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PRESENTER: MARK COPPIN

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Students of all abilities should be provided with the opportunity to enjoy and participate in the reading process. Participants in this webinar will discover ways to open doors for students of all ages by adapting reading materials. The iPad has provided professionals with the opportunity to individualize and customize materials for each student. This webinar will demonstrate how to utilize apps to create and adapt books to meet each student's particular needs. Participants will learn about the various apps that are available for creating and providing books for all learners. This webinar will also provide information on accessibility features, device management, file sharing and copyright.
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Struggling with differentiating instruction to meet Common Core Standards? Looking for results-oriented teaching? Learn how to creatively use apps to transform everyday classroom projects and basic general ed supports into interactive tools for learning and communicating on the iPad! Take a look at how a classroom teacher jump-started her curriculum teaching to differentiate instruction. See how team members taught true understanding of curriculum content tied to the Common Core Initiative. Go inside a classroom to see how to use these tools and strategies every day for meaningful inclusion by viewing video clips, photo galleries and live app demonstrations.
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WEBINAR PRESENTERS:

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PHYL T. MACOMBER, President of Make A Difference, Inc. and Practical Assistive Technology Solutions and Author of adapted curriculum framework called T.H.E. P.A.C.T.™

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Implementing evidence-based strategies in the classroom

Augmentative and alternative communication (AAC) strategies are widely used among parents and educators of students with autism spectrum disorders (ASDs).

However, questions have arisen regarding the efficacy of such interventions, and concerns have been expressed about AAC inhibiting the development of verbal speech and language.

AAC AND AUTISM
REPORT

Fortunately, there is now evidence to support the use of AAC for students with ASD

Recent publications by the National Autism Center and the National Professional Development Center on Autism Spectrum Disorders provide professionals with research data to support the use of AAC tools and strategies for individuals with an autism spectrum disorder.

Both of these organizations conducted comprehensive literature reviews to establish best practices for interventions commonly used with this population. The National Autism Center's National Standards Report identified speech generating devices (SGDs) as an "emerging treatment;" while the National Professional Development Center on Autism Spectrum Disorders determined that the use of SGDs is an "evidence-based practice."

AAC strategies, such as the Picture Exchange Communication System (PECS), functional communication training, visual supports and story-based intervention were also examined, with mixed results. In this article, the definition of evidence-based practice (EBP) and its application for speech-language pathologists is reviewed, followed by a discussion of the methods used to conduct the literature reviews.

Results of the two literature reviews are compared and contrasted. Current research, published after the distribution of these reviews, is also investigated, and the direction for further research considered. School-based speech-language pathologists (SLPs) can use this data to make decisions regarding AAC service delivery. Specific assessment methods and interventions are proposed, and tips for successful implementation of AAC are shared.

Evidence-Based Practice and Implications for Speech-Language Pathologists

When discussing evidence-based practice (EBP), it's important to clarify exactly what this term means and how it is determined. The American Speech-Language Hearing Association (ASHA) has outlined three components of EBP: external scientific evidence, clinical expertise/expert opinion and client/patient/caregiver perspectives. Given this model, SLPs are obliged to make decisions regarding therapy and services based not only on professional judgment and clinical expertise, but also on the wishes and preferences of the client. In addition, the SLP should be able to support these decisions with current, relevant scientific research.

BETSY A. CAPORALE has been working in the field of speech-language pathology for over 20 years, specializing in autism, augmentative communication and assistive technology. She has worked in a variety of settings, including public schools, private clinics, and hospitals. She received her certification as an Assistive Technology Specialist, Communication Services, from the University of South Florida, and earned a Certificate of Competency in Communication Assistive Technology Applications from the National Association of State Directors of Special Education. She works as an SLP, AAC/AT Specialist for the California Department of Education, Northern California Diagnostic Center.

The National Autism Center/National Standards Project (NAC/NSP) Findings

The results of the NAC/NSP's research are provided in their publication, Evidence-Based Practice and Autism in the Schools: A Guide to Providing Appropriate Interventions to Students with Autism Spectrum Disorders. A summary of these findings, as related to AAC, is provided below:

Established AAC treatments
- Schedules
  - Visual strategies used to communicate a series of activities, as well as required steps for a specific activity (see photo three)
- Story-based intervention package
  - Written stories depicting specific situations or events, describing expected behaviors (see photo two)

Emerging AAC treatments
- AAC devices
  - Interventions include high- and low-tech strategies, such as pictures, photos, symbols used to facilitate communication (see photo one)
- PECS
  - AAC strategy based on behavioral principles
- Sign instruction
  - Direct teaching of sign language to improve functional communication skills

Unestablished Treatment
- Facilitated communication
  - Providing physical support to assist a person with significant communication deficits in pointing to pictures, objects, words or letters

When making decisions regarding treatment, the NAC encourages professionals to first consider established treatments, as there is compelling scientific research to indicate the efficacy of these strategies. However, emerging treatments should not be ruled out and should be considered if established treatments are deemed inappropriate. Unestablished treatments do not have conclusive research to support efficacy and should not be considered until such research is available.

National Professional Development Center on Autism Spectrum Disorders (NPDC on ASD) Findings

The NPDC has published their findings on their website (see References). The website also provides links to online modules for identified evidence-based practices (EBPs), as well as a chart that compares their findings to those of the National Standards Project. There are six EBPs related to AAC identified by the NPDC, including:

- **Speech generating devices/VOCAS (voice output communication aids)**
  - Low- and high-tech devices with voice output (see photo one)
- **Functional communication training**
  - Use of AAC tools and strategies to replace unconventional communicative forms/behaviors
- **PECS**
  - Picture Exchange Communication System
- **Social narratives**
  - Describe social situations, behavioral expectations and/or routines in a story format using visual aids, including pictures and text (see photo two)
- **Video modeling**
  - Use of video recording/display to model targeted behaviors or skills.
- **Visual supports**
  - Visual tools/strategies that assist students in transitioning and completing activities throughout the day (see photo three)

Photo 1- SGDs are identified as an Emerging Treatment by the NAC, and an Evidence-Based Practice by the NPDC on ASD.

Photo 2 - Social Narratives and Video Modeling are identified as "evidence-based" by both the NAC and the NPDC on ASD.

Photo 3 - The efficacy of visual schedules and supports is well documented and substantiated by scientific research.

Overlap Between Evidence-Based Practices Identified by the National Professional Development Center (NPDC) on ASD and the National Standards Project (NSP)

Evidence-Based Practices Identified by the National Professional Development Center (NPDC) on ASD	Established Treatments Identified by the National Standards Project (NSP)										
	Antecedent Package	Behavioral Package	Story-based Intervention Package	Modeling	Naturalistic Teaching Strategies	Peer Training Package	Pivotal Response Treatment	Schedules	Self-Management	Comprehensive Behavioral Treatment for Young Children	Joint Attention Intervention
Prompting	x			x						The NPDC on ASD did not review comprehensive treatment models. Components of The Comprehensive Behavioral Treatment of Young Children overlap with many NPDC-identified practices.	The NPDC on ASD considers joint attention to be an outcome rather than an intervention. Components of joint attention interventions overlap with many NPDC-identified practices.
Antecedent-Based Intervention	x										
Time delay	x										
Reinforcement		x									
Task analysis		x									
Discrete Trial Training		x									
Functional Behavior Analysis		x									
Functional Communication Training		x									
Response Interruption/Redirection		x									
Differential Reinforcement		x									
Social Narratives			x								
Video Modeling				x							
Naturalistic Interventions					x						
Peer Mediated Intervention						x					
Pivotal Response Training							x				
Visual Supports								x			
Structured Work Systems								x			
Self-Management									x		
Parent Implemented Intervention	The NSP did not consider parent-implemented intervention as a category of evidence-based practice. However, 24 of the studies reviewed by the NSP under other intervention categories involve parents implementing the intervention.										
Social Skills Training Groups	Social Skills Training Groups (Social Skills Package) was identified as an emerging practice by the NSP.										
Speech Generating Devices	Speech Generating Devices (Augmentative and Alternative Communication Device) was identified as an emerging practice by the NSP.										
Computer Aided Instruction	Computer Aided Instruction (Technology-based Treatment) was identified as an emerging practice by the NSP.										
Picture Exhcahnge Communication	Picture Exchange Communication System was identified as an emerging practice by the NSP.										
Extinction	Extinction (Reductive Package) was identified as an emerging practice by the NSP.										

