Family Center on Technology and Disability

Technology

An AT Pioneer Trains a New Generation of Educators



When it comes to assistive technology in the class-room, Ellen Engstrom has seen it all, or at least quite a bit of it. In recent years, she has devoted herself to teaching what she's learned to a new generation of teachers. In this month's edition of *Technology Voices*, we asked her to share her "lessons learned" with readers.

Ms. Engstrom's experience began before any of the legislation that mandates AT consideration was a twinkle in the government's eye. "I started teaching before the passage of Public Law 94142 – the Individuals with Disabilities Education ACT (IDEA) – in 1975," she recalls. "Back then I had classrooms that consisted of many children with severe reading and writing disorders, as well as students who had no learning problems. There were no extra services for those who were unable to read or write well." All of her early classes, she says, had at least 30 students. In many ways, she notes, "my classrooms were no different from classrooms in the 1950s; there was no technology at all, other than a filmstrip projector."

"Looking back on that now, given all the services and technology that are available, I can't fathom

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how I managed to handle – or not handle – those early classes. My field as it exists now was barely emerging when I was earning my initial teaching certification."

She feels fortunate, she says, "that I've been a participant in every turn of the road as the field has moved from that primitive past to our technologyrich present. I continue to look forward to future developments in technology and to the benefits they'll bring to students with reading and writing challenges."

Ellen Engstrom, M.A., Speaks

An associate professor at Landmark College and a Lead Education Specialist at the Landmark College Institute of Research and Training, Ellen Engstrom has been, since 2010, Director of Teacher Training at Groves Academy (http://www.grovesacademy.org/), a regional private school in Minnesota dedicated to teaching children with learning disabilities; it's Ms. Engstrom's second stint at Groves. Her first exposure to teaching occurred when she was an undergraduate at Boston-area Wellesley College. "I did volunteer tutoring in the Boston public schools," she remembers. "The environment was chaotic; I felt so powerless. It was then that I realized that youth and energy weren't enough to educate students, that other skills were necessary."

Following graduation from Wellesley, Ms. Engstrom, who says she possessed an abiding interest in education even before attending college, decided to obtain a teaching credential. "I was especially interested in language and how it evolves. But I was most interested in discovering why some students were unable to read. After I became a general education classroom teacher, I often found myself with students with reading challenges. I enjoyed trying to decipher those challenges and help those students to resolve them." Her passion, she says, "led

me to earn a second Masters degree, in educational psychology at the University of Minnesota, when I moved here with my family."

What was most ironic about her formative experiences as an educator, she points out, "is that no one ever taught me how to teach reading. I read studies about reading instruction and about the importance of including what we now call balanced literacy – including phonics instruction – but no one ever taught me, in a formal way, how to do it."

Determined to acquire that teaching knowledge, she obtained training in the Orton Gillingham method of instruction (http://www.orton-gillingham.com/frmMethodology.aspx) which emphasizes student understanding of the alphabetic principle, the development of the ability to read sight words and a proficiency in reading words by matching speech sounds to parts of words. She practiced that method in her teaching while at Groves Academy in the 1990s.

It was during her first time at Groves "that I became very intrigued about the ways that technology could benefit students with disabilities. My family was an early adopter of the PC. I was interested in keyboarding, for example, and in spellcheck in ways that would help my students, interests that laid the groundwork for my future work with AT and instructional technology."

Her 1999 move to Landmark College in Vermont, a two-year institution that prepares students with learning disabilities for the academic rigors of college, resulted in a decade-long AT immersion experience during which she became an assistive technology expert and in 2003 authored an AT manual, published by Landmark, that was distributed to all Vermont public schools and revised for general publication in 2005.

Since then, she says, "I've continued to work with AT and to keep up with the latest classroom technology iterations. When that manual was published there were only a few software packages that were appropriate for our use with students with learning disabilities. Today, there are many, with more appearing every year. To move from an educational environment with no technology or legal supports for students with learning disabilities to one with so many possibilities for supporting students has been a stunning journey.

Following our interview with Ms. Engstrom are resources related to the themes she addresses in this issue. We've also included information about a few of the organizations in our database that serve families of children with disabilities. We invite you to share this information with your own networks. If you have an upcoming event or recently published resource that you would like us to include in a future edition, please let us know that as well. Our new email address is: fctd@fhi360.org.

