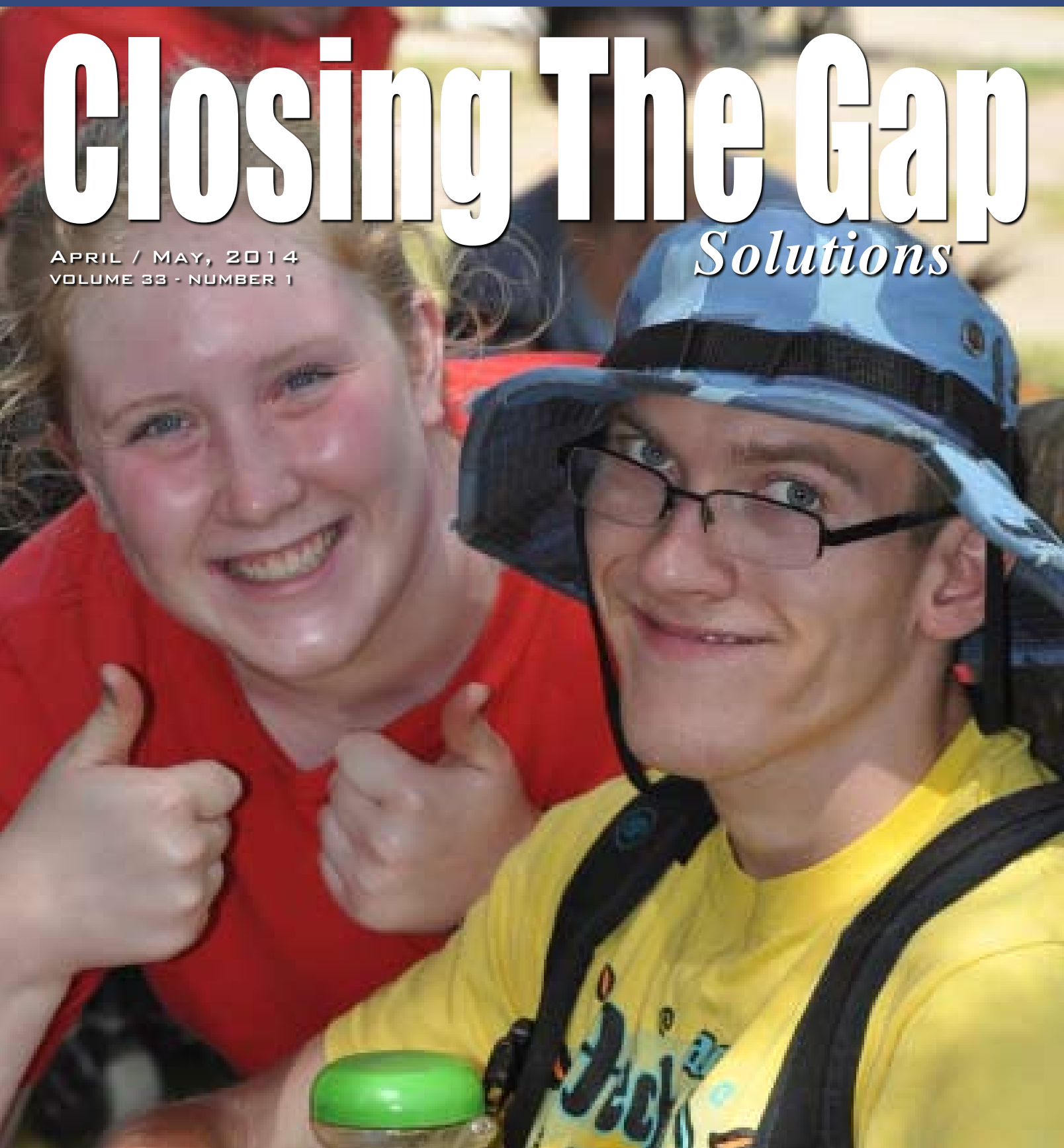


Assistive Technology Resources for Children and Adults with Disabilities

Closing The Gap

APRIL / MAY, 2014
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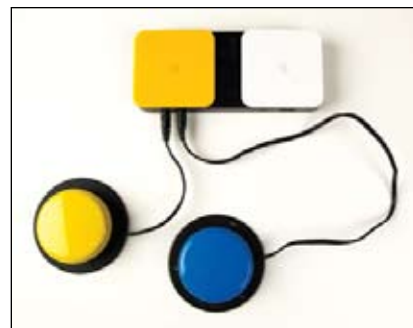
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Apps to Support Older Students

THURSDAY, APRIL 17, 2014

10:00 AM - 11:30 AM CDT

The iPad has proven to be a powerful tool in the classroom for students with diverse learning needs. As our students get older, many struggle trying to keep up with the increasing workload. They may struggle with keeping up with reading and/or writing and start falling behind. There are a wide variety of apps that can be used to support the struggling readers and writers and provide them with tools to help them keep pace. This webinar will cover apps for adapting reading and writing materials, note-taking, classroom management, OCR (Optical Character Recognition, Word Prediction and more. This session assumes that you have a basic understanding on how to use the iPad and its accessibility features.

PRESENTER: MARK COPPIN, B.S., is an Apple Distinguished Educator and the Director of Assistive Technology, Anne Carlsen Center for Children, Jamestown, ND.

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OCTOBER 15-17, 2014

Preconference Workshops

Monday and Tuesday, October 13-14, 2014

DoubleTree by Hilton Hotel Bloomington

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Closing The Gap is truly more than a conference, it is a network of invaluable resources – teachers, therapists, clinicians, parents, end users and manufacturers – all emphatically working together to change lives with assistive technology.

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Day-long workshops, conducted by nationally recognized leaders in the field, providing in-depth professional skills necessary to successfully implement assistive technology in the lives of persons with disabilities.

★ OVER 200 PRESENTATION AND HANDS-ON LAB HOURS

Sessions describing and/or demonstrating successful strategies and practical applications of assistive technology for persons of all ages with disabilities. Presentation titles and descriptions will be announced August 1, 2014.

★ COMMERCIAL EXHIBITS

Extensive exhibition area displaying and demonstrating state-of-the-art assistive technology products and implementation strategies.

★ CEUS AND ACADEMIC CREDIT AVAILABLE!



\$30 RETURN DISCOUNT

A \$30 "return" discount is available to **ANY** past conference registrant and must be used by June 30, 2014.

This discount can be used for any preconference workshop OR conference registration and is

IN ADDITION to any and all other applicable discounts. If registering online, you will be required to enter and apply code **RETURN** at checkout.

REGISTER NOW!

Conference - Wednesday, Thursday, Friday, October 15-17, 2014 Includes Preview of Exhibits – Tuesday, October 14, 5:30 pm - 8:00 pm

Registration Received	On or Before June 30	July 1 - September 11	September 12 - October 2	October 3 - Onsite
Standard Rate Group Discount - 5 or more Group Discount - 8 or more <i>All group registrations must be received at the same time.</i>	\$440 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50	\$490 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50	\$515 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50	\$540 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50
Parent Rate (A letter describing your child's disability must accompany registration)	\$300			
Full-time Student Rate (Proof of full-time student status must accompany registration)	\$300			
Presenter Rate	\$350		\$400	
Exhibitor Rate	\$350		\$400	

Single Day and Exhibit Hall Only Registration	Price
Thursday Only - October 16	\$300
Friday Only - October 17	\$150
Exhibit Hall Only - Tuesday evening through Friday, October 14-17	\$175

Preconference Workshops - Monday and Tuesday, October 13-14, 2014 (Includes Preview of Exhibits – Tuesday, October 14, 5:30 pm - 8:00 pm)	Price
Monday, October 13 (Some preconference workshops carry an additional fee for materials)	\$275
Tuesday, October 14 (Some preconference workshops carry an additional fee for materials)	\$275
BUNDLED PRICING! Monday and Tuesday Bundle (\$60 savings)	\$490

Conference Scholarship - Wednesday, Thursday, Friday, October 15-17, 2014

A limited number of scholarships are available for persons with disabilities or parents/guardians of children with disabilities. To apply, complete a conference registration form, indicating your scholarship request. Submit the form and attach a letter describing your/your child's disability and telling us why you would like to attend the conference. Applicants will receive written notification of acceptance or denial.

EXCEPTIONAL OPPORTUNITIES TO LEARN AND SAVE!

- Workshop registration includes the Preview of Exhibits on Tuesday evening.
- **BUNDLED PRICING** is available - take two workshops and save \$60!
- **CEUs, Academic Graduate-level Credit and Certificates of Attendance** are available for workshop participation.



PRECONFERENCE WORKSHOP TITLES

COME, NETWORK, LEARN – Each workshop is conducted by a nationally recognized leader in the field, providing in-depth professional skills necessary to successfully implement assistive technology in the lives of persons with disabilities.

PC-1 PODD Communication Books: Two-Day Introductory Workshop

PC-2 The Written Productivity Profile: New Research, New Protocol

PC-3 Teaching Scanning and Switch Access for Independent Use of AT (for students with the most complex bodies) to Support Real Learning

PC-4 Creating MATHLIT Kits: Math Assistive Technology Hands-On Literature Integration Tools

PC-6 iTech Boot Camp: Using iTechnology as Evidence-Based Practice to Meet the Learning and Behavioral Needs of Students with Autism Spectrum Disorder

PC-7 Getting Started with Writing for Students with Significant Disabilities: Mission IS Possible!

