# Special Needs Tech
## News

**A newsletter celebrating enabling technology, the people who use it and the companies that make it possible.**

## EDITOR'S CORNER

**New Opportunities:** This year has given me a chance to do some things I've been hoping to do for a few years. I finally made it to the **Closing the Gap Conference** in Minneapolis in October. I've been reading their publication for years as well as contributing articles. So, it was an exciting experience to attend the conference and meet some new people. The technology displays and great educational sessions were well worth the trip. Earlier this year I had a chance to attend the ATIA and CSUN conferences. One of the best things about writing about special needs technology is that it provides opportunities to talk with some very interesting people. Many creative and energetic individuals are making contributions to the AT/ special needs technology field. You can learn about some of these people and products through the articles in this newsletter. More articles are available on-line at http://ca.geocities.com/janethopkinsbc/articles.html

**Please feel free to make complete copies of this publication to share with others.**

Send feedback to:

**Janet Hopkins, ATP**

**at_consulting@canada.com**

or

**at_consultingbc@yahoo.ca**

**Phone (250) 828-1444**

**Fax (250) 828-1452**

**Mail: 2265 MacIntyre Place**

**Kamloops, BC V1S 1H7**

### ASSISTIVE TECH EDUCATIONAL CONSULTING

**SPECIAL NEEDS TECHNOLOGY INFORMATION, ASSESSMENT, TRAINING AND WRITING SERVICES**

## Join the ATCanada Listserv

The ATCanada Listserv was initiated on Dec. 30, 2001. Educators and members of the public may join this free discussion group to learn about or exchange information on assistive technology issues. Join at:
http://ca.groups.yahoo.com/group/ATCanada or
http://ca.geocities.com/janethopkinsbc/

## INSIDE

## MOUSE TRACKS

### International Children's Digital Library

**http://www.icdlbooks.org/**

This newly launched website hopes to provide access to children's books in a variety of languages. A high-speed Internet connection and a high-end computer are required to properly access the content available on this site.

### American Foundation for the Blind Career Connect

**www.afb.org/careerconnect/**

AFB CareerConnect™ is a free international resource for people who are blind or visually impaired to learn about the range and diversity of jobs that are performed throughout the United States and Canada by adults who are blind or visually impaired. Register as a resource user or mentor.

## Functional Evaluation for Assistive Technology (FEAT)

A new evaluation tool has been developed that provides assistance to professionals performing AT assessment duties. The **Functional Evaluation for Assistive Technology** (**FEAT**), co-developed by Marshall H. Raskind and Brian R. Bryant, is a comprehensive set of materials designed to guide the AT evaluation process. The FEAT may be used by clinicians and educators to evaluate clients of all ages as candidates for technology to compensate for specific learning disabilities. The FEAT worksheets and examiner's manual promote a consistent yet flexible approach to AT assessment carried out by an evaluation team or individual. Ideally, information should be collected from as many sources as possible when completing the FEAT.

The worksheets that accompany the FEAT manual are comprised of a variety of scales to examine the individual, technology, educational settings and client / device interaction. The worksheets are organized as checklists to ensure that important considerations will not be overlooked during an assessment. However, it may not be necessary to complete every worksheet or every item on a form. The FEAT worksheets are intended for the collection of new information in order to facilitate collaborative decision-making. The five forms are listed below in their typical order of completion:

- Contextual Matching Inventory
- Checklist of Strengths and Limitations
- Checklist of Technology Experiences
- Technology Characteristics Inventory
- Individual-Technology Evaluation Scale

A summary of the information from these forms along with the case background and client identification is recorded in the FEAT Summary and Recommendations Booklet. Samples of completed forms can be reviewed in the evaluator's manual. Although the FEAT provides numeric rating scales, it is not designed as a test. The FEAT would best be described as a standardized evaluation of a person's AT needs.

The FEAT was developed with input from professionals across the United States for the purpose of helping AT evaluators help individuals to achieve greater independence. It is a well-organized system adaptable for widespread use as a standardized assessment model. Most importantly, the FEAT's structure takes into consideration the multiple factors that demand flexibility in order to achieve successful AT outcomes.

### Dr. Brian Bryant Responds to Questions About the FEAT

*1. How is the FEAT's development linked to the background and work of the developers?*

Well, there's a short answer and a long answer. The short answer: It is linked to practically EVERYTHING in our background and work. The long answer:

Marshall has worked in AT for many years, with particular applications in learning disabilities. He began his work in AT at CSUN, where he headed the Learning Disabilities Program and the Computer Access Lab in the office for students with disabilities. He has published numerous research studies on AT and learning disabilities. These studies have investigated the effectiveness of speech recognition and text to speech technologies. He is currently Director of Research, as well as Director of the Trafford Center for Technology and Learning Disabilities at the Frostig Center in Pasadena, CA. Marshall also serves as consulting editor to the Journal of Learning Disabilities,

the Learning Disabilities Quarterly and the Journal of Special Education Technology. He is also Associate Editor of Intervention In School and Clinic.