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"Now May be the Best Time in History to Be Dyslexic"

An Interview with Ellen Engstrom, Director of Teacher Training, Groves Academy (MN), former Associate Professor, Landmark College (VT)

Thanks to the accumulating weight of research, the increasingly rapid development of assistive and instructional technology and the proliferation of learning strategies and software choices, "this is probably the best time in human history to be dysolexic" or to have learning



Ellen Engstrom

disabilities in general, declares longtime educator and AT advocate Ellen Engstrom. Assistive technology encourages active student engagement, which is critical to the academic success of children with learning disabilities.

"What's beneficial about technology is that it tends to be very engaging. When students are actively engaged in their learning they are more successful. They learn more and are more attentive and focused," Ms. Engstrom states.

"Technology Fosters Engagement in a Unique Way"

"Technology is inherently interesting to many students," Ms. Engstrom remarks. "Technology allows students to take charge of their own learning by manipulating and customizing the software and by actively participating in multimodal or multisensory reading and writing as well as brainstorming experiences. It's not just that it's technology, however interesting that is to students, it's that the use

of technology fosters engagement, especially in literacy, in a way that not using technology does not."

For teachers and school districts, Ms. Engstrom notes, the challenge is to match technology to student needs and strengths. Ideally, she says, the appropriate match engenders enhanced student attentiveness and focus and results in a more successful academic outcome.

Generally, she explains, "research shows that students tend to do better – and utilize technology more effectively – when they learn to use it not as an add-on but instead as an essential part of their writing or reading process." Technology, she adds, "requires the metacognitive awareness of a strategic approach to reading and writing." Such awareness, she insists, can prove pivotal in optimizing outcomes for students with learning disabilities. On the other hand, she cautions, "should a student's IEP call for a laptop or Kurzweil, that student needs instruction in how best to use the hardware and software. Otherwise, students won't get the intended benefits and experience less success."

"We Once Believed that ADD Had No Impact on Learning to Read"

Increasing technology use in classrooms, Ms. Engstrom says, "has resulted in an explosion of research on reading and on brain function." As research has expanded "we are learning much more about attention



and working memory vis a vis reading. We once thought that ADD was unrelated to reading difficulties. In fact, the individuals conducting cuttingedge research are finding that there is much more interconnection between the two disorders than we'd thought." As a result, she notes, "individuals who can read reasonably well -- those who are proficient at word decoding - are now utilizing text readers and voice recognition software to support their ability to focus."

Research was not nearly so voluminous when Ms. Engstrom arrived at Landmark College in 1999, she recalls. "I'd already learned much about teaching literacy to K-12 students when I was at Groves Academy the first time, and had begun to learn about classroom use of the existing classroom technology." It was at Landmark, though, that she strengthened her knowledge base.

"When I moved to Landmark, two important things occurred: I met Barbara Wilson and I taught in a newly formed learning community of students with substantial dyslexia and dysgraphia."

Barbara Wilson is the creator of the Wilson Reading System (http://www.wilsonlanguage.com/history2.asp). Organized sequentially, the Wilson System employs extensive controlled text to help teachers implement a multisensory structured language program. Recalls Ms. Engstrom, "Barbara came to Landmark to train and certify a group of faculty, including me. Using her method I found such success with students that I persisted in its use and became a Wilson trainer."

In Ms. Engstrom's dyslexia/dysgraphia student learning community program, she taught AT as well as reading and study skills so students could use active reading strategies in combination with AT software. The AT of the day, she remembers, consisted mainly of Kurzweil 3000 for reading text and Dragon NaturallySpeaking voice recognition software. There were some early glitches with Dragon but they were soon resolved. In 2000, she says, "the combination of Kurzweil and Dragon consumed too

much memory resulting in computer crashes." In addition, she continues, "Dragon wasn't as consistent then as now, would pick up background noise and was incapable of functioning with more than one user on a computer."

For that reason, she notes, "we took Dragon Naturally Speaking off of public access machines. When Landmark College introduced universal laptop use in 2002, students in the Language-Intensive Curriculum (LIC) received an assistive technology software bundle installed on their laptops. Use of Dragon took off."

Using Effective Learning Strategies to Teach AT

In 2002 Landmark College received a Congressional award from the office of Senator Patrick Leahy (D., VT) to develop a curriculum for at-risk students that integrated AT. "I was the project manager for the academic side of that effort. My



colleagues and I integrated research based learning strategies into students' use of Kurzweil 3000®, Inspiration®, and Dragon Naturally Speaking®.