Image 1 - Overlap Between Evidence-Based Practices Identified by the National Professional Development Center (NPDC) on ASD and the National Standards Project (NSP)

Discussion and Comparison of NAC/NSP and NPDC on ASD Findings

The NAC is a nonprofit organization located in Randolph, MA, that serves children and adolescents with autism spectrum disorders (ASD), and is the May Institute's center for the promotion of evidence-based practice. One of the primary goals of the NAC's National Standards Project (NSP) was to identify established treatments for autism spectrum disorders, based on a review of scientific research. Their literature review includes studies conducted over a 50-year period, from 1957 through the fall of 2007. Strict inclusionary and exclusionary criteria were established, resulting in a total of 775 studies used for analysis. Based on their findings, they identified three categories of treatment: established, emerging and unestablished. When determining the efficacy of AAC devices (low- and high-tech), they looked for evidence to support improvement in verbal communication. AAC devices were identified as an emerging treatment. PECS was also found to be an emerging treatment, based on evidence to support its efficacy in improving verbal communication and interpersonal skills.

The NPDC is a multi-university center (FPG Child Development Institute at the University of North Carolina at Chapel Hill, the M.I.N.D. Institute at the University of California Davis Medical School and the Waisman Center at the University of Wisconsin at Madison) that has identified 24 evidence-based practices based on a literature review spanning 12 years (1995-2007). Rigorous criteria was used to determine evidence-based practices (as opposed to established treatments identified by the NAC)

through peer-reviewed research in scientific journals. The NPDC identified the use of speech generating devices (SGDs) , including voice output communication aids (VOCAs) as an EBP, concluding that they were effective in increasing expressive language for learners with ASD who struggle with verbal speech. They also identified PECS (Picture Exchange Communication System) as an evidence-based practice, based on evidence that supported an increase in functional communication.

When comparing these two literature reviews, readers should take note that the NAC/NSP reviewers focused on evidence to support improvement of verbal communication for both AAC devices and PECS, while the NPDC on ASD considered evidence to support an increase in expressive language for SGDs/VOCAs and an increase in functional communication for PECS.

In addition to their findings regarding AAC devices, the NPDC on ASD identified the following factors for successful implementation of SGDs:

- **Motivating vocabulary**
- **Symbol size and number**
- **Accessibility/ease of use across environments**
- **Providing environments and opportunities that encourage communication**
- **Training of communicative partners**

Readers are encouraged to refer to the chart developed by the NPDC on ASD (see image one) for a complete list of all evidence-based practices and established treatments and a comparison of findings.

Recent Research

Two important research reviews regarding the use of AAC, published after 2007 and not included in the above research reviews, will be discussed in this section. The first, Schlosser and Wendt (2008), reviewed research conducted between 1975 and 2007 to determine the effects of AAC on speech production in children with autism.

The second review, published in 2009 by Calculator and Black, determined best practices in providing AAC services to students with severe disabilities in general education classrooms. Although the second study did not focus primarily on students with an autism spectrum disorder (ASD), the prac-

Sample AAC Implementation Plan

KEY: V-vocalizations; S/G - signs and gestures; CB-communication board; SGD- speech generating device

Created by Betsy Caporale, M.S., CCC-SLP

ACTIVITY	COMMUNICATION STRATEGY	LOCATION	FACILITATOR	WHEN
Arrival	V, S/G SGD (announce date, weather, etc.)	Classroom	Staff, Peers	a.m.
Small Group	CB (choose activity) SGD - make announcement, share about a personal event	Classroom	Teacher, Para, Peers	a.m.
Music	CB, (choose song)	Classroom	Music Teacher	a.m.
P.E./Motor	S/G, CB (choose activity)	Classroom	Adatpive P.E. Teacher, Peers	a.m.
Speech Therapy	CB (introduce new vocabulary) SGD (training/ practice)	Classroom / Speech Room	Teacher, SLP	a.m. / p.m.
Story Time	CB (choose book), SGD (announce title of book or repeated story line)	Classroom	Teacher, SLP	a.m. / p.m.
Lunch / Recess	V, S/G (interact with peers), CB (request food)	Classroom / Luchroom	Lunch Helper, Peers	a.m. / p.m.
Computer	CB (choose computer activity)	Computer room, Classroom	Teacher, Para, OT	a.m. / p.m.
Classroom Job	CB (choose job)	Classroom, school grounds	Teacher, Para, OT	a.m. / p.m.

Image 2 - Sample AAC implementation plan.

tices identified by the reviewers can be considered best practices for all students with complex communication needs, including those with ASD. Summaries of these studies are provided below.

Schlosser and Wendt focused on three AAC interventions in their review: SGDs, PECS and manual sign. Their search resulted in a total of 76 studies that met their inclusion criteria. None of the studies they reviewed reported a decline in speech production as a result of AAC intervention. In fact, most studies reported an increase in speech production with the use of AAC strategies. The authors concluded that AAC intervention did not impede speech production.

Calculator and Black conducted a comprehensive review of literature published between 1976 and 2009 to develop an inventory of best practices in providing AAC for students with severe disabilities (defined as severe to profound intellectual disability

and associated challenges with adaptive behavior). Only one of the studies looked specifically at students with autism.

Practices were reviewed by a panel of eight experts who had between 15 and 30 years of experience in the field of AAC. Based on their review, the authors developed 91 best practices within eight categories. Many of the best practices identified by Calculator and Black overlap with those identified by the NAC/NSP and the NPDC on ASD. Common best practice strategies and recommendations include:

- **Use of a multi-modality approach to communication**
- **Close collaboration among staff**
- **Staff and peer training**
- **AAC implementation within relevant, meaningful and motivating activities**
- **Providing functional communication strategies across environments**
- **Involving family in AAC assessment and implementation process**
- **Speech-language pathologist plays a primary role, but implementation of AAC is shared by many.**
- **Consultative role of speech-language pathologist is supported by team and parents**

Directions for Future Research

As SLPs, we are often challenged by parents, teachers and administrators when recommending AAC strategies that we judge to be sound and efficacious. This can be a source of great frustration and discouragement. Fortunately, we have research to support the use of these strategies for students with ASD and can now move forward in implementing them as EBPs. However, in order to further our efforts in serving this population, we need to look beyond the efficacy of AAC as a tool to increase verbal communication and expressive language and consider the other benefits that we know exist, but don't have adequate research to support. These include:

- **Increasing functional communication (verbal and nonverbal)**
- **Enhancing vocabulary and sentence formulation skills**
- **Reducing problem behaviors**
- **Increasing personal responsibility**
- **Gaining independence**
- **Improving social skills**

Best Practice Guidelines for AAC Assessment and Implementation

Providing AAC assessment and implementation services is no easy task. It requires the skills of many team players to review relevant research, analyze assessment data and use clinical experience and professional judgment to make informed decisions. Unfortunately, many AAC assessments focus primarily on the acquisition of sophisticated, high-tech devices and, in the process, common sense is thrown out the window. Expectations regarding the acquisition and use of AAC must be explicit and realistic. This requires the assessment team to be truthful and candid about a student's strengths and weaknesses and the skill sets needed to access AAC. Having worked in the field of AAC for over two decades, I have developed my own "best practice guidelines" for serving this population, which I will share with you now.