My background has been in assessment and in AT. I served as Research Director at PRO-ED, an educational publishing company, for about 10 years, where I participated in the development of over 100 tests, including many of my own. My background in AT began in 1992 when I was the Director for the Office of Students with Disabilities at Florida Atlantic University. I had a student who was blind -- he was a tech guru and he taught me a lot. When I moved to Austin a year later, I became the Director for Texas' Tech Act Project. I did that for about 3 years and learned a great deal about consumer advocacy. I also learned from my fellow Tech Act project directors and some wonderful AT professionals and AT consumers in Texas. Since leaving the Tech Act project, I've worked with my wife and other colleagues to develop an Assistive and Instructional Technology Lab at The University of Texas at Austin. We have over 1000 students a year who receive 2-hour AT orientations in the lab, which is something we're very proud of. I also teach a graduate course in AT and undergraduate and graduate assessment courses at UT.

So I guess the FEAT is an outgrowth of our collective experiences, ALL of which have had an influence in one way or another on the scale's construction. If we've learned anything in our careers, it's that people with disabilities have multiple influences in their lives and have multiple needs. But they also have <u>multiple</u> strengths. Thus, any assessment, whether it be in AT or anything else, must be ecological in nature to try to

account for as many of those influences as possible. We tried to incorporate that into the FEAT.

### *2. Where is the FEAT currently in use?*

The FEAT was just published, so its use is limited. The FEAT has been used widely at the Frostig Center in Pasadena, CA and my assessment and AT classes at the University of Texas. We have had numerous queries from around the country and PES, the publishing company, has begun shipping copies to interested consumers.

### *3. What are the specific assessment problems that the FEAT is intended to address?*

Primarily the FEAT was designed to provide examiners with a consistent and systematic protocol that could be used to conduct an ecological evaluation of a person's AT needs. We have found that, without a consistent structure, sometimes, important information is omitted from an evaluation.

### *4. What are the suggested guidelines for re-evaluation? How current would the FEAT assessment need to be for its recommendations to be considered valid in supporting a technology request?*

Clearly, AT evaluations are ongoing. We use the FEAT to provide an estimate of what device(s) will be of benefit to the person being evaluated. We think that the Individual-Technology Evaluation Scale and accompanying worksheets provides the opportunity to see the person use the technology and determine its overall effectiveness. And we use the other scales to assess other important aspects that will influence device use in a variety

of contexts. But we know that sometimes the device doesn't do what it was intended to do in real-world applications, even following the best of evaluations. Unforeseen events crop up sometimes to undermine our best efforts. This is why follow-up evaluations on a regular basis are critical -- we actually build those into the FEAT Summary and Recommendations Booklet. As evaluators, we are researchers in a way. We generate hypotheses about what we think will work based on the results of the evaluation. We then test the hypothesis daily in classrooms, homes, the workplace, or wherever the AT device is being used. Fortunately, we are right more than we are wrong, but if the evaluation did not yield accurate results, we need to find out right away so we can make further adaptations to ensure successful AT implementation. This affects validity, of course, because the FEAT purports to be an ecological, comprehensive instrument that will yield data about a person's AT needs and how the device will work when applied. Validity is not an all-or-nothing concept; evaluation results are valid depending on the interpretations that are to be made. Only through consistent monitoring through follow-ups can we determine if the interpretation of the FEAT's results are indeed valid for a particular purpose in a particular setting.

### *5. What feedback has been most helpful in the design of these materials?*

Everyone's feedback has been helpful. Some reviewers of the scales during its development suggested minor tweakings, others suggested major overhauls. We examined every comment and made alterations that we considered appropriate. People who field tested the scale,

both my students and AT specialists at the Frostig Center, were extremely valuable because their comments were made based on actual administrations. And we expect FEAT users to notify us about their use of the scale. Their constructive considerations will be used to make the scale stronger in the revision process. Scale development never really ends, and we will use customer feedback to improve the scale over the course of the next several years.