PC-8 Introductory Proloquo2Go 4 and Proloquo4Text: Hands-On

PC-9 Advanced Proloquo2Go 4 and Proloquo4Text: Hands-On

PC-10 Upgrading Your AT Team: One-size-does-not-fit-all

PC-11 Transparency of Switch Access to AT (especially for those students with the most complex bodies)

PC-12 Communication and Literacy Learning for Girls with Rett Syndrome: Theory and Hands-On Workshop

PC-13 Accessibility in the Age of Transitioning Technologies

PC-14 Literacy and Language Instruction for Complex Learners, From Tots to Teens

PC-15 Somewhere Lost in the Middle: Serving Students who Struggle with Executive Skills, Processing, Working Memory and Retention

PC-16 Scaffolding Conversations Through Communication Circles and Social Scripts: Apps Included!

PC-17 Make Them Laugh! Making the Curriculum FUNctional

PC-18 Clicking Along: Assessment and Implementation Strategies for Developing Independent and Intentional Access to Curriculum Through Switch Use

CALL FOR PARTICIPATION

Share your expertise, learn and network at what has become known as the best educational AT conference in North America.

The Call for Participation for Closing The Gap's 32nd Annual Conference, October 15-17, 2014 is now available online. A pdf of the Call is available as well.

Deadline to submit is 2:00 pm Central Daylight Time, Thursday, May 8th.



SUBMIT ONLINE

[VIEW WORKSHOPS AND DESCRIPTIONS](#)

Using Text-to-Speech Software to Improve Reading Outcomes Among Secondary Struggling Readers

Many secondary students will grapple with complicated course texts and new terminology. Yet for struggling readers, the challenge of reading to learn is especially arduous. With adoption of the Common Core State Standards (CCSS) of 2012, attention is shifting to the critical need to facilitate struggling readers' immediate access to their course texts while supporting literacy development in the content areas. Text-to-speech (TTS) software is an educational technology that teachers can leverage to help meet this pressing need.

WHAT IS TEXT-TO-SPEECH SOFTWARE AND HOW CAN IT HELP?

TTS software is widely used to help struggling readers gain access to print. Using speech synthesis technology, TTS software transforms electronic text into sounds that resemble naturally-voiced human speech (Taylor, 2009). When using TTS software for reading, a student listens to a passage voiced aloud and reads along, following the text on the computer's screen. Several TTS software packages (e.g., Kurweil 3000, WYNN reader) also include integrated study features designed to promote active reading. For example, the software can automatically highlight individual words and sentences as the speech synthesizer voices the text aloud. Other features allow students to highlight text, create sticky and audio notes, look up words with hyperlinked reference tools and even extract selected text to a new TTS readable document.

Recently, we investigated whether TTS software use can improve reading outcomes among 9th graders who were reading at least two grades below their current grade level (1.0 to 6.9 grade level equivalent (GLE)). Over a 10-week period, 134 students and 21 teachers used the TTS software to read and learn from textbooks, articles, novels and Web pages in their content area classrooms. Before and after the intervention, we measured students' reading proficiency without the use

of the software (unaided). Results were dramatic. Analyses revealed that after 10 weeks of TTS software use, the unaided reading comprehension and vocabulary gains of the intervention group surpassed the gains of the control group, by the GLE of five months and six months, respectively (Park, Roberts, Takahashi, & Stodden, 2013). This finding is exciting and significant as previous studies of TTS software have utilized single group designs without a control group (e.g., Roberts, Takahashi, Park & Stodden, 2013; Stodden, Roberts, Takahashi, Park & Stodden, 2012) or measured students' reading skills and comprehension while using the TTS software (e.g., Dimmitt, Hodapp, Judas, Munn, & Rachow, 2006; Disseldorp & Chambers, 2002; Lange, McPhillips, Mulhern, & Wylie, 2006).

READING TO LEARN IN A TTS ENABLED CLASSROOM

Below, we offer a glimpse into a TTS-enabled classroom transcribed from a video observation of Ms. Lu's (pseudonym) classroom.

Visitors to Ms. Lu's secondary classroom will notice the rhythmic sound of fingers tapping computer keyboards, clicking mouses and the quiet hum of students' thinking. Students wearing headsets listen attentively to a marine biology text voiced aloud while their eyes follow the passage displayed on

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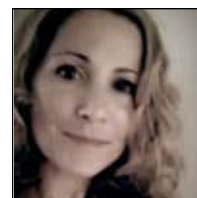
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ROBERT STODDEN, Ph.D., is a professor in the Special Education Department and founder and director of the Center on Disability Studies at the University of Hawaii and Manoa.



their computer screens. Students move their cursor to circle words, highlight sentences and attach virtual sticky notes to the text. Ms. Lu is a secondary teacher using TTS software to improve her students' reading comprehension and content area learning.

At the front of Ms. Lu's classroom, a display maps out how students can use the different TTS study tools while reading to learn. Ms. Lu's TTS-enabled computer is connected to a projector and screen so that her computer's display is visible to students. When modeling how to use TTS software study tools, Ms. Lu voices aloud her thinking about their use and provides time for students to practice using the study features on their own.

For this science lesson, students use TTS software to read through an assigned passage without interruption. Next, students read the passage again while leveraging TTS software features to monitor and repair their comprehension. First, students circle unfamiliar words they wish to define, then place the cursor before each word to access a hyperlinked dictionary. Students then copy and paste the word definitions into bubble notes they attached to the text. Next, students use the highlighter to capture key information and add virtual sticky notes containing their questions or comments about the text. Finally, students add a footnote, within which they type a summary of the section they just read.

While Ms. Lu uses TTS to support students' reading comprehension and vocabulary development, she captures opportunities to model the kinds of thinking that advance learning within the science discipline. For example, when modeling how to record questions onto virtual sticky notes, Ms. Lu audibly voiced questions about marine life, which emerged while reading the text. About a marine mollusk, Ms. Lu asked: "I wonder what is inside the chamber. Is there any gas or any life inside?" and "I wonder what happens to old chambers?" Through authentic questioning, Ms. Lu made her thinking visible (Ritchhart, Church, & Morrison, 2011) and modeled sustained intellectual curiosity – a thinking disposition characteristic of scientific inquiry, meaningful engagement with text and knowledge production within a discipline (Tishman, Jay, & Perkins, 1993).

Several students in Ms. Lu's classroom are struggling readers. Most do not have

computers in their homes and rarely engage in reading outside of school. Yet, twice a week, students use TTS software in her classroom. Since incorporating the TTS software into her classroom practice, Ms. Lu has noticed an increase in students' reading engagement. "When they use the software, they are really focused on their reading material. Their eyes are moving – they are reading, not just daydreaming." She also highlighted that students' use of the software's annotation tools support their engagement with text. "It's quiet, but I can tell there is a lot of thinking going on ... they are asking questions while reading and making comments, too ... I think they are thinking more critically ... beyond the text."

INCORPORATING TTS IN YOUR CLASSROOM PRACTICE

Reading in the content areas provides students with authentic opportunities to apply reading strategies. In the discussion below, we share our ideas on how teachers can harness TTS software features to support struggling readers' reading skill and literacy development in the content area classroom.

FACILITATE DECODING

The ability to decode multisyllabic words is critical for secondary student success in content area classes (Carnine & Carnine, 2004). Yet, adolescents with reading difficulties may lack effective strategies to decode the multisyllabic words that comprise their content area texts (Archer, Gleason, & Vachon, 2003). Students with decoding difficulties can benefit from using TTS software that automatically highlights words and sentences as the speech synthesizer voices the text aloud. This feature helps students focus their attention on individual words and sentences. Students with decoding difficulties can also benefit from TTS software with an integrated word syllable reference tool. While using the software, students can click on a challenging word and listen to each syllable of the word voiced aloud. To further reinforce the correspondence between graphemes and speech sounds, students can quietly subvocalize the word's syllables while softly tapping out the number of syllables (Carreker, 2011). As students become more fluent readers, cognitive effort that was once consumed by decoding can be freely applied towards

monitoring understanding (Rose & Dalton, 2002).

COMPREHENSION MONITORING

Students who closely attend to text and strive for meaning are monitoring their understanding (McKeown, Beck, & Blake, 2009). Formulating questions and constructing summaries while reading are practices that support meaning making (Gajria & Salvia, 1992; Klinger, Vaughn, & Boardman, 2007). Using TTS software, students can read along as they listen to the passage, then pause the speech synthesizer to monitor their understanding. Students can conveniently type their questions or key points onto virtual sticky notes they attach to the passage. Students can also record verbal questions, comments and summaries as audio-notes they can embed within the passage. Just as writing and talking about text support learning and comprehension (Duke, Pearson, Strachan, and Billman, 2011), the audio-notes feature can be especially helpful for students who form mental representations through talking about text. At the end of each passage, students can also add a footnote, within which they type summaries of the scientific processes or author perspectives they encounter through the text.