• Assessment Process
The word "process" is key here, as an AAC assessment is collaborative and ongoing. I'm often asked how long an AAC assessment takes, and my response is always the same: a lifetime! An AAC user's needs, environments and skills are constantly changing over time, as are AAC technologies. Therefore, the assessment process must continue over the span of an AAC user's lifetime.
Determining appropriate AAC tools and strategies for a student is a highly individualized process that requires careful planning and strategizing. The assessment should always include:
  - Interviews (family, friends, service providers, school staff, etc.)
  - Observations across settings, within natural contexts
  - Review of educational and medical records
  - Individualized assessment, often using alternative means, such as:
    - Cause/effect toys
    - Choice making activities
    - Picture books (see photo four)
    - Communication board trials (see photo five)
    - Matching games
    - Adapted computer hardware and software
    - Observation checklists
  - Trials with a variety of AAC tools and strategies (no tech, low-tech and high-tech)

An AAC assessment should never start with device trials and should always be a collaborative process. A "drop in" or "drive-by" assessment by an "AAC specialist" is not best practice and typically results in a poor feature match. This causes frustration on the part of the student, family and school staff and, in turn, leads to device abandonment, a situation that occurs far too often!

• Determining a Feature Match
Only after a comprehensive assessment is completed can the selection of AAC tools and strategies begin. The assessment team must carefully consider variables, such as skill sets (those that are acquired and those that need to be taught), mobility, fine and gross motor skills, visual acuity, accessibility across environments, family support and motivation of the student. Allowing the AAC user to make choices regarding features, such as device color, voice, symbol sets and vocabulary, will give him or her a sense of control and increase motivation. Likewise, including the user in the selection of vocabulary will help ensure "buy-in," and provide incentive to communicate. When selecting vocabulary, it's

Best Practice Guidelines for AAC Assessment and Implementation

important to include functional, meaningful words and phrases that are relevant to a specific environment or activity. For example, you would not want to include "bathroom" or "break" on a communication board designed to be used during an art activity. Also consider age-appropriateness: "bubbles" and "Dora the Explorer" are not part of a typical teenager's vocabulary!

• **Implementation**

Most SLPs will agree that the implementation of AAC in the classroom is extremely challenging, whether it be a general or special education setting. Common complaints and concerns shared by teachers, staff and family members include:

- Teacher and staff aren't using the recommended AAC tools and strategies
- The student is rejecting the system/device
- The student's communication needs are not being met by AAC

As with AAC assessment, AAC implementation requires careful planning and a collaborative team approach. I have discovered that when provided with a user-friendly implementation plan (see image two), classroom staff is almost always willing and eager to use AAC. This tool clearly defines which communication strategies will be used across all activities of the school day and who will help facilitate. The implementation plan is a working document, which changes as the student's needs and environments change, and is developed collaboratively by the entire AAC team. With this document in place, the implementation of AAC becomes a shared responsibility, and expectations for both staff and student are made clear. When developing an implementation plan, consider the following:

- Provide frequent practice and training opportunities
- Plan motivating activities where highly predictable vocabulary can be pre-determined
- Allow opportunity for independent exploration and use of a device
- Don't expect too much too soon! Learning to communicate using a new tool or device takes practice, patience and perseverance
- Train family, friends, staff and peers how to be efficient communicative partners using AAC
- Use a multi-modality approach – do not rely on one tool or strategy
- Keep in mind that AAC will never replace natural verbal speech

Photo 4 - Picture books are a great tool for informal assessment of vocabulary skills, initiation and motivation to communicate.

This poses a crucial question: Who has the time and resources to conduct this important research?

High quality, publishable research typically requires extensive funding, subjects who are followed over a period of time, as well as careful data collection and analysis. The financial and time constraints inherent in this process prevent school-based SLPs, who work directly with the students on a regular basis, from participating in research studies. Marilyn A. Nippold (2010) offers a realistic solution to this problem: combining the efforts of school-based SLPs with university faculty and graduate students to conduct research directly at school sites. Nippold suggests starting with "questions whose answers are likely to have a positive impact on the profession." For example, a school-based SLP might pose the question: "Does the use of communication boards at recess increase peer interaction for nonverbal students with ASD?" This would provide the university "investigator" with a clear focus for creating a data collection tool. Graduate students (and perhaps school staff) could then be trained how to use this tool to collect data. Once the data is collected, it could be analyzed by university staff and students. The finished document could then be submitted for publication in a professional journal, such as ASHA's Perspectives on Augmentative and Alternative Communication. As Nippold points out, by partaking in this type of cooperative research design, everyone benefits; graduate students expand their knowledge of the field, faculty members conduct useful research, school-based SLPs contribute to important research and the field of speech-language pathology is provided with data to support EBPs!

Final Thoughts

SLPs who serve students with complex communication needs must remain focused on the student and not get caught up in the technology madness! This is not easy, especially given the demands often placed on SLPs to acquire devices based on media hype or emotional reactions. Remember, AAC is a process, not a tool! Also, keep in mind that AAC is not an exact science. Strive to implement interventions that are evidence based, while also relying on your clinical judgment and that of other team members. Most importantly, always consider the individual needs and preferences of the AAC user, and remember that they will change over time.

References

American Speech-Language Hearing- Association www.asha.org

National Autism Center http://www.nationalautismcenter.org/

National Professional Development Center on Autism Spectrum Disorders http://autismpdc.fpg.unc.edu/

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Photo 5 - Low-tech AAC boards/books can be used to assess vocabulary, symbol recognition, navigation and categorization skills.

UDL Learning

How promoting universal design can improve the accessibility of technology in your child's school

Olivia, who is blind, has a computer equipped with text-to-speech technology at school. It reads aloud all of the text presented on her screen. She goes to the computer lab to use a web-site to complete an assignment with her class. The website's designer, however, neglected to include text descriptions of the content presented within graphic images; therefore, this content is not accessible to her. Even with her impressive computer system, Olivia is stuck. She sits on the sidelines, surrounded by the enthusiastic chatter of her class-mates working together.

> **Too often, Olivia and other students with disabilities cannot access Web content or operate educational software because of its inaccessible design.**

Students like Olivia do not have full access to the standard curriculum and are in danger of failing to meet state learning stan-dards and the goals of No Child Left Behind. Excluded from computer-based activities, these students do not receive the benefits technology delivers to their peers who do not have disabilities.

How can you ensure that your son or daughter has access to technology-based learning opportunities at school? This article presents strategies that can help you advocate for technology that is accessible to all students, including your child. It pres-ents key terms and then puts them all together in a way that makes a simple, compelling case for the purchase, development and use of accessible technology. If you would like to join the effort to promote the use of accessible technology in our schools, keep reading.

WHAT DO I NEED TO KNOW?

It is helpful to have a basic understanding of a few terms in order to effectively promote the use of acces-sible technology.

Assistive technology (AT), such as the text-to-speech system Olivia uses, can help a person with a disability

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operate a computer and access computer output. Grammar checkers, alternative keyboards, hands-free interfaces and other assistive technology may be prescribed on your child's Individualized Education or Section 504 Plan.

Information technology (IT) includes computers, software, websites, telephones, CDs, DVDs, smart phones, calculators and other electronic devices. Many IT products, like the website Olivia tried to access, are designed in such a way that they are inaccessible to people with disabilities, even to those who have AT.

Universal design refers to the design of products and environments so that they are usable by everyone, to the greatest extent possible. A teacher is applying universal design when he purchases an instructional video that includes captions for children who are deaf, even though he does not currently have a student who is deaf in his class. The manager of a computer lab is applying universal design when he purchases adjustable tables in anticipation of students who use wheelchairs.

Accessible information technology is created when producers consider the needs of people with disabilities in the process of designing information technology. More accessible products minimize the need for AT, but they are also compatible with existing AT products. If Olivia's teacher assigned the use of an accessible website to her students, it would have included alternative text for graphic images and other features so that Olivia's text-to-speech system could read the content to her.

AT and accessible information technology work together to allow everyone to access all product features. Accessible information technology and AT allow students with disabilities to participate, side by side, with their classmates as they complete assignments, access information and engage in collaborations, simulations and tutorials.

WHY IS IT IMPORTANT THAT INFORMATION TECHNOLOGY BE ACCESSIBLE?