In 2003, after developing and piloting the curriculum, "we produced an AT manual that was published by Landmark and which was subsequently distributed to public schools in Vermont. A 2nd edition was published in 2005 and is still available from the Landmark College Bookstore. The approach we took at Landmark is an approach that research increasingly supports; we taught students to use the AT through our effective learning strategies. For example, we taught use of the Kurzweil 3000 to students in the form of an active reading process, which consisted of tasks to be performed

before, during and after reading. We also taught students how to highlight and make margin notes."

Those lessons, she emphasizes, were aimed at supporting reading comprehension. "But the material was learned using Kurzweil, creating a seamless integration of software with an active reading process. "In addition, the students learned a system of textbook note taking that any college student would find useful. "The system gives them a good road map and is, in fact, a strategy consisting of a series of steps resulting in an endpoint: enhanced active student engagement."

Also in 2005 Ms. Engstrom and a Landmark colleague, Linda Hecker, were invited by Columbia Teachers College language skills professor Judith Birsh to contribute a chapter on AT to Dr. Birsh's textbook, entitled, Multisensory Teaching of Basic Language Skills. "The chapter we wrote was based on the work we'd done at Landmark. We focused on the research behind our work and about strategy integration, specifically learning strategies integrated with AT." Because field research moves so rapidly, Ms. Engstrom, says, "we completely rewrote our chapter for the book's third edition, published last summer (2011)."

What has held up through the years, Ms. Engstrom remarks, is the value of text readers for students striving to cope with reading difficulties. "Any student using a text reader is not only reading along with the cursor on the page but is also listening to the words. If students are using voice recognition software like Dragon NaturallySpeaking, they are actually speaking the words and seeing them appear on-screen. This is beneficial for reading and spelling in and of itself, and certainly fluency. There are small studies and observational cases of students who have greatly improved their reading and spelling simply by using voice recognition soft-

ware. So far, however, there's been no 'big' study to fully document this, but I can certainly understand how these benefits can accrue to students faced with reading and writing challenges. Eventually there will be such a study."

Teaching Teachers: Matching Technology to Student Needs

An experienced trainer of teachers, Ms. Engstrom assists teachers in learning to match technology to student needs.



This approach, she explains, helps teachers identify students' needs, strengths and goals and to ascertain how ready students are to pursue those goals. "These and other considerations have to be evaluated. For example, a comprehensive student psycho-educational assessment can help identify the point at which student performance begins to break down."

Dyslexic student breakdowns, she remarks, "are not attributed to motivational, persistence or interest factors but instead to lack of ability to decode words rapidly enough in order to derive the maximum benefit from reading. Therefore, using a text reader is very important for that student."

The task demands of an educational environment should also be considered, she advises. "Not all students need software like like Kurzweil 3000 or even Read and Write Gold just to hear the text talk. If text/talk is the student's goal there are less expensive – even free — alternatives such as operating system text readers. It's good to keep the student's goals in mind."

Another important consideration, she continues, "is the way in which a student will be supported. For example, is there an individual available to assist the student with problem-solving or other issues related to device use? There should also be someone available to monitor student progress with the device. Is the student using the device in a way that will derive the maximum potential for the device? Is the device performing the task for which it was acquired?" These are questions, according to Ms. Engstrom, that should be asked and answered prior to the formulation and finalization of a student technology plan.

Helping Teachers Formulate Learning Strategies

Ms. Engstrom has worked closely with teachers in helping them formulate learning strategies for their students. Take the writing process, for example, she says. Consisting of five steps, that process generally begins with idea generation and then proceeds to the organization of those ideas, drafting and then revising the draft before final proofreading.

"Students with and without learning disabilities can become paralyzed at any point in the writing process. I ask them, 'What are the ways that we can generate and organize ideas?' Brainstorming is one way and can consist of a free write, or a student can employ Dragon NaturallySpeaking to speak ideas, which can then appear on paper or on screen. Another way that's proven successful with students - who like it - is via the use of graphic organizing software like Inspiration (http://www.inspiration. com/Inspiration). Kurzweil 3000 v.12 (http://www. spectronicsinoz.com/kurzweil-3000-version-12for-windows) has the graphic organizing feature built into it, and its rapid-fire function quickly generates - and organizes -- ideas graphically." These ideas, she adds, can then be linked to categories. Inspiration, she explains, has a graphic organizer side and an outline side. "A student can brainstorm on the visual side and then outline on the outline side."