COMPREHENSION REPAIR

Good readers also revise summaries of what they have read (Duke et al., 2011). Students who reread, restate, identify unknown words and request help are employing fix-up strategies that repair breaks in comprehension (Shanahan & Shanahan, 2008). Using TTS software, students can listen to a complex passage multiple times, highlight main points and circle unfamiliar words. Then, using TTS reference tools, students can click on an unknown word to listen to the word's definition, synonyms or syllables voiced aloud. Students can record their comprehension questions in virtual sticky notes or in audio-notes and then share these questions with their teacher and peers.

SUPPORT VOCABULARY DEVELOPMENT

Underdeveloped reading vocabulary limits a reader's ability to infer word meanings from context (Stahl & Nagy, 2006). For students who have good mastery of oral language, listening to the text while reading can help

overcome the challenges of comprehending text and facilitate exposure to new vocabulary (Dalton & Grisham, 2011). Whether TTS software is used for repeated reading or to support students to read widely, several features of the software can be combined with word-learning instruction. Many TTS software programs provide convenient access to a hyperlinked dictionary and thesaurus. While using TTS software for reading, students may simply “click” on a word to see and hear word definitions and synonyms read aloud. Teachers can encourage students to utilize the embedded reference and study tools. Using annotation tools, students can easily circle challenging or unfamiliar words. Later, they can use the extract function to make lists of these words and add the definitions to make personalized glossaries. While some students can study these words independently, the word lists and glossaries can also be shared with students’ special education or ELL instructors.

PROMOTE CONTENT AREA LITERACY

One way teachers can promote disciplinary literacy is by enculturating the kinds of thinking that advance knowledge development within the content domain (Moje, 2008). For example, teachers can challenge students to reason from evidence and evaluate truth claims, two thinking dispositions that advance understanding within social science and science disciplines.

To enculturate these thinking dispositions in a social studies or science classroom, teachers can use the Red Light, Yellow Light routine (Project Zero, n.d.; Ritchhart et al., 2011) with an interesting text. This thinking routine employs probing questions to elicit students’ evaluation of truth claims presented in primary documents, such as historical papers and journal articles. Developed by David Perkins, the questioning routine prompts students to evaluate truth claims as very doubtful (What are the red lights?), possibly inaccurate (What are the yellow lights?) and convincing (What are the green lights?) (Ritchhart et al., 2011). Use of this thinking routine motivates students to dig deeper into the text, look for sweeping generalizations and draw on textual evidence when critiquing an author’s recommendations (Ritchhart et al., 2011) – thinking dispositions highly valued within the social science and science domains.

Use of TTS software features can help students remember when and how to apply Perkin’s Red Light, Yellow Light routine while reading. Using TTS software to read a primary document, students can read while listening to the passage voiced aloud and highlight doubtful claims in red, possibly inaccurate claims in yellow and convincing claims in green. Students can then use TTS software to circle the author’s evidence in support of his/her truth claims. Meanwhile, students can record their skeptical thinking about the truth claims in audio or sticky notes they attach to the text. Students can use the extract function to export the author’s truth claims (red, yellow, and green highlights) and the author’s supporting evidence (circled text) into a new TTS accessible document. By adjusting the extraction settings, students can create an outline of truth claims and supporting evidence that nests circled text beneath the highlighted text.

During small group or whole class discussions, students can refer to these outlines when identifying evidence for truth claims and refer to their audio and sticky notes when offering reasons why they are skeptical of the author’s claims. As a follow-up assignment, students can print their outlines and choose a truth claim to critique in a take-home writing assignment.

LOOKING FORWARD

TTS software with integrated features can be a valuable instructional technology for reading, which can open a door leading to improved motivation and cognitive engagement. TTS software use expands students’ access to interesting reading materials and can support students’ vocabulary development and passage comprehension. Through the use of TTS software, students are consequently better prepared to participate in small group and whole class discussions of text. We hope teachers will further explore the benefits of this technology for struggling readers. As youth are preparing to exit high school, it is important that we provide them with every opportunity likely to improve their chances for success.

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Forget the Index Cards!

Tips for Using Assistive Technology to Write a Research Report

When I was in school, I was assigned my fair share of research reports, and I absolutely dreaded them. Surrounded by stacks of color-coded index cards filled with scribbled notes and quotations, I couldn't wait until I typed the last period on my typewriter so that I could insert the finished reports into plastic covers and submit them to my teachers. And that was just the first drafts. For me, working on a research report was tedious and time-consuming, and I was a student with strong reading and writing skills. Imagine how students with dyslexia and other language-based learning differences feel when they are assigned a writing project that involves searching for appropriate sources, completing large amounts of reading and organizing notes into a thoughtful report that includes citations.

Fortunately, assistive technology (and technology in general) has developed to the point where students, with LD or not, no longer have to shudder at the thought of such a project. Currently, there is an array of desktop-based software and Web-based tools that can help with the entire process, from brainstorming research questions to editing the final draft. This article will present a series of tips and describe how various technologies can be applied to specific tasks. Following these tips will make research and reporting more efficient and lead to better results for all students.

TIP #1 – CREATE A RESEARCH JOURNAL USING AN ELECTRONIC GRAPHIC ORGANIZER.

Forget the index cards. Yes, they are a step up from taking notes on random sheets of loose-leaf paper, but they still require students to rewrite their notes when it is time to outline their reports or compose first drafts. A much better way to collect ideas and quotations is in an electronic research journal using graphic organizing software,

such as Inspiration or Draft:Builder. First, many LD students are visual learners, so collecting and organizing notes in a mind map can be highly beneficial. Once a series of research questions, or subtopics, is created around the main idea, a student can easily and efficiently write notes that can be color-coded, moved around and linked together by familiar drag-and-drop functionality. Second, after the note-taking step is complete, a student can convert the mind map to a formal outline with one click, without having to rewrite his or her notes and ideas. Finally, the outline can be trans-



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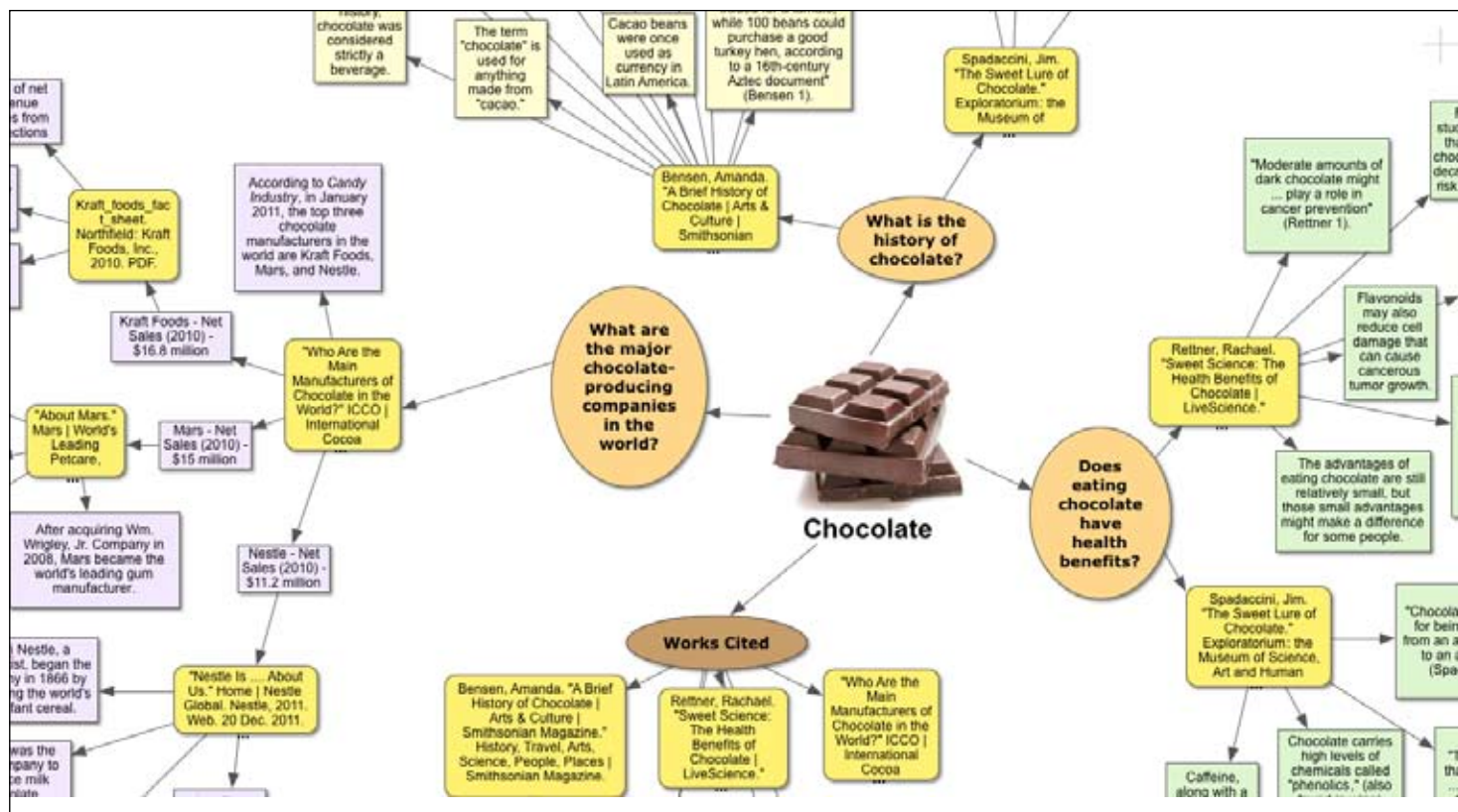


Image 1 – Inspiration Research Journal.

ferred to a word processing program with another click and transformed to paragraph form without having to rewrite the information for a third time. A list of sources can also be collected in the mind map to be used later in the Works Cited page of the report. See image 1 for a sample research journal created with Inspiration for the topic of chocolate.