The use of information technology is widespread in academic and employment settings. It has the potential to maximize the independence, productivity and participation of students with disabilities. However, this potential can only be realized if all students can effectively use the IT. This requires that students be provided with the assistive technology they need AND that teachers and lab managers procure, develop and use accessible information technology.

WHAT SHOULD WE ASK FOR?

So how do we put all of this together into words that we can use for advocacy in our schools? Here's one way to say it:

We want our schools to purchase and use accessible information technology and apply universal design principles in the creation of its facilities and programs. There should also be an efficient system in place to ensure that individuals have access to the assistive technology they need.

Promoting universal design is a powerful way to get your message across. Just like ramps installed for people who use wheelchairs also benefit those who are pushing delivery carts or baby strollers, accessible information technology benefits individuals with and without disabilities. For example, captioning on video presentations benefits students whose are deaf, as well as English language learners.

WHAT CAN I DO?

Considering universal design of computing tools and environments requires that educators consider the wide range of abilities and disabilities of all present and future students, including those of your child. Encourage school personnel to think proactively by designing and purchasing accessible products and creating facilities in anticipation of students with a wide variety of characteristics. Teachers should anticipate that students will come with a wide range of abilities and disabilities.

Often school decision-makers consider access issues only once a specific student with a disability enrolls. The student may be treated as an exception and teachers and other school personnel may try to make him/her fit into an environment equipped with inaccessible information technology. Advocating for universal design of educational environments, technology and instruction builds in the flexibility to make curriculum and activities more accessible to everyone, including your child.

Consider taking the following steps, perhaps in collaboration with other parents.

• Educate yourself on how technology is used in your child's classroom and school. What software is used? What websites are accessed? What types of assignments are given?

• Determine what barriers your child is facing or is expected to face in technology-enhanced instructional activities. Are computers, software, websites and other technology accessible to him/her?

• Alert your child's teacher or computer lab manager of accessibility barriers you

identify. If your child has an IEP, bring up these issues in IEP meetings.

Advocate for improved accessibility to technology and computing environments in your school and district by suggesting a proactive approach to teachers, technology support staff and administrators. For example, suggest that the school's computer lab have a few adjustable tables, offer trackballs as well as mice, place handouts where they can be reached from a seated position and develop and use accessible websites.

In the case involving Olivia, her parents could communicate with her teacher and the computer lab manager about the importance of using accessible products. They could request that vendors of current inaccessible products include accessibility features in future versions and that webmasters redesign their websites to be accessible to individuals with a variety of disabilities and assistive technology.

BUT, DOESN'T THIS MEAN MORE WORK FOR ME?

Yes, but not a lot more. You might just need to change your approach a bit. The work put into this effort initially may lead to less work in the long run, yet a more accessible education for your child. The ultimate reward is a more accessible school and a more accessible world for everyone.

WHAT RESOURCES ARE THERE?

Parents, school administrators, teachers and computer lab support staff can seek more information about the design, procurement and use of accessible technology from the following resources:

• The Center for Universal Design in Education www.uw.edu/doit/CUDE

• CAST Universal Design for Learning www.cast.org/index.html

This article was adapted with permission from the 2004 publication Breaking Down Barriers K-12 and Beyond - A Parents' Guide to Accessible Technology in Schools by Sheryl Burgstahler. This publication is available in an accessible format, as well as in a printable version as an attractive twelve-page flyer, and can be freely distributed for educational, non-commercial purposes. See www.uw.edu/doit/articles?1250.

ACKNOWLEDGEMENT

Raising the "Cool Factor"

for U.S. Students with Print Disabilities through Digitally Accessible Books and Reading Technologies

Today, with the availability of more digitally accessible books and reading technologies in schools, thousands of U.S. students with print disabilities no longer feel the stigma and embarrassment of waiting for their school books or carrying around bulky large-print. Many of them are now vigorous readers who know how to use and demonstrate multiple devices and technologies. They can easily download digital books, navigate pages and set bookmarks and user preferences for improved accessibility. Some may also use digital dictionaries and take online notes. For these students, the "cool factor" of using digital materials and technologies has increased tenfold – and to the delight of school administrators, so have their reading skills!

As a seasoned educator and technology specialist, I predict 2013 to be a pivotal year to break down more reading barriers for students with print disabilities and for the educators who help them achieve academic progress and learning equality.

Did you know that more than 75,000 U.S. educators are now sponsors of Bookshare, an online library with over 175,000 digitally accessible books? Membership is at no cost to U.S. schools or students who qualify – thanks to awards made by the U.S. Department of Education, Office of Special Education Programs. Are you one of these champion educators who have embraced accessible books and digital reading for learning progress? The library collection holds titles from K–12 textbooks to classic novels to teacher-recommended literature, bestsellers and periodicals. Members can use a variety of reading technologies, too.

My district, Brewster, NY, utilizes Bookshare to support students who qualify, in grades 3–12. We've been excited to see many students improve their learning outcomes. I can also say that I receive positive comments from teachers, parents and students about this free educational library. So how do we use the library?

DONNA SCHNEIDER is an Assistive Technology Specialist for the Brewster, NY school system. She brings 27 years of teaching experience in elementary, special and AIS education. She holds a BS in Elementary and Special Education from Slippery Rock University and a master's degree in Curriculum/Instruction from Western Connecticut State University. Donna evaluates students' learning needs and recommends software, apps and devices. She also purchases materials and provides training to students, teachers and the community. She is active in Special Olympics statewide and enjoys providing positive experiences for all persons. She is a member of the eMapper Advisory Board project, a Web application that will individualize standards-based content for students with autism. Most recently, she has become a member of the Bookshare National Advisory Board.

HOW WE USE BOOKSHARE IN OUR DISTRICT

Elementary – Grades 4 and 5

Younger students use the Don Johnston Read:Outloud program on the computer. In addition, there are several special education classes that use MP3 files on iPod shuffles to access their books. Students take the shuffles home. This has been the most effective way in which students access Bookshare and read for pleasure. They listen to the book and follow along with the highlighted words. We taught them how to manipulate two different ebooks on the shuffle at one time so that they can read independently a book of their own interest and a required reading assignment for class. Students are excited to read! Parents have said to me, "Wow, this is the first time that my son has said he wants to do his homework."

Middle School

In middle school, the reading teachers understand that students need to be taught how to read, but they also must move away from phonics and be exposed to grade-level books. This is a challenge because many students have had such negative experiences with reading.

For three years, we have implemented iPod shuffles and MP3 files. Before that, I used Kurzweil to convert the text files to MP3 to be used in iTunes. Now it is much easier with Bookshare's release of MP3 files. Several other students like the Read2Go app on the iPad. Overall, these tools and files have helped our district to make good progress. And, just like in your school, our teachers are swamped with tasks, so I download books for students. Teachers provide a list; I prepare the files in the preferred format for each student. I upload the files onto a common drive and put them on the iPod shuffles or burn CDs. Teachers tell me, "Students now enjoy reading; they answer more critical thinking questions and talk to peers about the books they read." These conversations did not happen prior to Bookshare.

Free Read Fridays

We have "Free Read Fridays" at school. Walk into a classroom and you'll see students with headphones on, shuffles attached to a book, listening and reading topics they chose for indepen-

dent reading. Many parents jumped on board and purchased MP3 players or iPads. About every two weeks, I receive emails from a reading teacher or parent saying students have a list of books they want me to download. When I show up, there is usually a stack of 10 -15 personal devices and notes requesting books. No one forces them to read – they just want to.

High School

In our high school, visually impaired students use iPads and Read2Go in their classes, and Bookshare and the technologies have opened a new world of learning for them. They no longer lug enlarged and heavy textbooks around. This is a burden lifted for them and a cost/time savings for us. This year, we plan to identify early which K-12 textbooks are needed by students who qualify and will use the new Bookshelf tool to organize downloads for multiple students.

Summer Reading

For summer, our entire high school read Wonder by RJ Polaccio. It was rewarding to know that this book was available to everyone in a format that was accessible. Just this simple adjustment allowed all students to take part in discussions about the book when they returned in the fall, and it was truly a whole-school read. The new Bookshare WebReader will also be helpful to individual members.