Some students, she notes, "are proficient at brainstorming but experience difficulty with the drafting process. These processes require heavy writing. If students are dysgraphic or if writing is very effortful for them the process can be streamlined to include utilization of graphic organizers at the beginning stage. Ideas can be organized graphically or in an outline which can then be exported seamlessly to word processing where drafting and revision tasks can be performed."

Similarly, she continues, "students who have composed documents via word processor can take advantage of a text reader to perform proofreading tasks. Students can also have a text reader [speak] it back to them. I advise students, 'Have Kurzweil read it,' because students often miss errors because they fail to see them, but they hear errors."

Students may not need to use all of these tools in the writing process, she explains. "They may only need to use some of them depending on their needs at any point in the process of writing, especially if they experience difficulty at the outset in getting started or in persisting through all the required tasks in the process, from start to finish."

Overcoming Student Resistance to Technology

Development of self-awareness – metacognitive awareness – is implicit in successfully matching technology to student needs. This self-awareness becomes even more important when students transition to college. "In college no longer are students with disabilities under the same protection as in their K-12.years. Therefore, students should visit their college's office of disabilities and request ac-

commodations, which must be documented. Students who are aware of their needs are often the best candidates for technology use because they already have goals; if technology is available to help them realize those goals they will use it."

Surprisingly, in this era of student digital natives, there are some students who resist the equalizer aid provided by technology. At Landmark, she notes, some students chose to attempt to improve their reading and writing skills independent of technology. "However, since technology was integrated into the LIC program, students were required to demonstrate their proficiency in various AT software programs. Once they gained proficiency many students who initially rejected technology aids found the AT to be so helpful that they adopted it to support their academic studies."

Transition to College: Technology's Role

Technology, Ms. Engstrom insists, can play a critical role in helping students with learning disabilities prepare to transition to college. For example,



"technology can be used to help students make transparent what I like to call the 'hidden curriculum' – the skills that college instructors expect students to have mastered but for which they are often unprepared."

Those skills, she points out, include note taking, the ability to employ active reading strategies and an acquired understanding of the process involved in writing and composition, "in other words, study skills that would also include planning and organization of assignments and content."

Ms. Engstrom recommends the use of Universal Design for Learning (UDL) tools "as a very effective way to spur the college transition process because students experiencing organizational difficulties can use technology-based calendaring, alarms and alerts. Documents can be filed in Microsoft One Note (http://www.microsoft.com/education/en-us/products/Pages/onenote2010.aspx), which is very inexpensive. Developing fluency with a text reader is also very advisable."

UDL's purpose, Ms. Engstrom explains, "is to plan instruction so that it takes into account the needs of the most diverse group of learners possible." The diversity, she adds, can include English Language Learners and students with reading difficulties as well as those with attention/focus issues. "We should look at multisensory tasks, multiple means of instruction, multiple means of representation and multiple means of presentation. The objective is to present educational opportunities in a variety of formats. Therefore, technology is a natural for UDL because students who require reading support can have their textbooks scanned; they can have digital reading materials and use a text reader to support their reading."

Ms. Engstrom says that she has conducted numerous UDL workshops for teachers "and I've found that for teachers UDL is a broad concept. "Educators who decide to embrace UDL, she adds, "find that it is dissimilar in some ways from differentiated instruction, in which technology can also play an important role. When creating a UDL environment teachers are careful to present material so that learners with different strengths and weaknesses can process and absorb in their own way."

College, she declares, presents a heavy reading comprehension burden on all students, even students who don't have learning disabilities. "Ev-

ery class, every field of study, all the introductory courses in the first two years of college, require students to learn a new vocabulary and new ways to regard course material depending on the academic discipline. The college reading load alone can overwhelm some students. Technology eases the general burden of college and supports reading comprehension."

The Family's Role in College Transition: It Begins with RTI

The technology-supported transition to college – and a family's role in it—Ms. Engstrom asserts, begins with response to intervention (RTI). "AT has a very, very significant role in RTI; instead of waiting for students to fail we try to find ways to intervene earlier – AT helps us do that. When intervening educationally we usually place a heavy emphasis on remediation, i.e. having students complete special programs. However, at some point, as students age, teachers and administrators should ask, 'At what point do we pull back on some of the remediation and instead provide students with sound and useful compensatory strategies, including those anchored by AT or else students may be stunted intellectually and academically?"