TIP #2 – USE DICTATION OR WORD PREDICTION SOFTWARE TO TAKE NOTES AND DRAFT THE REPORT.

Although this may sound obvious for students with dyslexia or other learning differences, speech-to-text software, like Dragon NaturallySpeaking, and word prediction software, like Co:Writer, can make the writing process more efficient for any student. In addition to helping with spelling, dictation programs can serve as productivity tools and speed up the writing process, particularly for those with slow typing speeds or those with fine motor difficulties. Word prediction programs can help students spell words correctly early on in the writing process and save time during proof-reading and editing.



Image 2 – SweetSearch

TIP #3 – USE SMART METHODS OF SEARCHING THE INTERNET.

Don't just Google the main topic of the research report and be happy with the search results. There will be far too many websites to read, and many of them will not be helpful or appropriate for an academic

report. There are smarter, more refined ways to search the Internet. My go-to search engine is called SweetSearch, and as its tag line states, it is "A Search Engine for Students." Research experts have vetted every Web site that is identified in a search, so students can have confidence in them as trustworthy sources. See Image 2.

Another great way to search the Web, especially for a student with reading difficulties, is to use Google Advanced Search. Among several parameters that can be set in the advanced search is “Reading Level,” in which the student can narrow down results according to “basic,” “intermediate” and “advanced” levels.

TIP #4 – USE ASSISTIVE TECHNOLOGY TO READ AND UNDERSTAND ELECTRONIC SOURCES.

There are several text-to-speech choices that students can use to help them read electronic content. If they are already using robust software like Read&Write Gold or Kurzweil 3000, they can certainly use those to read websites aloud. Nevertheless, there are free text-to-speech options that will also get the job done. All of Apple’s computers and devices now have TTS built into the operating systems, and a great option for Windows computers is the free version of NaturalReader, which is a floating toolbar with a “play” button that will read any selected text aloud. If the vocabulary on a certain website or downloaded article is difficult to understand, I highly recommend a website called Rewordify. See image 3.

On the site, you can either copy and paste text into a conversion box or copy and paste a website’s URL address, and Rewordify will replace higher-level vocabulary with words that are easier to understand. It’s a great piece of technology and can play a significant role in improving a student’s reading comprehension.

TIP #5 – USE ONLINE CITATION CREATORS TO HELP WITH THE WORKS CITED PAGE.

When I was in high school, one of the most confusing and time-consuming things about writing a research report was trying to correctly format my sources according to the MLA guidelines, and then when I was a freshman in college, the MLA decided to change the rules. Furthermore, now that we have a plethora of electronic sources

from which to gather information, there are even more formatting rules to remember. Thanks to the folks at websites like EasyBib and BibMe, students no longer have to remember all the rules. See image 4.

On both sites, students just have to copy and paste URL addresses into a search box, and the citations are generated automatically. The sites also offer the option to manually input publication information for non-electronic sources, and EasyBib even has an iPhone app that will generate a citation from a photo of a book’s barcode. By using online citation creators, any student today can save

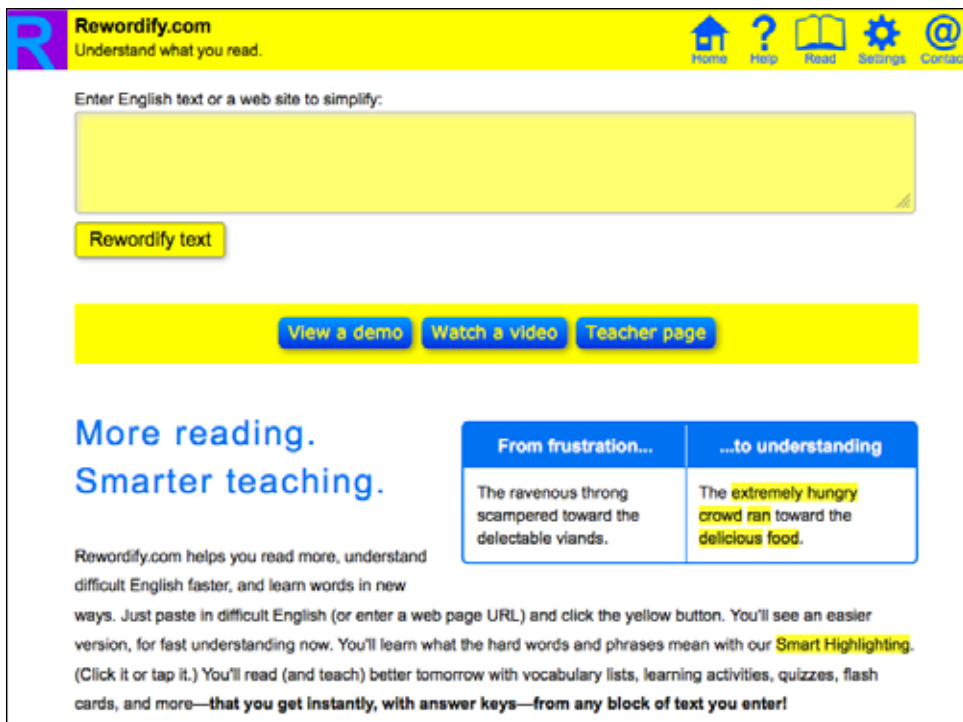


Image 3 – Rewordify website.

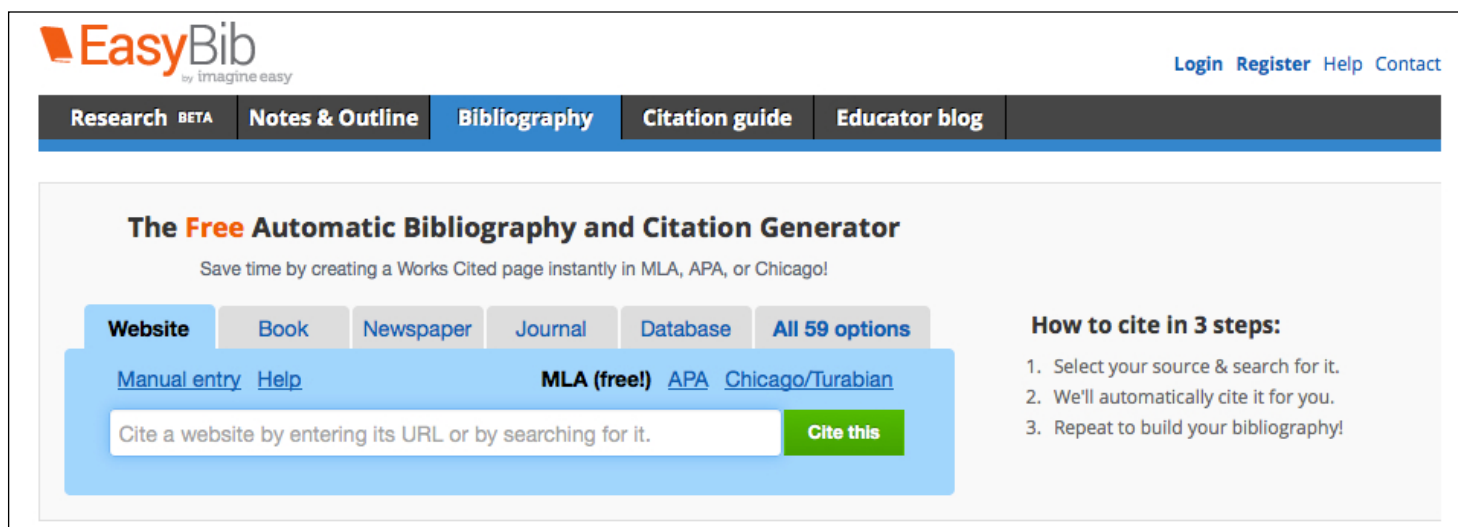


Image 4 – Use EasyBib to generate bibliography and citations for research papers.

a great deal of time and avoid frustration while working on the Works Cited page of a research report.

TIP #6 – USE CONTEXTUAL SPELL AND GRAMMAR CHECKERS DURING PROOFREADING AND EDITING.