Training

At my district, we train the teachers, parents and students to use Bookshare. Many tools, information and webinars are free and available. We help students sign up for individual accounts in order to use the library at home. I have a process where I send the necessary paperwork home and it comes back signed. I email the parents a how-to document that walks them, step by step, through setting up Bookshare. We feel that the easier the process is, the more parents and students will use the service.

In addition to working at my school district, I am also a Bookshare Mentor Teacher and belong to a wonderful network of educators and specialists (330+) from across the United States who offer skills and knowledge about accessible books to neighboring schools. This is truly a rewarding experience. For more about this, visit: https://www.bookshare.org/_/promo/2011/03/bookshareMentors2

Get Started with Bookshare

With digitally accessible books, non-readers and/or students with significant learning disabilities, who would never pick up a book, now ask to read. They are eager to learn about new technologies that can help them read longer or listen to the same books that their peers read. They enjoy active conversations and have improved skills, such as listening, comprehension, critical thinking, vocabulary, note-taking and writing drafts. Students with severe reading challenges, like dyslexia, are no longer restricted to simple texts due to their inability to decode words and can now read grade-level content. Students with physical disabilities, like cerebral palsy, don't have to carry oversized books and feel different. Students with visual impairments can easily use tablets with a zoom feature, and students who are blind push aside the CCTV.

How great would it be to transform the learning experience for all students with print disabilities, to create independent readers and to increase their "cool factor?" You can do it and level the learning field! ∎

Spicing Up SOCIAL SKILLS

Instruction with Web 2.0 Tools

The Importance of Teaching Social Skills

Many educators know that social skills are a critical element to student success; however, teachers are often so focused on curricular demands that social skills instruction is much lower on the list of priorities. Social skills have often been thought of as the "hidden curriculum," however, the new Common Core State Standards will bring social skills to the forefront by placing a much greater emphasis on speaking and listening skills that are embedded throughout the K-12 standards in all areas. Thus, systematic instruction of social skills will be increasingly necessary for student success.

So how do we do it?

Research tells us that direct instruction is a key component for effectively teaching social skills. T.H.E. P.A.C.T.™ (Technology Helps Easy and Practical Adapted Curriculum Teaching) is a four-step, color-coded teaching framework broken down into the receptive Learn About and Read About modules, followed by the expressive Write About and Talk About modules (See Photo 2, reprinted with permission). Lessons are presented in consistent formats across various activities so that cogni-tive energy is focused on the learning, not the task. Because of its structure and focus on consistent/predictable supports, T.H.E. P.A.C.T. (see Photo 1, reprinted with permission) is a natural fit for social skills instruction. Therefore, in our quest to design more effective social skills units, key social skills, assistive technology supports, and multimedia tools (free Web 2.0 tools) were identified and embedded into the modules of T.H.E. P.A.C.T. In the "Having a Conversation" social skills unit outlined in Table 1, activi-

LESLEY MCGILLIGAN, is a speech-language patholo-gist in St. Louis, MO who specializes in augmentative communication. Since 1996, Lesley has been supporting learners with various disabili-ties and ability levels and has a keen eye for pairing technology tools with the needs of the learner to ensure a more active, engaged learning experience. In addition to her roles as an augmentative communication facilitator and active staff developer at Special School District of St. Louis County, Lesley serves as an adjunct faculty member at St. Louis University and presents at the local and national level on relevant and exciting topics related to augmentative communication and assistive technology.

JULIE OSHEROW, M.Ed. has been a special education teacher since 1998 with students with various special needs in both self-contained and inclusive settings. She is currently a computer access facili-tator at Special School District of St. Louis, MO, supporting students with assistive technology and providing professional develop-ment to staff in the form of workshops and hands-on technology trainings. Julie is a local and national presenter in the field of assistive technology.

WHAT THE RESEARCH TELLS US

- A student's social skills are critical to future success as an adaptive adult. (Hartup, 1992)

- 75 percent of students with learning disabilities (LD) exhibit social skills deficits (Kavale & Forness, 1996) in addition to being a common feature of ASD.

- Students with deficits in social skills are known to have difficulties with interpersonal relationships, depression, aggression, anxiety and poor academic performance. (National Association of School Psychologists [NASP], 2002)

- Students with poor social skills show a higher incidence of involvement in the criminal justice system as adults. (NASP, 2002)

- A 2007 study conducted at Indiana University involving a meta-analysis of 55 published research studies revealed that programs designed to teach social skills to children with autism are failing to meet their goals.

- Social skills instruction can be improved by: (Center for Implementing Technology in Education [CITEd], 2009)

  - Increasing the intensity and frequency of direct instruction

  - Matching social skills deficits taught to the skill deficits of students

  - Instructing in the general education environment to increase generalization

  - Using authentic contexts

  - Using a variety of media to teach skills throughout the day

  - Allowing for practice and feedback

  - Selecting tools that give opportunity for reflection and discussion

T.H.E. P.A.C.T.™ is a 4-step color-coded, comprehensive, language-based structured teaching framework that is easy to implement.

✔ Founded on language-based research
✔ Aligns to Common Core Standards
✔ Integrates into any setting
✔ Systemizes instruction for learners and teaching staff
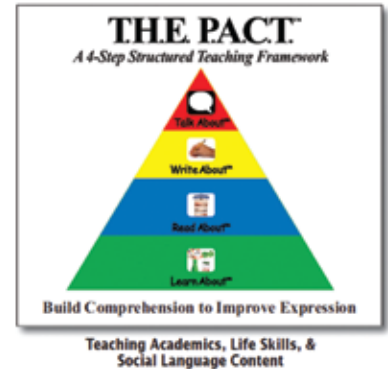
Photo 1: T.H.E. P.A.C.T. framework.
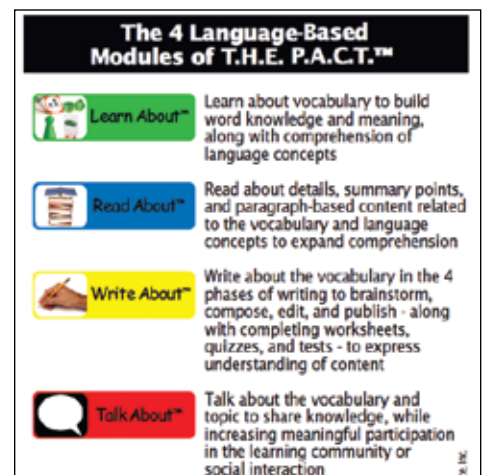
Photo 2: The four modules of T.H.E. P.A.C.T. framework.

ties were adapted to meet different learning outcomes in more than one module, and many were printed as low-tech solutions.

Web 2.0 Tools

Knowing that student engagement is increased with the use of multimedia technology, four free Web 2.0 tools were chosen for integration into the "Having a Conversation" unit: Prezi, VoiceThread, SpiderScribe and Pixton.

Prezi: www.prezi.com

Prezi is an online presentation tool with a "zoomable canvas." Instead of a traditional slide format, information is presented in a nonlinear format on a large canvas. Content can include text, images, audio, video and even links to other Prezis. Prezi is also available as an app, which allows you to create, present and share your Prezis on Apple mobile devices.

Prezi is a perfect tool for a Learn About activity by teaching single-word vocabulary in a fun, interactive way. It is also an ideal format for social skills lessons since most social situations do not follow a linear format. Students find this tool extremely engaging due to its hallmark zooming feature. In Photo 3, screenshots were taken of Boardmaker® symbols and placed on the canvas. Although any images can be used in Prezi, these symbols were chosen specifically because they were meaningful to the students. The students utilized a variety of access methods to move through the custom zooming path. Paired with a Step-by-Step™, the students heard each vocabulary word/definition as the presentation advanced.

