tailor these test methods for evaluating AT products.

We have begun Expert Review on some products already, and are in process of running usability test trials on software used to program a hand held prompting device for people with cognitive disabilities. For more information contact Greg McGrew at 303-315-1289 or [Greg.McGrew@ucdenver.edu](mailto:Greg.McGrew@ucdenver.edu).

**To be added to the  
CommunicATor distribution list or to  
request a hard copy, contact  
[atp@ucdenver.edu](mailto:atp@ucdenver.edu)  
or  
303-315-1280**



## Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



### **A Process for Selecting Appropriate Assistive Technology Devices in Order to Optimize Their Use**

*Marcia J. Scherer, PhD, MPH, FACRM*

Most consumers of AT, as well as their providers, find it frustrating to find and choose the right device. The reasons for this are many. There are over 35,000 different products on the market, so there is a lot to know and a lot of choices. It is also the case that information about available products is incomplete and difficult to locate. And it is the rare person who knows all available resources and options. That is why a service such as AT Partners is so valuable.

But knowing options and where to go for information is only a start. The real work comes in understanding the needs and preferences of each consumer and matching that person with the most appropriate AT for his or her use. This means using a process that allows the provider to get to know the consumer and ask all the right questions, such as:

- The user's goals and expectations
- What the user tried that worked out well
- What the user tried that did NOT work out well
- Appropriate AT choices and their quality
- How the consumer can best be trained to master use
- How well the AT is likely to perform for the consumer in all relevant environments
- The support the consumer will have for use
- The expectations of relevant other persons such as family members, teachers, and employers.

The *Matching Person & Technology (MPT)* assessment process has been developed to gather all of this information, and more. It was designed from the real-life experiences of individuals with disabilities who chose to use or not use an AT made available to them (see books below). It is a resource to aid in decision-making around device selection, and then to determine the impact of that device choice on the user's perform-

ance of desired tasks and participation in key life roles and activities. Thus, impact is judged not simply according to the user's ability but the achievement of consumer life goals. The process also does not see value in comparing Judy to Jane but in seeing how both Judy and Jane had progressed in their goal achievement over time. The process also has the consumer rate competing devices on many dimensions so that the most appropriate one is selected.

#### **When using the MPT process, provider and consumer work together to:**

- choose the most appropriate technology when there is a choice of several;
- decide whether a particular technology is the most appropriate choice given the characteristics of the person, technology and environment;
- decide on the most appropriate training strategies for an individual's optimal use of a technology.

It has also been found that trial use of an AT before committing to its purchase is very important to achieving the right consumer and device match. Peer users of devices can be very helpful when they share their knowledge and experiences. Then the consumer is better equipped to address the following questions:

#### **Examples of Questions for Users to Answer about Their Preferences, Expectations**

- Will AT use fit with the way I usually do things?
- How important is it that I do things as independently as possible?
- Am I comfortable using technology?
- Will I have the contact with others that I desire?
- Do I have the capabilities to use the AT?

In order to obtain the most useful and helpful information to select AT and achieve positive outcomes, an investment of time needs to be devoted to gathering that information. Yet, such time may not be available, reimbursed or otherwise devoted to assessment. This is not the case at AT Partners because they believe that investing time initially is likely to result in the best possible device selection for each particular consumer.



# Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



## 2009 Advanced Personnel Prep Students

This year we have 11 students participating in the Advanced Assistive Technology Personnel Preparation Grant. The students are diverse group of knowl-

edgeable Occupational Therapists, Speech-Language Pathologists and Special Education Teachers. They are completing coursework in assistive technology implementation, assessment, research and engineering and biotechnology.



Brian Burne



Deanna Encinias



Rachel May



Allison Montana



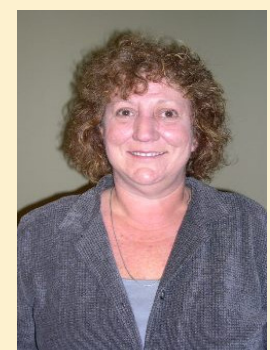
Angela Goerke



Rhonda Johns



Andra Parks



Phyllis Romano



Peggy Kelly



Val Knafelc



Tricia Williams





# Assistive Technology Partners

BREAKING BARRIERS, CHANGING LIVES

CommunicATor: Summer 2009



## **ATP OFFERS FREE EDUCATION TO THE PUBLIC**

Monthly, Assistive Technology Partners (ATP) offers free **Learning Labs** that cover a broad range of topics specific to different areas of assistive technology. From low tech/no tech and free ware that can be found on the internet to the most recent new technologies that are coming out on the market, we will provide a short discussion and give ample opportunity for hands-on exploration. Topics are presented by remote learning technology at our satellite offices in Grand Junction (WesTAC) and Colorado Springs (SETAC).

### **Demonstration of the AT Funding Sources Database**

WesTAC Wednesday July 15<sup>th</sup>  
SETAC Tuesday, August 25<sup>th</sup>

### **Applying Principles of Ergonomics to Office Design and Set up**

Denver Thursday, July 9<sup>th</sup>  
WesTAC Wednesday August 19<sup>th</sup>  
SETAC Tuesday, September 22<sup>nd</sup>

### **An Overview of Kurzweil 3000 Software**

Denver Thursday, August 13<sup>th</sup>  
WesTAC Wednesday September 16<sup>th</sup>  
SETAC Tuesday, October 27<sup>th</sup>

### **Dragon Naturally Speaking: Quick Tips for Success**

Denver Thursday, September 10<sup>th</sup>  
WesTAC Wednesday October 21<sup>st</sup>  
SETAC Tuesday, November 24<sup>th</sup>

### **Seating and Positioning Options for Infants and Toddlers**

Denver Thursday, October 8<sup>th</sup>  
WesTAC Wednesday November 18<sup>th</sup>  
SETAC Tuesday, January 26<sup>th</sup>, 2010

### **Wheelchair Seat Cushions**

Denver Thursday, November 12<sup>th</sup>  
WesTAC Wednesday January 20, 2010  
SETAC Tuesday, February 23<sup>rd</sup>

## **Contact Assistive Technology Partners**

Assistive Technology Partners  
Department of Physical Medicine and Rehabilitation  
School of Medicine  
University of Colorado Denver

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

### **Denver Office:**

Pearl Plaza  
601 East 18th Avenue, Suite 130  
Denver, CO 80203

MAIN: 303.315.1280  
CLINIC: 303.315.1282  
TOLL-FREE: 800.255.3477  
TTY: 303.837.8964  
FAX: 303.837.1208

### **Satellite Office: Western Slope Technical Assistance Center (WesTAC)**

Mesa County Workforce Center  
2897 North Avenue, Modular 3A  
Grand Junction, CO 81501

MAIN: 970.248.0876  
TOLL-FREE: 800.255.3477  
TTY: 970.248.0877  
FAX: 970.248.0877

### **Satellite Office: Southeast Technical Assistance Center (SETAC)**

828 Wooten Road  
Colorado Springs, CO 80915

MAIN: 719.380.6229  
TOLL-FREE: 800.255.3477  
TTY: 719-380-6230  
FAX: 719.380.6230