At Landmark College, "our students in the Language Intensive Curriculum had four classes – reading and study skills; communication for oral language; developmental writing; small-group reading instruction — amounting to 75% compensatory to 25% remediation. For a student finishing high school and preparing to begin college this ratio is appropriate."

She urges parents to develop awareness of technology possibilities for their child even before a text reader is deemed appropriate for the child's use and long before college is imminent, "realizing that just because their child doesn't read well does not mean that that child cannot be successful and achieve

goals. The more that parents can accept that some technology tools and strategies will be helpful, she says, the earlier their child can begin to prepare for his or her academic future. "I have no problem with students having text read to them as long as solid, research-based remediation is being pursued and implemented as needed."

The Family's Role in Supporting Student Academic Performance

In supporting technology use at home, Ms. Engstrom says, "it helps if technology utilization is accepted there



and parents are educated about its benefits and potential. One of the clear benefits of AT use is that children with disabilities no longer have to be accompanied by an adult who scribes for them or reads to them. Families who value a child's independence can maximize that independence by allowing children to become familiar with and use AT on their own and not immediately rush to help or intervene."

One of AT's most important benefits, Ms. Engstrom points out, "is helping wean children with disabilities away from aspects of the 'learned helplessness' that some of our students tend to acquire over time." At Landmark, she recalls, "we informed students that we would not accept spelling errors in their papers because, thanks to technology, ways to check and correct spelling are plentiful. We told them no one would be scribing for them or reading to them, unless a specific circumstance exists that requires those services. Our belief – and mine – was that students, even those with disabilities, need to

develop a level of independence if they are going to move ahead in school, work and in life. Technology's knack for fostering active engagement can make that independence a reality."

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New Spanish Language Resource from the Family Center on Technology & Disability

The Family Center (FCTD) is pleased to release a Spanish language version of its new publication Family Information Guide to Assistive Technology and Transition. In addition to an extensive, illustrated glossary of AT and transition terms, the new guide helps families and teachers understand the role of assistive technology in IEP's, IFSP's, and transition plans. It describes the benefits of developing a student AT portfolio and provides a number of useful checklists and charts. The guide includes information on relevant laws in family-friendly language as well as stories of youth who have used AT to make successful transitions to higher education, employment and independent living. The guide can be accessed online in both Spanish and English at http://www.fctd.info/show/fig_summary



RESOURCES

ARTICLES

Using Technology to Enhance RTI Implementa-

By Matthew K. Burns, Ph.D.

Response to intervention (RTI) is an evidence-based method of academic intervention designed to provide early and effective aid to children experiencing learning difficulties. In this article Dr. Burns discusses the ways in which technology supports RTI implementation. He notes its role in easing the time burden placed on teachers by data collection and analysis, thereby contributing to data-based decision making within schools and school systems. He looks at the technology-enhanced assessment tools that met the standards set by the National Center on Student Progress Monitoring, and addresses the importance of implementation fidelity. The article includes a brief discussion of family involvement, including family-school partnerships.

http://www.rtinetwork.org/getstarted/implement/using-technology-to-enhance-rti-implementation

Matching Assistive Technology Tools to Individual Needs

By Marshall Raskind, Ph.D.

Great Schools (2010)

Well-respected researcher Dr. Marshall Raskind begins this article by acknowledging that because "students with learning problems have individual strengths, limitations, interests, and experiences, a technology tool that is helpful in one situation or setting may be of little use under different circumstances." As a result, he writes, "selecting the appropriate technology for a student with learning disabilities requires a careful analysis of the dynamic interaction between the individual, technology, task and context." He goes on to offer the following pointers to parents as they make their way through the technology selection process:

- Investigate the qualifications of the individual conducting the AT assessment
- Become familiar with the key components of a quality AT assessment
- Consider a student's strengths and weaknesses in reading, writing, spelling, speaking, listening, math, memory, organization and physical/ motor ability in order to identify specific areas of difficulty that need to be bypassed by utilizing AT
- Pinpoint specific tasks with which a student struggles
- Employ direct observation as the best technique for gathering information about a student's use of technology to compensate for an area of difficulty
- Note an AT device's effectiveness in accomplishing compensatory purpose
- Consider the selection of technology relative to all settings in which the technology will be employed
- Be aware that currently there are no standard policies, procedures or practices a m o n g school districts for conducting AT assessments
- Take a comprehensive view of AT selection, carefully analyzing the interaction between student and technology
- Consider the student's technology experience and interest relative to the specific areas of difficulty
- Remember that an AT assessment is ongoing; reevaluation of the student-AT match is therefore an ongoing process

http://www.greatschools.org/special-education/legal-rights/968-matching-assistive-technology-tools-to-individual-needs.gs

Technology and Teaching Children to Read: What Does the Research Say?