The last step before submitting a research report to a teacher is proofreading and editing. Many students try to skip this step – I know I often did when I was in school. Students with LD may perceive proofreading and editing as too difficult; after all, it takes a lot of their resources just to complete a first draft. Nevertheless, assistive technology can make the editing process manageable. A good first step is to use text-to-speech to listen for errors that can be easily identified. Once that has been done, students should use a contextual spell and grammar checker for a closer reading of their reports. Two excellent pieces of software are Ginger and Ghotit. The advantage that these programs have over the basic spell checking function of word processors is that they check entire sentences at a time, which gives them the context to correct such errors as homonyms (e.g., to, two, too). They also do a much better job identifying and correcting phonetic misspellings.

When a student without learning differences works on a research report for school, he or she has to draw on several different reading and writing skills that were previously learned. The same holds true for students with LD who are accustomed to using assistive technology. They need to combine several technology tools in order to get through the process. While I have not provided a complete list of available AT in this article, the tips I have outlined will certainly help students reach the goal of a research project, which is to learn something new, independently. ■

PRODUCT AND WEBSITE INFORMATION

Inspiration Software, Inc.

Inspiration - \$39.95
6443 SW Beaverton-Hillsdale Hwy
Suite 370
Portland, OR 97221
Phone: 800-877-4292
Fax: 503-297-4676
<http://www.inspiration.com/>

Don Johnston, Inc.

Draft:Builder – \$125.00
Co:Writer – \$290.00
26799 West Commerce Drive
Volo, IL 60073
Phone: 800-999-4660
Fax: 847-740-7326
<http://donjohnston.com/draftbuilder/#.Uwzo6V71-r6>

Dragon NaturallySpeaking

\$99.99 - \$199.99
Nuance Communications, Inc.
1 Wayside Road
Burlington, MA 01803
Phone: 781-565-5000
Fax: 781-565-5001
<http://www.nuance.com/dragon/index.htm>

Texthelp, Inc.

Read&Write Gold – \$645.00
600 Unicorn Park Drive
Woburn, MA 01801
Phone: 888-248-0652
Fax: 866-248-0652
<http://www.texthelp.com/North-America/readwrite-family>

Kurzweil Educational Systems

Kurzweil 3000 – \$1,395.00
24 Prime Parkway
Natick, MA 01760
Phone: 800-894-5374
<https://www.kurzweiled.com/products/kurzweil-3000-firefly-overview.html>

NaturalSoft Ltd.

NaturalReader – Free - \$69.50
6091 Forsyth Crescent, Richmond, BC,
V7C 2C4, Canada
Fax: 604-608-9708
<http://www.naturalreaders.com/index.php>

Ginger Software

Ginger Software – Free - \$14.90
annual subscription
<http://www.gingersoftware.com/>

Ghotit, Ltd.

Ghotit – \$199.00
<http://www.ghotit.com/>

SweetSearch

<http://www.sweetsearch.com/>

Google Advanced Search

http://www.google.com/advanced_search

Rewordify

<http://rewordify.com/>

Ramp Up and Shake Up Your Toolkit for PROFESSIONAL DEVELOPMENT

In 1997, amendments to the Individual Disabilities Education Act mandated assistive technology consideration for every student receiving special education services. 17 years later, schools continue to struggle to build expertise among providers who must meet this mandate. This has been compounded by decreasing funding for professional development and educators who now juggle multiple roles, as well as rapidly advancing technology options and solutions.

Kent Intermediate School District, in southwest Michigan, has experienced this trend. Our assistive technology program got its start in 2001, with great hopes for growing local teams, identifying and building area AT specialists and creating a network of professional learning. We are a county with over 400 schools and 7000 staff, serving approximately 17,000 special education students, and yet continue with only one AT Consultant. Our barriers are familiar to many: limited ISD staff responsible for training, an overwhelming amount of new information/ideas/strategies to share, minimal time for



Image 1 - Face-to-Face Professional Learning.



KINDY SEGOVIA, OTR, is currently the Assistive Technology Coordinator at Kent Intermediate School District, Grand Rapids, Michigan. She has worked as an occupational therapist in both schools and pediatric rehabilitation for over 25 years. Over the past 15 years, she has provided educational training for teachers, parents and administrators, with a focus on adapting curriculum and classroom accommodations and integrating technology into instruction. Kindy is also an adjunct professor at Grand Valley State University.



RON HOUTMAN is an Educational Technology Consultant at Kent Intermediate School District, Grand Rapids, Michigan. For the past 13 years, Ron has taught in the classroom and supported educators that are learning and using technology to enhance their teaching and learning. He is also an adjunct professor at Aquinas College and Cornerstone University, a board member of the Michigan Association of Computer Users in Learning and the Director of REMC 8.

face-to-face workshops, conflicting schedules, dwindling funds for speakers, substitutes or materials, lack of effective implementation of tools and strategies and staff who are overwhelmed and have varying levels of expertise, to name just a few.

As a result, we have adopted a wide range of professional learning tools and activities, collaborating with many “nontraditional” partners to meet the needs of our local educators. Our team began with the two of us – the AT Consultant and the Educational Technology Consultant – forging a strong alliance. In our experience, this combination creates a creative system of supports for all learners and educators, breaking down the silos of responsibility. Building on the principles of Universal Design for Learning, our AT Professional Learning Toolkit incorporates flexible strategies to meet the learning styles and time constraints of our educators. Our Toolkit includes:

Face-to-face events: (Image 1) We continue to offer periodic professional learning events at our central location, bringing in educators from our county, as well as the greater southwestern Michigan region. As funding for attendance at large regional or national conferences has been cut, these events allow us to bring local or national “experts” to our own backyard. Participants also have a chance to network and interact with others beyond their own buildings and districts – creating lasting learning communities that extend well beyond the event.

Learning to Go: (Image 2) We have also created an option that offers professional learning topics on-site in area buildings and districts. Our local schools can choose from a menu of topics or request a custom-made workshop. Presenters typically include a team of ISD staff – assistive technology, educational technology, curriculum consultants, etc. – facilitating professional development (PD) designed specifically for the needs of that staff. This often brings a deeper level of commitment and follow-through, as co-workers learn and plan together.

Blended learning: (Image 3) We have embraced this model as well, using a variety of tools, such as Moodle and Google Drive. Whether this involves one session or multiple sessions over time, participants have access to varied learning tools (digital modules, video tutorials, audio supported content, hands-on activities, etc.) that meet their unique learning style and pace. They



Image 2 - Learning to Go.

meet with the presenters or facilitators for a limited amount of time and then work independently online. Incorporating some principles of the Flipped Classroom and online discussion boards or commenting, as well as sharing “homework” with each other have made this a powerful tool. Blended workshops or courses remain available to participants indefinitely after completion, and they are encouraged to return there for ongoing learning.

AssisTechKnow: (Image 4) One of the most successful additions to our PD Toolkit has been this annual two-day AT Conference. We have marketed this as a “mini Closing The Gap”! Participants can register for one day or both, to accommodate difficult schedules. Registration is only \$25 per day, which includes access to over 60 sessions, 15 exhibitors and vendors, morning and afternoon snacks and, of course, door prizes. Presenters are recruited from across the state, vendors and community businesses provide sponsorships, door prizes and snacks to help cover costs, and student volunteers help with everything from registration to traffic control.

LEAP: (Image 5) We hold a similar conference, (Lead/Empower/Assist Parents), targeted at the parents and caregivers of our students with disabilities. This workshop is held on a Saturday, to accommodate parent schedules, with over 20 sessions, 15 vendors and exhibitors, lunch and snacks and more door prizes. Presenters donate their time and expertise, vendors and community businesses again provide sponsorship, and volunteers help the day run smoothly. We encourage teachers and itinerant staff to



Image 3 - Blended Learning



Image 4 - AssisTechKnow Conference

attend with their students’ families, creating lasting collaboration.

Edcamp: (Image 6) One additional event we encourage our special educators to attend is our local educational technology “unconference,” held also on a Saturday and coordinated by our Educational Technology team, with topics generated by the participants the day of the conference. This is a free event, offering sessions on over 25 topics related to technology in education, and a wonder-

ful opportunity for assistive technology and educational technology to join together.

Every toolkit also needs tools that are simple, quick and available at your fingertips. With this in mind, we have incorporated several nontraditional tools that are ongoing and our educators can access anytime - now or later. These small doses of learning are often just enough to spark implementation of a new strategy or engage a teacher new to assistive technology to explore further.

Assistive Technology Strategy-A-Day Desktop Calendar: (Image 7) For those educators who benefit from a low-tech option for PD, we collaborated with Loudoun County Public Schools in Virginia to create this flip calendar. It provides an AT tip for each day throughout the school year, incorporating no-tech through high-tech ideas. We give these away to educators attending workshops, and local districts can purchase them for wider staff distribution.

iPad and Tablet Tidbit Rings: We took the tidbit idea one step farther and created small cards on a ring, providing an app suggestion, accessibility solution or implementation strategy for iPads and Android devices. Our teachers love to receive the latest editions of both, the calendars and the rings. Tips and strategies are gathered from fellow AT consultants throughout our state, national AT blogs and websites and our own educators.