The FEAT is available through www.psycho-educational.com

TextAloud MP3: A Lot for A Little

There are many text-to-speech software products on the market these days. But, when it comes to value, it's hard to beat TextAloud MP3. NextUp.com has designed a product that converts digital text to audio and further enhances it with portability potential. It's a product that will increase the appeal of text-to-speech for people who lack the time or ability to read. If these flexible features aren't enough to get your attention, consider the price. It's just $24.95 (US) to purchase TextAloud MP3 via download, or you can get it on CD with the optional premium AT&T

Natural Voices for a total of $51.90 (US) including shipping. At these prices, TextAloud MP3 is one of the most cost-effective and useful utilities you can purchase.

TextAloud MP3 can be purchased on-line at http://www.nextup.com. Consumers who want to learn more about this software before making a decision can download a free fully functional 20 day trial from the company's web site.

If you're not already familiar with text-to-speech software, it's exactly what it says it is. This is software that speech enables a computer allowing a computer user to hear text read by one of a selection of synthesized voices.

For an individual who wants the freedom to utilize information from a computer while in another environment, TextAloud MP3 provides the technology to accomplish that. As well as providing text screen reading functionality, this software also allows the user to save text as WAV or MP3 files which can be used on portable devices such as CD and MP3 players.

TextAloud MP3 can provide a computer user with audio support while at the computer or away from it. This versatility is what makes it a remarkable product with expansive applications. TextAloud MP3 provides new accessibility options for computer users who are visually impaired or print disabled. Others who have difficulty reading from a

computer screen due to a lack of time or desire can also benefit from this software.

TextAloud MP3 could easily be employed in a work or educational setting to assist people who have limited ability to access print resources. Students with reading difficulties or those who need auditory support in order to grasp their course content could benefit from the availability of this product. Especially at the high school level where many students already have their own MP3 and CD players, TextAloud MP3 makes it possible to convert these student-owned technologies into personal assistive devices.

I tested TextAloud MP3's potential for audio-based learning by selecting a sample of public domain literature from the web site www.literature.org. I located a chapter from a Tarzan novel and copied the complete chapter to the TextAloud MP3 text screen. I elected to save the chapter as a WAV file on my hard drive. Then I inserted a CD-RW disk in my CD drive and transferred the Tarzan WAV file to the disk. When I put this disk in my son's CD player, I was able to enjoy listening to Chapter One of Tarzan as read by "Peter," the default voice on TextAloud MP3.

TextAloud MP3 gives students and teachers a new tool for creating audio resources from electronic text that may originate on the Internet or elsewhere. By using a flatbed

scanner with optical character recognition (OCR) software, educators and students can convert books and study sheets to digital format and save them as WAV or MP3 files with the use of TextAloud MP3. Of course, there are variable jurisdictional copyright laws, which must be observed when reproducing materials in alternate format. Nevertheless, this combination of new technologies offers valuable learning alternatives for struggling students. TextAloud MP3 expands the functional value of an MP3 player as an individual can now use it to listen to academic or recreational literature as well as music. Check the NextUp.com website for recommended MP3 players.

It takes a little time to become comfortable using any new technology. TextAloud MP3 provides access to a QuickStart Guide and a very useful Help file. I recommend reviewing both of these resources in order to become acquainted with the TextAloud MP3 toolbar, features and options for configuring the software to function as you wish. An on-line tutorial is available at http://www.nextup.com/TextAloud/tutorial.html. Free and fast technical support is also included via email.

TextAloud MP3 has received recognition from technology reviewers for ZDNet, CNET, TUCOWS and PC World. The New York Times named TextAloud MP3 "the undisputed winner" in a three way comparison of top text-to-speech applications. CNN Headline news also featured TextAloud MP3 in recent segments. It's easy to get excited about this product once you've seen and heard what it can do. To find out more about TextAloud MP3 and other products developed by NextUp.com, visit their web site at www.nextup.com.

> This article has also appeared on AbilityHub.com

# CONFERENCES

January 15-18, 2003
**ATIA 2003 Conference**
Orlando, Florida
Tel: 1-877-687-2842
FAX: 1-847-869-5689
E-mail: Info@ATIA.org
WWW: www.atia.org

March 19-22, 2003
**18th Annual CSUN Conference: Technology and Persons with Disabilities**
Los Angeles, California
Tel: 818-885-2578
E-mail: ltm@csun.edu
WWW: www.csun.edu/cod/

April 3-5, 2003
**ATAINS - Assistive Technology Application and Integration Nova Scotia**
Bridgewater, Nova Scotia
Tel: 902-543-6329 or 902-543-4702   FAX: 902-543-0190
 E-mail: welsfobe@lunenburg.nscc.ns.ca
OR

myerssm@lunenburg.nscc.ns.ca
WWW: ATAINS.ednet.ns.ca

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