North East and the Islands Regional Technology in Education Consortium

Education Development Center (2004)

This lengthy report is aimed at helping educators and disability professionals understand, evaluate and implement effective uses of technology in K-6 reading programs. The report spotlights National Reading Report research-based guidelines for teaching children to read and provides information about the use of multimedia digital technology to enhance reading instruction. Highlighted in the article are the following key questions:

- Is a process established in your school or district for reading specialists, technology specialists, classroom teachers, and special educators to collaborate on reviewing the possibilities and recommending uses of technology to enhance reading instruction?
- What technologies (hardware and software) are available in your school or district to support reading instruction? How are they currently being used? How are teachers prepared to use them effectively?
- Which of the five components of effective reading instruction (phonemic awareness, phonics, fluency, vocabulary and comprehension) need to be strengthened in your school or district? Which technologies can enhance these components?
- How is your school providing reading instruction to students who are reading below their grade levels? ESL students? Special needs students? How can technology support teachers in helping these students?
- Is information being provided to parents about how technology can help their children learn to read both at school and at home?

http://www.neirtec.org/reading_report/report.htm

WEBSITES

MakeBeliefComix for Students with Special Needs

Created by Bill Zimmerman, this website enables teachers and others who work with students with disabilities to help students design their own comic strips, an activity that fosters literacy and self-expression. The site features tips from teachers of students with a wide range of special needs, both physical and cognitive. Comics can be designed in seven languages including Latin. Text, moods, objects and colors are customizable. Comics may be emailed or printed in hard copy.

http://www.makebeliefscomix.com/Special-Needs/

Supporting Literacy for Students with Disabilities

Designed for teachers, program coordinators and parents, this website, which features an AT segment, spotlights literacy programs utilized by the West Virginia Department of Education. These programs encompass the following three categories: literacy in the classroom and at home; literacy curriculum and instruction; assessments for students and programs. Topics addressed include: ways to present literacy opportunities; the manifestation of literacy assessments on a child's IEP; provision of administrative support, resource allocation; addressing the literacy issues of children with hearing and vision impairments; building and delivering curriculum; and assessing literacy programs and materials.

http://wvde.state.wv.us/osp/supporting-literacy/

GEEK SLP

Created by speech-language pathologist Barbara Fernandes, the founder and developer of Smarty Ears (http://smartyearsapps.com/), this website reviews speech-language applications, addresses classroom technology applications and offers tips on utilizing iPods, iPhones, iPads, Android and other computer systems in speech-language therapies for auditory-verbal difficulties, autism, aphasia, AAC, and language delays. The site also includes apps and resources for parents, how-to articles, event listings

and a shop to purchase applications. http://www.geekslp.com/

WEBINARS

Using Assistive Technology to Promote Children's Participation

Produced by Virginia Commonwealth University (VCU) for educators, early interventionists, technology staff and parents, this webinar focuses on learning via adapted AT. The broadcast defines AT and describes its optimum use by infants and toddlers within the context of "skill learning" - the ability to competently execute a task - and "participation" - taking part in an activity regardless of a child's skill level. The webinar emphasizes the use of AT in both activities as well as the design of low-tech AT for home use. Although viewers cannot participate in this archived broadcast, they can access the webinar's content as it was initially presented. The program is uncaptioned but each screen displays text, the size of which is adjustable by viewers.

http://www.eipd.vcu.edu/sub2_archive_webinar.html

TOOLS

Into the Book

A reading comprehension resource for K-4 students and teachers, this software program focuses on the following research-based strategies: the use of prior knowledge; making connections; questioning; visualizing (drawing pictures to accompany a story); inferring; summarizing a story's main idea; evaluating and synthesizing through activities in the program's student section. http://reading.ecb.org/

\$ \$

KNOWLEDGE NETWORK MEMBERS

Groves Academy

Groves Academy is a private, independent day school for students with learn-



ing disabilities or attention disorders. Located in St. Louis Park, Minnesota, the school has provided full-day and outreach programs to the Twin Cities community for more than 30 years. The Groves Academy full-day program is accredited through ISACS (Independent Schools Association of the Central States) and instruction is research-based. The Groves outreach program for area families and educators features diagnostic assessments, individual tutoring, summer school programs, community outreach workshops, teacher training and an annual college fair. The outreach effort includes assistive technology training workshops for educators and parents, with an emphasis on free and feebased digital products.