The same Prezi was modified from green to red (Photo 4) and used again in the Talk About module. The students were expected to choose a vocabulary word and share any information they learned. A Step-by-

Step was provided for students who needed the accommodation to hear each vocabulary word aloud. The familiarity with navigating Prezi allowed the students to focus more on sharing their knowledge about the topic.

Voice Thread:
www.voicethread.com

VoiceThread is a simple, accessible digital presentation/collaboration tool. Various types of media, including images, audio, video and documents, can be uploaded to VoiceThread and annotated. By simply sharing a weblink, collaborators are invited to comment on the media in a variety of ways: via text, audio (microphone, telephone, pre-recorded) or webcam video. The app version of VoiceThread allows for content creation and presentation on Apple mobile devices. With its ease of use and built-in access features, VoiceThread is an ideal tool for use in social skills instruction.

In Photo 5, a talking dictionary activity (color-coded green) was created in PowerPoint and uploaded to VoiceThread.com. The teacher then annotated the slides with verbal comments and highlighting to illustrate the key single-word vocabulary for the Learn About module of the "Having a Conversation" unit.

The same PowerPoint presentation was modified for use as a Read About activity (color-coded blue). Building on the single-word vocabulary presented in the Learn About activity, students were engaged in reading about the vocabulary in sentences to gain additional knowledge. Because the students were not yet at an independent reading level, the teacher verbally narrated the text by using the record audio feature in VoiceThread. (Photo 6)

For the Talk About module (Photo 7), students were expected to respond to the audio prompt from the teacher, "What would you say next?" by commenting on the Pixton comic images uploaded to VoiceThread. Students had the added benefit of seeing and hearing the comments that had already been left by their classmates. A weblink sharing the completed product was shared with parents as a student learning artifact.

SpiderScribe:
www.Spiderscribe.net

While there are many mindmapping tools on the market, SpiderScribe's clear interface paired with the ability to upload text, images, files, calendar events and geographic locations to graphic organizers makes it a standout application. Because social skills can often be tricky for our students to "decode," graphic organizers assist in clarifying relationships among targeted social

concepts by displaying information in a simple, visual format.

A mindmap outlining the concept of appropriate commenting was created for the receptive Read About module of T.H.E. P.A.C.T and color-coded blue (Photo 8). Boardmaker symbols were uploaded and examples of appropriate/inappropriate comments related to the topic of baseball were inserted. The students could either read the content on the Web or use the low-tech version with a talking pen (Penfriend or AnyBook Reader™.)

This same Web 2.0 tool was utilized to create an expressive Write About activity (color-coded yellow) in which the students sorted comments related to the topic of baseball into either the "appropriate comment" or "inappropriate comment" category (Photo 9). This activity could be completed either electronically or in printed form. In this example, a reusable file folder pocket and double stick tape were utilized to create the low-tech version (see Table 1).

Pixton (For Fun): www.pixton.com

Pixton is an online tool for comic-making and sharing with poseable characters and a wide range of templates, backgrounds and props. Comic strip conversations can increase students' perceptions of social situations, their ability to generate solutions to difficult social situations and demonstrate an increase in target behaviors (Pierson & Glaeser, 2005). Although there are a myriad of comic-generating websites and apps, this tool is perfect for social skills activities as the facial expressions/emotions and positioning/body language of the characters can be changed.

In Photo 10, a social story was created in a comic book format as a Read About activity. The speech and thought bubbles were color-coded blue and contained sentences with the target vocabulary words. Staff read the comic with the students, making sure to point out the expressions and emotions of the characters. A low-tech version of this activity was also printed out as a book. The pages were placed in a binder, and voice output was added with an AnyBook Reader so the students with beginning literacy skills could independently complete the activity (Photo 11).

This activity was then easily modified to create a Write About activity, in which the students were engaged in demonstrating their knowledge about the target vocabulary. The speech and thought bubbles were simply changed from blue to yellow, and the text was removed. The blank speech and thought bubbles allowed the students to either create their own comic with the target vocabulary or use a low-tech version to choose appropriate responses (Photo 12).
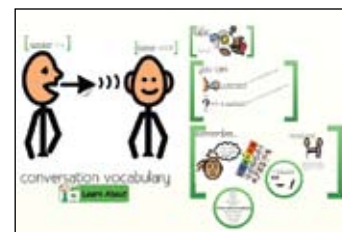
Photo 3: Screenshots were taken of Boardmaker symbols and placed on the canvas.
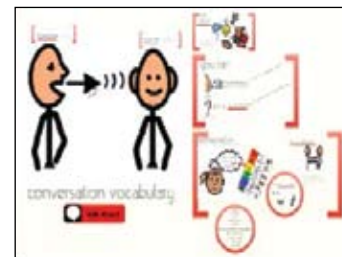
Photo 4: The same Prezi was modified from green to red and used again in the Talk About module
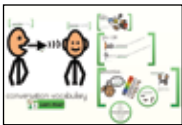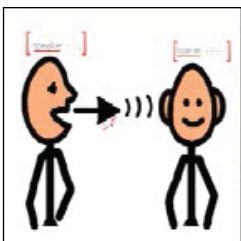
Photo 5: A talking dictionary activity. Color coded green, learn about module.

Photo 6: The same PowerPoint presentation was modified for use as a Read About activity (color-coded blue).

Photo 7: For the Talk About module, students were expected to respond to an audio prompt from the teacher.

T.H.E. P.A.C.T. Module	Learning Objectives	Tool	Image of Low Tech Activity	Assistive Technology Tools / Strategies
Learn About	Students will listen to the definition of nine vocabulary words	www. prezi.com		Step-by-Step
	Students will explore converation vocabulary	www.voicethread.com		Talking Photo Album
Read About	Students will read/ attend to a social story containing conversation vocabulary.	www.pixton.com		AnyBook Reader
	Students will listen to related and non-related comments on a topic.	www.spiderscribe.net		AnyBook Reader
	Students will read/attend to conversation vocabulary in sentence format.	www.voicethread.com		Talking Photo Album
Write About	Students will arrange related and non-related comments on a topic	www.spiderscribe.net		Magnetic Manipulatives
	Students will place comments and thoughts in corresponding speech and thought bubbles	www.pixton.com		Word Bank
Talk About	Students will share knowledge of conversation vocabulary by stating three facts learned.	www.prezi.com		Step-by-Step
	Students will formulate a response, given the prompt "What would you say next?"	www.voicethread.com		AnyBook Reader

Unit: Having a Conversation | **Vocabulary**: conversation, speaker, listener, topic, taking turns, volume, personal space, body signals, comment, questions

Product Information: Talking Photo Album from Attainmentcompany.com $39 | Step-by-Step from Ablenetinc.com $165 | 15-hour Franklin Any Book Reader from Amazon $29.99

Conclusion

There is a broad range of research in the area of social communication that outlines effective instructional methods. While we focused on the use of various Web 2.0 tools to create engaging electronic activities for a social skills unit, multimedia software (e.g. Clicker 6, Boardmaker Plus or Studio, Intellitools Classroom Suite) could be used to design activities as well. Using the same tools multiple times during a curricular unit builds consistency and predictability for the students and ultimately builds confidence and success. Once students are comfortable with a particular tool/format, they can focus their cognitive energy on the content and not on simply navigating the tool. It is also a time-saver for the teacher, who can use the same format for various activities while targeting different learning objectives. By consistently engaging students in social skills lessons that are fun, creative and allow for successful demonstration of knowledge in multiple ways, our students are more likely to become socially effective communicators.

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Photo 8: A mindmap outlining the concept of appropriate commenting was created for the receptive Read About module.

Photo 9: This same Web 2.0 tool was utilized to create an expressive Write About activity.

Photo 10: A social story was created in a comic book format as a Read About activity.

Photo 11: Pages were placed in a binder, and voice output was added with an AnyBook Reader so the students with beginning literacy skills could independently complete the activity.

Photo 12: The blank speech and thought bubbles allowed the students to either create their own comic with the target vocabulary or use a low-tech version to choose appropriate responses.