Email and Social Networking: Realizing that many of our educators may never connect with us through a workshop, AT Tidbit emails and iPad/Tablet Tidbit emails and tweets are sent out weekly, with one or two links, strategies, apps, ideas, etc. on a broad range of topics. These also include no-tech through high-tech solutions for early childhood through high school and transition. These tidbits are widely distributed as educators share them with each other, and those new to assistive technology who have asked to be added. While many of our local educators remain uncertain about Tweeting, we have taught them to follow us, as an initial step into this professional networking powerhouse. Once there, we share other assistive technology and educational technology gurus to follow, helping to build their network and move beyond email.

ATNAPFTS - All Teachers Need a Place for Their Stuff!: (Image 8) All of these professional learning tools are great, but how do the teachers and therapists find them? How do those who cannot attend an event or

workshop still benefit from the information? Building and maintaining an online space has been one of the most important tools we have used. Utilizing a wiki as a central space to post workshops, handouts, resources, forms, links to the tidbits and more allows anyone to find information anytime, anywhere. Kent ISD assistive technology can be found at kentisdatt.pbworks.com and educational technology can be found at kisd.pbworks.com.

Once you have your professional learning tools and an online space to act as the toolbox, there are a few key strategies that will help ramp things up. First, make sure administration knows what you are doing. Subtly and discreetly share your activities, both small and large. Take pictures during workshops and forward them, add your administrator to your tidbit email list, provide calendars at meetings and share the positive feedback from your followers.

Build relationships, including those in your immediate building or area. Support staff, media specialists and other consultants can help you with workshops and events if they feel connected. Connect to local educators who are doing great things and using assistive technology; boost their efforts by sharing their story and they will present for you. Reach out to vendors, offer to be a pilot site for a product and/or invite them to provide a demo at a local or regional meeting; they will give door prizes or sponsorships and attend your events.

Be flexible with your time, the format and location for PD, and the amount of repetition that is necessary to embed learning. Offer learning opportunities after school, on Saturdays, off site and repeat important topics more than once. Creating a well-rounded Professional Learning Toolkit not only involves including a variety of necessary tools, but effectively marketing and managing your product.

Finally, handholding a reluctant educator, especially one that doesn't believe they can effectively learn new technology, can make all of the difference. ■



Image 5 - LEAP Conference



Image 6 - edcamp Grand Rapids



Image 7 - Strategy-A-Day Desktop Calendar



Image 8 - ATNAPFTS!

Switch Access to iDevices for Communication and Instruction

The iPad is a device that is quickly making its way into classrooms all around the world. Educators are finding that iDevices are changing the landscape, not only for regular education students, but also for students with special needs. iDevices are having a profound impact on individuals of all abilities for access to learning and communication.

As iDevices are quickly being adopted into classrooms and one million apps (and counting!) are available in the iTunes store, there are considerations that need to be carefully addressed to support this as a solution for those individuals with physical and cognitive disabilities. Access, proper mounting and positioning of an iDevice and switches are critical to success for those who cannot use these devices a typical way.

iDevices, such as the iPad, are intended to be used with touch, swipes and taps, making it difficult, if not impossible, for individuals with certain disabilities to use the device. Previously, individuals with disabilities had fewer opportunities than most to enjoy the newest in mobile computing due to the complexity of applications and physical limitations. In addition, the majority of the available apps were not created with switch accessibility in mind.

With the introduction of iOS 7 in the Fall of 2013, that has all changed. Never before has a mobile operating system come with such a powerful switch accessibility toolset built directly into the operating system. As part

of the accessibility tool set, iOS 7 includes a powerful new accessibility feature, Switch Control. For users with significant physical disabilities, Switch Control is a much needed feature that provides access to almost every feature in iOS 7 through the use of one or multiple switches connected via Bluetooth.

With one or two switches connected via Bluetooth, individuals with disabilities now can easily access an iPad, iPhone or iPod Touch running iOS 7 to do tasks like communicating using an AAC app, writing an email, browsing the Internet, watching a video or listening to music. Every app and every screen item is now accessible.

There are two basic scan modes available in iOS 7 Switch Control, as explained by Richard Moss, "One is the simple scan that cycles through each location and can be used in single- or two-switch mode. The other is a coordinates-based system, which scans a vertical line and then a horizontal line across the screen to focus in on a single point at which to register a tap or a swipe." The coordinates-based system allows access to apps that are created as switch accessible. For example, playing the most popular downloaded app, Angry Birds, with a switch is now a reality, although it may take a bit of practice. View switch access to the Angry Birds app at <http://www.youtube.com/watch?v=w9Qe-oBGoFo>

The New Blue2 switch from AbleNet is a solution for connecting switch(es) to your iDevice. This new and improved switch



Image 1 – New Blue2 switch - \$ 179



Image 2 - New Blue2 with two external switches

Image 3 - Use QR code to watch single switch set up.



MARY SAGSTETTER, M.A.Ed, joined AbleNet in June of 1998 with over 11 years of professional experience in the field of Special Education. In her current role as the Business Development Manager, Mary focuses on providing global awareness for the growing AbleNet portfolio of assistive technology solutions for individuals with disabilities. Her responsibilities include supporting US schools to increase visibility, and educate customers about the assistive technology solutions from AbleNet. In addition, Mary presents at national conferences, and has provided assistive technology and curricular trainings for school districts across the nation. (msagstetter@ablenetinc.com)

provides a sleek, modern design with new features that make it compatible with iOS 7 and all apps and included features (See image 1). Also included is the ability to toggle the on-screen keyboard on and off for iOS 7 devices. The New Blue2 has a built-in rechargeable battery and two external switch jacks for individuals requiring use of custom switches, making both single- and/or dual-switch access possible with the use of dedicated switches (See image 2).

Setting up Switch Control is simple using the New Blue2 switch. After connecting this switch via a Bluetooth connection, switch set-up is performed by going into General Settings and then into the Accessibility section. There you have the option of pairing one or two external switches. Pairing an external single switch allows for automatic scanning mode, in which the scan will automatically move across the screen and the individual will activate one switch to make selections. Pairing a second external switch allows for a controlled scan, in which the individual depresses one switch to move through the selections and then depresses the second switch to activate the selection. Scan the codes to access the video instructions of how to set up both single- and dual-switch access (See image 3).

iOS 7 includes a wide variety of settings for Switch Control, which will allow you to customize the Switch Control experience for each user. Auto Scanning, Auto Scanning Time, Number of Loops, Color Choice for the Cursor and Speech Prompts are just a few of the options available. Setting up the New Blue2 switch so two external switches can be used can even make it possible to activate Siri and make a phone call!

Now that switch access has been addressed, proper mounting and positioning of the iDevice and switch(es) need to be considered as part of the equation for a successful experience. It begins with understanding an individual's needs. Using the key questions below provides you with information to guide your choice:

- How is the New Blue2 switch going to be activated? - direct, external switch(es)?
- Does the New Blue2 and/or external switches need to be mounted?
- What can you mount to – flat surface, table top, wheel chair, bed?
- What is the ideal position of the product for repeatable activation or viewing?

- Will the iDevice or switch(es) need to be repositioned frequently?

Proper mounting and positioning of an iDevice and switch(es) can mean the difference between success and failure, comfort and fatigue, efficiency and wasted effort for individuals with disabilities. Incorporating mounting and positioning solutions assures that independence and communication freedom is attainable for individuals in any environment.

AbleNet has produced a line of iDevice mounting and positioning accessories that include Table Top, Wheel Chair and Body Mounts. There are a variety of cradles that mount seamlessly to the AbleNet mounts. A few of these are shown below. (See images 4, 5 and 6). In addition, AbleNet offers the Rugged iPad Case that is shockproof-rated to pass military standards (MIL-STD-810). It fits iPad 4th Gen, iPad 3rd Gen and iPad 2, and can be under water for up to an hour. The clear protective screen on front keeps the unit watertight. The Rugged iPad Case is mountable to the AbleNet mounting arms, and no tools are needed to insert or remove the iPad from the Rugged Case. The Rugged Case allows access to the power on/off, volume up/down and 30-pin Lightning Connector, and a headphone jack is available while the iPad is in the Case (See image 7 and 9).

These accessories are designed to provide maximum protection while securely mounting the iDevice in the proper position at home, school and community environments.

IMPACT FOR COMMUNICATION AND INSTRUCTION

Initially, individuals with disabilities had access to a few educational and communication apps that had built-in switch accessibility. These apps were being released slowly and were basically focused on early learning skills and cause and effect activities.

Currently, switch accessible, educational-focused apps are being released on a regular basis for those with beginning skills for choice making, encourage attention, observation, listening and participation skills, while incorporating pre-reading and numeracy skills. View video of an app with built-in accessibility for switch access at <http://youtu.be/sP6naEpsZYM>.