For more information, contact:

Groves Academy

3200 Highway 100 South

St. Louis Park, MN 55416

Phone: (952) 920-6377 Fax: (952) 920-2068

http://www.grovesacademy.org/

New Horizons for Learning (NHFL)

Housed since 2009 at the Johns Hopkins University School of Education, NHFL for more than 30 years has identified, communi-



cated and helped to implement educational strate-

gies. The organization spotlights effective teaching and learning practices and concepts that have not yet reached the mainstream. It works in coordination with other reputable networks and learning communities to synthesize relevant research and turn it into practice. In conjunction with other Johns Hopkins programs, NHFL's expanded vision includes establishing a synergetic nationwide and global community of interdisciplinary professionals. The alliance aims to gain a fuller understanding of students and the learning process, and provide professional development to teachers, researchers and other education professionals. The expansion of NHFL is part of a new School of Education initiative that links teacher education and educational technology with the neurosciences.

http://education.jhu.edu/newhorizons/index.html

Innovative Rehabilitation Technology, Inc. (IRTI)

IRTI is a software and hard-ware developer and reseller



specializing in high-tech products and services for the blind/low vision community and for individuals with learning disabilities. The organization publishes accessible tutorials for consumer electronics, making low-cost tools easier for individuals with disabilities to use. IRTI provides data conversion and services for daisy digital talking books and other accessible media formats. IRTI is also a computer systems integrator and a service and training center providing specialized on-site and web-based training for assistive technology.

For more information, contact: Innovative Rehabilitation Technology, Inc. 13465 Colfax Highway Grass Valley, CA 95945

Phone: (800) 322-4784 (toll free); (530) 274-2090

Fax: (530) 274-2093 Email: Info@IRTI.net

http://www.irti.net/about_us/about_us.html

The Gow School

Gow is a not-forprofit boarding school for boys in grades 7-12. The school's college preparatory cur-



riculum is presented using a multi-sensory format in a technology rich environment. The 4:1 student to faculty ratio allows focus on the remediation of language based learning differences -- reading, written expression, spelling, dyslexia, dysgraphia, auditory processing disorder and dyscalculia -- through Reconstructive Language, a phonics-based program closely related of the Orton Gillingham method. Located near Buffalo, New York, The Gow School was founded in 1926 by educator Peter Gow, Jr., informed by the principles of neurologist Dr. Samuel T. Orton, creator of the teaching method that bears his name.

For more information, contact:

2491 Emery Road; P.O. Box 85,

South Wales, NY 14139-0085

Phone: (716) 652-3450

Fax: (716) 652-3457

Contact: M. Bradley Rogers, Jr., Headmaster

Email: brogers@gow.org http://www.gow.org/

The Elizabeth Lee Black School



Part of the Dr. Gertrude A. Barber National Institute, the Elizabeth Lee Black School in Erie, Pennsylvania offers a full range of programs for children with multiple disabilities and autism who are referred to the Black School by surrounding public school districts in northwestern Pennsylvania. The Il-classroom facility features state-of-the-art technology, including computers with Internet access as well as areas for individual and group instruction and a low student-to-teacher ratio. The school encourages the acquisition and classroom implementation of AT. Tuitions at the Black School, a private facility, are paid by the referring public school districts.

For further information, contact:

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TransAccess



TransAccess provides persons with disabilities age 15 and older access to the following five primary adaptive technology and education/career transition services:

• School-to-career, which include mentoring, job

- shadowing and business networking
- Computer Access Lab, which facilitates training on the latest technology
- Mobile Access Technology Lab, which trains students to become proficient in the use of state-of-the-art adaptive technology.
- Internship, which prepares students for entrance into the job market
- Job placement counseling

For additional information, contact:

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