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Access & Beyond

The Alberta Smart Inclusion Pilot Project

INTRODUCTION

During the three year period of September 2008 to September 2011, Alberta Education provided a total of $56 million to all publicly funded school jurisdictions and charter schools through Innovative Classrooms Technology Funding. This funding was provided to ensure every K-12 instructional space in Alberta schools is equipped with key technologies that promote innovative teaching and learning, specifically an instructional computer and a data projection device and/or electronic whiteboard. Instructional classrooms, province-wide, saw an influx of interactive whiteboard technology, primarily SMARTBoards.

Alberta Aids for Daily Living (AADL) launched the Speech Generating Communication Devices (SGCD) Pilot Project in June 2006 (AADL, 2006). The purpose of this project was to assist Albertans with severe communication disabilities, in this article referred to as complex communication needs, in purchasing SGCDs. Through this project, eligible Albertans are supported with the trial of an SGCD and application for cost-share assistance from Alberta Health Services for a mid-tech or high-tech device.

These two critical supports, taken together with the findings from the Smart Inclusion project at Upper Canada District School Board (UCDSB; Dunn & Inglis 2011) and London District Catholic School Board (Long & Cameron, 2011), have inspired educators and consultants involved in the Alberta Smart Inclusion project to take up

> " Access is having the means, supports and opportunities to communicate as effectively, meaningfully, accurately and authentically as possible.
>
> ~ B. Collier, (2012) "

the challenge to increase student access to technologies. Further, the team's goal was to move beyond access to leverage these technologies to support the learning of all students. In particular, one school district in the Alberta Smart Inclusion pilot project focused on increasing the participation and academic engagement of students with Autism Spectrum Disorder (ASD) and Complex Communication Needs (CCN). The results of this work will be discussed in this article.

UCDSB used action research design principals (Mills, 2000) to monitor implementation and effects of their Smart Inclusion Project. Thus, an action research design was implemented for the Alberta Smart Inclusion Project. The Alberta Smart Inclusion Project investigated the question: "Does the use of SMART Boards, integrated with special needs software and Augmentative and Alternative Communication (AAC), and set within frameworks from education and speech-language pathology increase the engagement, communication, participation and behavior of students with CCN?"

THE PROCESS

Setting

The Alberta Smart Inclusion Project was implemented in two congregated classrooms for students with (ASD) in an urban Alberta school district. These congregated classrooms are designed to help students with ASD to improve their communication, social interaction and behavior while developing academic skills. The Smart Inclusion Project Implementation Team included the team leader; a speech-language pathologist consultant, an education and behaviour consultant, an occupational therapist consultant and an assistive technology technician.

Participants

Characteristics of the students participating in this project included four males, age 7:0-8:6 years. Three students were in Grade 2; one student was in Grade 3. All students had a medical diagnosis of ASD and presented with the following additional characteristics:

- Severe receptive and expressive language delay with limited verbal skills
- Used AAC supports (e.g. pointing to pictures, Picture Exchange Communication System)
- Dependent on adults to provide and teach vocabulary in their communication systems
- Used a limited number of communication functions (i.e. gain attention, request, protest, refuse, greet, label,

answer questions, ask questions, share information, comment)

• English spoken in the home (as reported by parents and programming staff)

Rhythm of Support

The Smart Inclusion Project Implementation Team collaborated with the classroom teachers, educational assistants and other members of each student's learning team on a regular basis, ranging from biweekly to monthly. This collaboration consisted of specialty team meetings, in-class coaching and community of practice events. This rhythm of support was informed by the Beyond Access Model (Jorgensen, McSheehan, & Sonnenmeier, 2010). The Beyond Access Model is a comprehensive model comprised of four dynamic, recursive phases that link planning of students' instructional supports with professional development to improve team functioning.

The Student, Environment, Tasks and Tools Framework (SETT; Zabala, 2005) was merged with the Beyond Access Model to address the requirements of the project proposal (Alberta Smart Inclusion Project Grant, 2011). The Smart Inclusion team also incorporated the Participation Model (Beukelman & Mirenda, 1998) to replicate the UCDSB project.

Universal Design for Learning (UDL; Rose & Gravel, 2010), using multiple means of representation, expression and engagement, was implemented by the teachers. Auditory, including voice and speech output from speech generating communication devices;

visual, including pictures, picture communication symbols, videos, printed words and graphics; and kinesthetic modalities, including touching, adding to and moving information on the Smart board, were incorporated in the instructional approach.

The classroom teachers also used Aided Language Stimulation (ALgS; Gossens, Crain, & Elder, 1992) to support the communication efforts of students. ALgS is a language stimulation approach in which the facilitator points out picture symbols on the student's communication display and on the SMART Board in conjunction with all ongoing language stimulation. Through the modeling process, the concept of using the pictorial symbols interactively is demonstrated.

Technology

SMART Boards and FM sound field systems were available and used in both classrooms. Other educational technology included desktop computers and iPads. Software available in the classrooms included Boardmaker Plus (Mayer-Johnson), PixWriter (Slater Software) and Prentke Romich Company Application and Support Software (PASS). SGCDs were not in place for these students at the beginning of the project.

The first part of this project, the "access" component, focused on ensuring students had access to devices that were a good match with their communication needs. The Alberta Aids to Daily Living (AADL) Project provides eligible Albertans with CCN with support for the trial of SGCDs and application for cost-share assistance from Alberta Health

for a mid-tech or high-tech device. Examples of devices that were trialed, depending on the communication and access needs of the individual student, included the Go Talk Series (Bridges Canada), VocaFlex and SpringBoard Lite (Aroga Canada). Two of the four participants had successful applications for a mid-tech SGCD during the project.

The second part of the project, the "beyond" component, focused on how to leverage these technologies in the classroom to support the participation of students across school, home and community environments. Speech generating communication devices were integrated with Smart Boards. For example, the teachers highlighted picture communication symbols on the SMART Board and speech generating communication devices while verbally communicating with the students. Students receptively and expressively identified the pictures and/or symbols presented to them. This technology, provided in a modified Fitzgerald Key (Fitzgerald, 1949) approach, created many opportunities for students to combine words and build phrases/sentences through access to pictures and picture symbols with words. The Fitzgerald Key format follows a left to right linguistic order in which words are arranged in classes according to their typical position in a sentence and these classes can be color coded, e.g, yellow for people, green for actions, orange for nouns, blue for describing words, red for social vocabulary and white for other words.

PILOT PROJECT EVALUATION

Data Collection

The duration of data collection was from October, 2011 through June, 2012. The following results are based on the pre and post Smart Inclusion questionnaires completed by the teachers and the pre and post assessments and checklists completed by speech-language pathologists. Norm-referenced, standardized measures were administered to each participant by two speech-language pathologists (SLPs). These SLPs had with no affiliation with the project and had extensive experience in assessment of students with ASD. Results specifically from the areas of engagement, participation, independence

and communication for these students with ASD and CCN are reported.

Results

Engagement (Figure 1): The percentage of time students were engaged, as measured by participants looking, listening and responding, increased for all four students from pre to post SI project. Students may have been more successful engaging with others when they had access to many methods of communication, including vocalization, speech, speech output, symbols and words. Addressing the communication needs of the students and providing strategies to support

students engaging in activities with peers may have resulted in the improvement documented by the teachers.

Academic Participation (Figure 2): Academic participation levels are on a continuum. A comparison of pre and post Smart Inclusion academic participation levels for the student participants indicated increased participation for three of the four students. Student A remained "Active;" Student B increased from "Active" to "Competitive;" Student C increased from "None" to "Competitive;" and Student D increased from "Involved" to "Competitive."

Direct Assistance for Understanding and Completing

Tasks (Figure 3 and Figure 4): A decrease in the amount of time direct assistance was required to understand and complete lessons/tasks was reported for three of the four students. It is possible these positive results are reflective of an increase in language comprehension as students had available multiple means of representation to understand classroom directions and, subsequently, successfully complete assigned tasks.