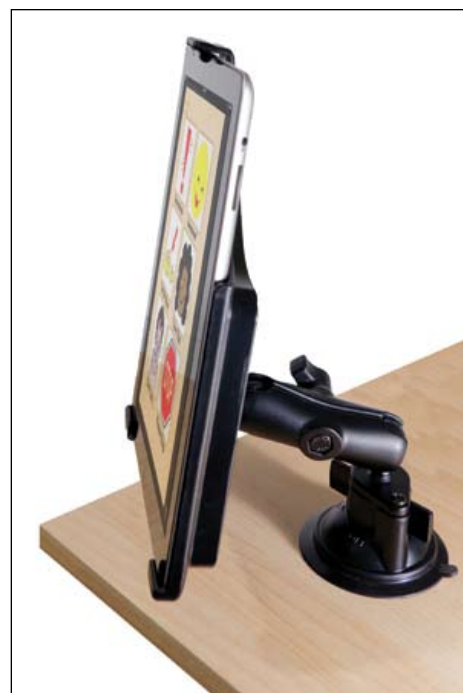


Image 4 - Table Top Suction Mount for iPad 1, 2, 3, or 4, and iPad mini - \$ 105



Image 5 - Adjustable iPad Cradle and Adjustable iPad mini- \$90



Image 6 - Latitude Mounting Arm Kit – iPad 1,2,3,4 - \$ 370

For students with complex communication needs, there are a variety of dynamic communication apps with built-in accessibility features. These communication apps have ready-to-use communication boards that support fast communication. Many of the app boards highlight key communication outcomes, such as expressions, emergency information, reading, daily living and social situations.

AbleNet has created a FREE communication app, SoundingBoard™ v4.13, to create multiple opportunities for supporting communication opportunities in the home, school and community. This app has been designed with built-in accessibility features and can be used with single- or dual-switch access. You can create communication boards for any situation with up to 20 message locations using the built-in AbleNet symbol library. This library provides instant access to hundreds of symbols and uses your own photo library or inserts a photo taken using your iDevice into the board immediately. SoundingBoard™ v4.13 can be downloaded for FREE in the iTunes Store. (<https://itunes.apple.com/us/app/sounding-board/id390532167>)

When searching for a list of educational or AAC apps with built-in accessibility features compatible with the New Blue2 switch, look no further than Jane Farrell's Switch Accessible Apps list (<http://www.janefarrall.com/html/ipad.html>), and Jane's Apps for AAC List (<http://www.janefarrall.com/aac-appslist.html>). At these sites, you will find a comprehensive list of switch accessible apps, description of the app, cost and keystrokes and switch access information.

Not every app will work seamlessly with Switch Control. It will be a process of trial and error to decipher how these apps work with built-in switch control and the accessibility features of iOS 7. It is exciting to know that, provided with the right solutions, apps that are used on a daily basis in the classroom may now be accessible to students of any ability, offering education opportunities similar to their peers.

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Image 7 - AbleNet Rugged iPad case \$ 130



Image 8 - AbleNet Rugged travel Strap - \$29

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Providing Discreet Support and Enhancing Independence

We've all been there. You're trying to put together a BBQ grill or a piece of furniture and the instructions are weak, at best. Or you're trying to change a faucet, solve your child's algebra problem, or figure out how to install that cool thing-a-ma-jiggy your brother gave you for Christmas. Tasks like this are frustrating, primarily because they are new or infrequent.

So imagine how frustrating it is to struggle with common day-to-day tasks, like getting dressed, going to work, doing your job correctly, preparing dinner and setting your alarm clock before going to bed. And having the same struggles with the same tasks day after day.

Regardless of the task at hand, nothing beats having someone standing beside you to offer immediate help and support, someone you can turn to and say... "Can you show me?"

ShowMeQR is a revolutionary new app that creates task-specific instructions (video and text) and embeds them into (and prints) proprietary ShowMeQR codes. ShowMeQR is created by Gus Communication Devices Inc., a leader in the field of assistive technology for over 22+ years, and the holder of the utility patent behind ShowMeQR.

ShowMeQR.com is an app (Apple and Android) that assists with the understanding and/or completion of tasks at home, school, work or anywhere help may be needed. Think of it as a personal assistant, a full time assistant, to help with life's ongoing series of tasks, tasks that can be as simple as "how to brush your teeth" to as complicated as solving mathematical linear equations.

ShowMeQR creates and prints proprietary codes that can be placed on (or near)



Image 1- ShowMeQR creates and prints proprietary codes that can be placed on (or near) objects.

objects. After scanning a proprietary ShowMeQR code with the "ShowMeQR – Reader" app, instructional videos and/or written instructions are presented. If the user needs immediate assistance, pressing the help button summons live video or telephone support.

The purpose of ShowMeQR is to help users gain confidence while decreasing their dependence on others for help. Although ShowMeQR was developed as an assistive technology product, it has a much broader appeal.

ShowMeQR is the only app that takes HD video, text, and live help and compresses it



GORDON HARRIS is the founder and President of Gus Communication Devices Inc, a world leader in the field of AAC/speech software solutions since 1992. Mr. Harris is the lead designer of TalkTablet for iOS, Android and Kindle, a speech app for communication disorders resulting from autism, aphasia, stroke, head injury, ALS etc. In April, Mr. Harris's company is releasing ShowMeQR, a new app specifically designed for vocational rehabilitation for iOS and Android devices.

into a proprietary, tangible, printable QR code. It forever simplifies how we would normally search for and obtain on-line help. It's usefulness extends to...

1. Tasks - ShowMeQR codes can be created to show or explain how to successfully complete a task at home, work, school or in public. For example, a ShowMeQR code attached to a dishwasher could be used to show how to correctly load and operate it.
2. Concepts - When placed in text books or instruction manuals, ShowMeQR can be used to demonstrate specific topics, like solving a mathematical equation like $2x - 12 = 1x$.
3. Tangible objects - By attaching a ShowMeQR code directly to an object, the user has immediate access to important instructions relative to that object.
4. Printed manuals - ShowMeQR codes are a perfect replacement for common installation/setup diagrams and printed instructions. ShowMeQR codes can be printed directly into product manuals for quick reference.

Except for their general appearance, ShowMeQR codes have nothing in common with common QR (website) codes. ShowMeQR codes are created using a patented method developed by Gus Communication Devices, Inc., and developed specifically as individual learning aids. ShowMeQR codes can only be viewed using the ShowMeQR app

PRODUCT BACKGROUND

US Department of Veterans Affairs

For the past several years, the VA and Gus Communication Devices have worked closely in offering our TalkTablet speech app to injured veterans. In the fall of 2012, we received a request from the VA asking us if we would consider developing a "task-based app" for veterans suffering cognitive disorders as a result of IED's (improvised explosive devices). The intent of this "task-based app" would be to aid soldiers throughout each day completing tasks, from brushing their teeth in the morning to setting their alarm clocks at night, and everything in between.

The Goal: Veterans who go on with their lives and live as independently as possible.

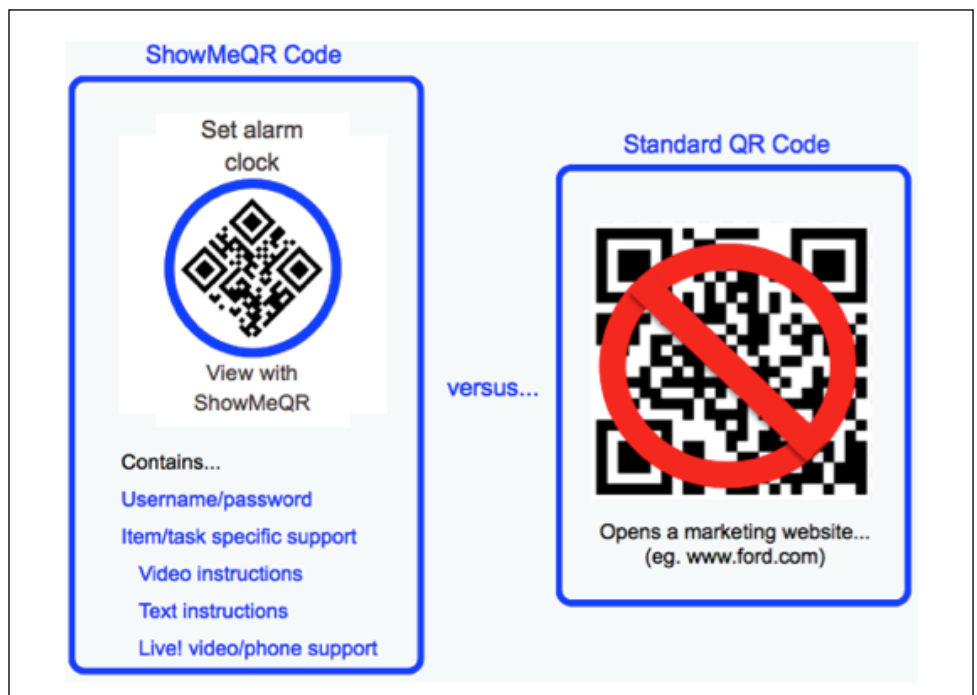


Image 2- Except for their outward appearance, ShowMeQR codes have nothing in common with standard QR codes.

WASHINGTON INITIATIVE FOR SUPPORTED EMPLOYMENT (W.I.S.E)

In March of 2013, during our presentation regarding the TalkTablet speech app, it became apparent that many of the people in the audience were looking for a specific type of app to support people entering into the workforce – an app that would help employees complete work-related tasks while offering DISCREET support if the employee has difficulty completing any task and an app that offers real-time assistance and support to employees.

The Goal: Employees who desire the dignity of employment and the satisfaction of accomplishment.

TEACHERS/EDUCATORS

Teachers have, for many years, expressed on-going frustration with the shortage of qualified "teacher aids." These important teacher aids typically follow students from classroom to classroom, offering help to the student when needed. They are costly for the school to employ, and they are limited to aiding single student. In addition, many older students struggle with the "embarrassment" that goes along with having an aid



following them from class to class. These students crave independence, but require the on-going assistance of the human aid.

The Goal: Students who feel more included, capable, independent and, ultimately, more successful.

HOW DOES IT WORK?

ShowMeQR is comprised of two separate apps

ShowMeQR - Manager (\$9.99) is used to create and print proprietary ShowMeQR codes that contain the content for specific tasks. For example, students may sit in various classrooms throughout the school day. At each station within a classroom, the teacher would place a ShowMeQR code that contains the video and text instructions applicable to a specific task. Students simply scan the code using ShowMeQR on any handheld or tablet device to see what tasks are required for each specific station. ShowMeQR codes are protected with a username/password to allow only specific individuals access to a code's content.

ShowMeQR - Reader (\$7.99) is used to scan and view ShowMeQR code content. User of the Reader app can only open/view codes created for them, based on their unique username/password.

An Internet connection (WiFi or Cellular) is required to update/download new ShowMeQR code content. However, after the content has been downloaded, an Internet connection is no longer required.

For example, at bedtime, a parent presses the "update" button in the Reader app, which then downloads all new and edited tasks created by the teacher (using the ShowMeQR - Manager app). Once the tasks (and content) have been downloaded, the student can use his tablet at school to read ShowMeQR codes without having an Internet connection. An Internet connection (WiFi or Cellular) WOULD be required to access the help (?) button.

In summary, if you are looking for a powerful way to physically attach a training session to an object, ShowMeQR is the way to do it. There is nothing else quite like it.

ShowMeQR Reader app: \$2.99US; ShowMeQR - Manager: \$9.99US

Android and iOS (Apple) compatible ■

CREATING A NEW SHOWMEQR CODE

STEP 1 – RECORD VIDEO

The first step in creating a task-specific ShowMeQR code is to record the video that will become part of the task. Once you have the "tutorial" video recorded, it can be added to a ShowMeQR task, along with text instructions (if needed).

STEP 2 – OPEN SHOWMEQR (MANAGER) AND ADD A TASK

- Select "Add" to create a new task title (e.g., "Assemble toy chair").
- Select "Upload Video" to add your video to the task.
- Select "Edit Task Instructions" to include text instructions for task.
- Select the green check mark at the top to SAVE the task.

After completing the task, press the green check mark at the top to save the task to the dedicated ShowMeQR cloud servers. When saving is complete, the following screen will appear, showing your new ShowMeQR code and instructions for printing.

THE FINAL STEP is to choose what type of action to take when the user presses the green help (?) button. The choices are...

- No help
- Skype video call to a predetermined Skype number. This option works with WiFi or Cellular Internet connected devices. Recipient needs to have a free Skype account to receive calls.
- Skype phone call to predetermined Skype phone number. This option works with WiFi or Cellular Internet connected devices. Recipient needs to have a free Skype account to receive calls.
- Use Phone - Normal phone call to pre-determined cellular phone number. This option works with WiFi or Cellular Internet connected devices.



It's not about the technology

When I became a part of the AAC community over 20 years ago, the latest communication device weighed 12 pounds, had limited memory and used a black and white screen. Now, the latest technology is based on consumer electronics, which changes almost daily. We take for granted that AAC technology will be small, lightweight, store a lot of data and have a crisp, clear screen that can be seen in any lighting.

The AAC industry has grown and changed too. Many more people can afford AAC because of Medicare and other funding sources. More people know about AAC because of the introduction of iOS apps. More people are comfortable with AAC because we are more comfortable with technology in general.

What hasn't changed? The reasons why people need to use AAC. Over the years, I have had the privilege of learning from individuals who use AAC and recognize just how important communication is. Communication opens doors to education, literacy, relationships and simply participating more fully in day-to-day life.

So how do we make sure the focus stays on communication and not the technology itself? I believe the key is to combine state-of-the-art technology with clinical rigor and practical supports.

When we started thinking about the DynaVox T10 and DynaVox Compass software, we wanted to take advantage of modern technology, like consumer tablet electronics and the cloud. But current technology was only a small part of what the AAC community needed. We looked closely at the latest

research in AAC and related fields. Strong ties with the research community are crucial to the development of tools that support evidence-based practices. We spend a lot of time working with clinicians to understand what they are doing every day in their practice and how we can best support that practice. We also rely heavily on feedback from AAC users and their family members to best understand what they need from the solutions we offer.

Combining research, clinical practice and user and family feedback allowed us to create a language system that is deep, rich and easily adjusted to the individual's specific needs. This also allowed us to organize pages in ways that reflect the strengths and overcome the weaknesses experienced by many AAC users. Finally, we used the research, practice and feedback to create supports, like videos, lesson plans, tools for identifying goals and evaluation activities, that are essential for helping people implement an effective AAC solution – one that enables them to start communicating quickly and continually grow and develop.



Only two decades ago, AAC devices still used a black and white screen, weighed 12 pounds and had limited memory.



Today's AAC devices are much smaller and lighter, store plenty of data, and have a clear screen that works in any lighting condition.



BOB CUNNINGHAM, Chief Strategy and Clinical Officer, DynaVox and Mayer-Johnson

Bob Cunningham joined DynaVox Mayer-Johnson in 1993 as the director of software development. His first major assignment was to create the software that ran the DynaVox 2c. He went on to lead the engineering team that designed the software for the DynaVox Series 5, M3, DynaVox Series 4, DynaVox 3100, MightyMo and MiniMo product lines, and the Dynamo and DynaWrite. Bob has worked as an independent computer-programming consultant on long-term projects for Xerox, Inc. and the U.S. Air Force. He has also written articles for a variety of technical publications, including "Interactive Method of Developing Software Interfaces," which was patented in the United States in 1991.

Since we released the DynaVox T10 and DynaVox Compass software, the reactions have solidified the impact of our efforts

“The Stroke and Brain Injury Persona” finally gives us a tool that actually integrates what we really use with our patients with Aphasia - a whiteboard, augmented input and written choice, rating scales, scripting; it’s all there together inside the Dynavox Compass software. We want our clients to be awesome communicators and now they have more than a speech solution; they have a multi-modal tool to help them use many strategies to be successful!” Renee Karantounis, M.S., CCC-SLP, Owner of AAC Specialists Greenwood Village, CO

Liz, a parent of a child with autism, said, “Last night I was putting him to bed... and I heard him say, ‘I want an orange.’ I had an orange with me for a bedtime snack but I was sidetracked... No behavior problems out of him. He simply said, ‘I want an orange.’ When you have a child with severe autism and they choose to communicate over an inappropriate behavior - that is success!”

“His ability to move between phrases, answer yes/no and answer questions directly, has changed his life. And the navigation and the depth of language in the Dynavox T10 made this possible... Kreed has had the T10 for about three to four months, and in those three to four months, he has gone from a kid who could ONLY request and answer basic questions to a kid who can ask, answer and comment on questions, make his own comments, type out some of his thoughts, answer yes/no questions independently and talk about himself and his own body. To me, it’s incredible. To him, he has found his voice.” From kreedworld.blogspot.com, February 10, 2014 Kreed, a teenager with autism, has been communicating things his support team only dreamed. You can read about and see videos of his progress at Kreed’s World.

It has been exciting to see how much new technologies, particularly mobile and Web technologies, have transformed our industry over the past several years. More people are aware of AAC than ever before, and there is a continually growing variety of solutions being offered.

To date, however, it feels like, as an industry, we have mostly taken ideas from older, proprietary AAC technology and moved them onto the new mobile technology. We’ve barely begun leveraging the new possibilities for improved communication afforded by having so much technology at our fingertips. To name a few, location-based services and GPS can help us present communication options based on where you are in the world. Low cost, powerful sensors, including multi-touch touchscreens, accelerometers and high quality cameras, provide an exciting array of ways to interact with your device and can support new ideas for those with significant physical challenges. The ability to be constantly connected to the Web can serve as a source for always-available, multimodal communication content, including text, pictures, video and sound. There are so many ways that we’ll be able to leverage technology in the coming years to create even better solutions for those that require AAC.

As we move forward to realize the potential that this exciting technology offers, we need to continually return to the purpose of what we’re doing. It can be easy to get enamored of technology for its own sake. That’s why, as a manufacturer, it is important to me to continually stay connected to the research community, practicing clinical professionals, the people using our products and the loved ones who support them. At the end of the day, what we do is only of value to the degree that it serves those who use it. Modern technology is full of amazing possibilities, but more amazing is seeing a child talk to a friend at the park or a husband communicate with his family as they deal with life changes due to ALS. I am so privileged to get to play a role by developing products that can help to make this happen.



PRODUCT INFORMATION

The DynaVox Compass for Professionals is now available free to all ASHA-certified SLPs! As the most comprehensive AAC app, SLPs can use the DynaVox Compass for AAC evaluations, in therapy sessions and for funding reports. Find more information online at www.mydynavox.com. ■

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