Receptive Vocabulary (Figures 5-6): Using the Peabody Picture Vocabulary Test – 4, the number of receptive vocabulary items students successfully responded to increased for three of the four students.
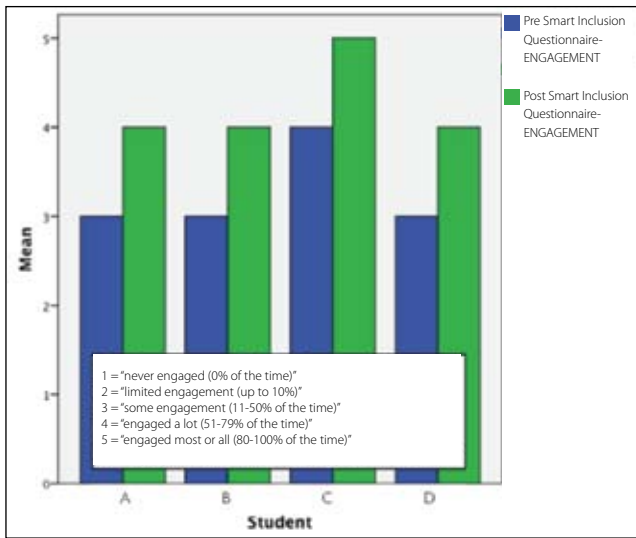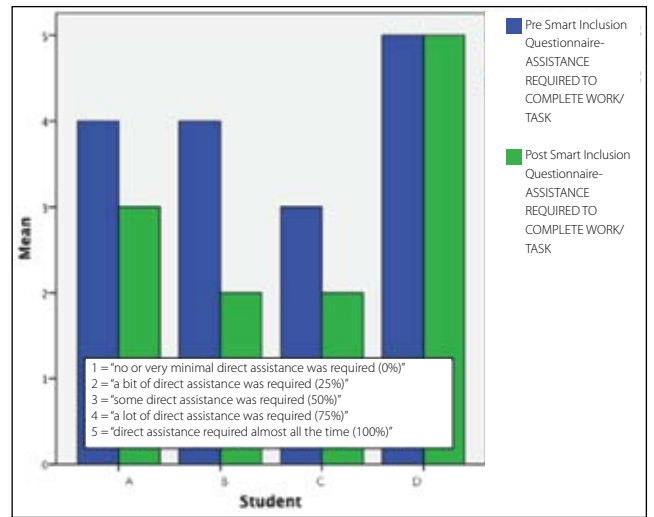
Figure 1: Engagement

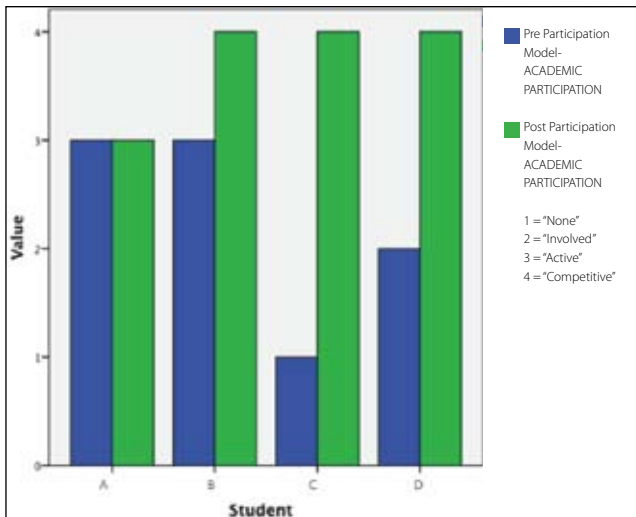
Figure 4: Direct assistance for completing tasks

Figure 2: Academic participation

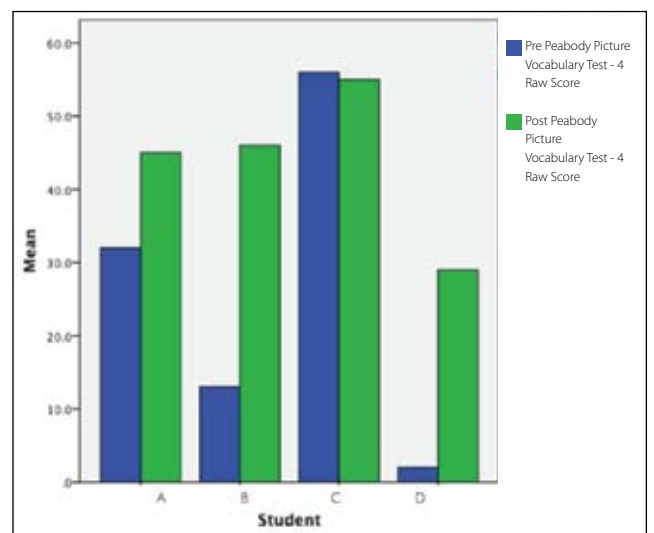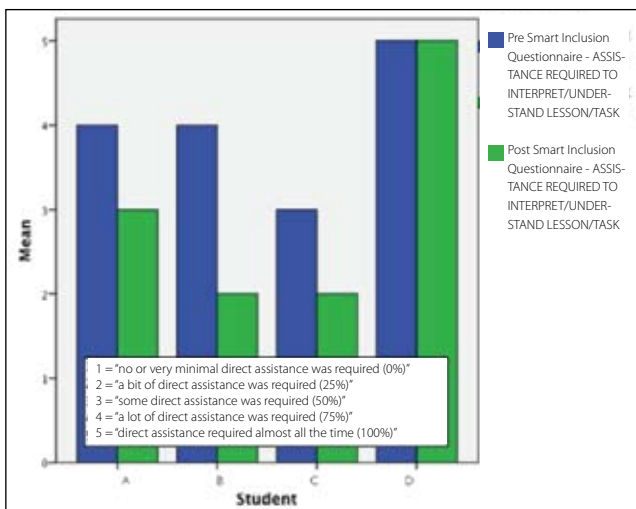Figure 5: Receptive language

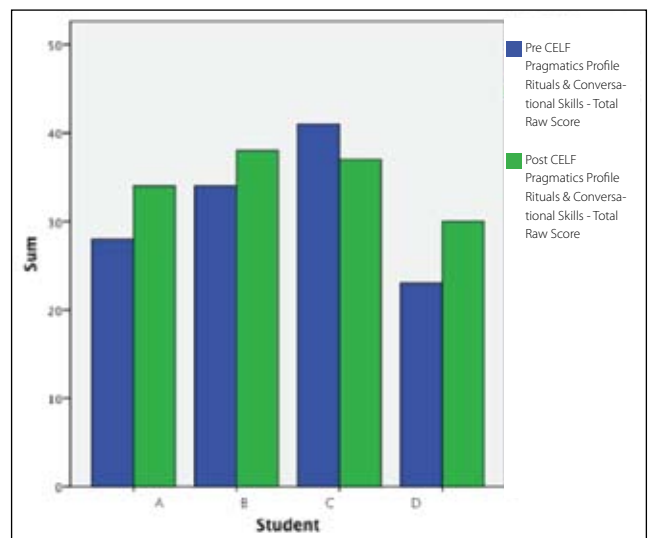
Figure 3: Direct assistance for understanding tasks

Figure 6: Rituals and conversation skills

COMMUNICATION INTENTS

KEY:
- Uses words and / or symbols (green)
- Uses nonverbal signals and/or behaviours (blue)
- No responses (grey)

The figure shows four students (A, B, C, D), each with Pre and Post columns, rated on the following communication intents:

- Engages Another
- Asks Questions
- Makes Comments / Shares Information
- Answers Questions
- Lables (Names Items)
- Greets Others
- Protests / Refuses
- Requests Help
- Requests Motivators
- Gains Attention

Student	Pre	Post
A		
B		
C		
D		

Figure 7: Communication intents

Based on the Clinical Evaluation of Language Fundamentals 4 (CELF-4; Semel, Wiig & Secord, 2003) Pragmatics Profile results, student performance increased on the Rituals and Conversational Skills measure for three of the four students. Examples of items on this measure included the student making and responding to greetings, making relevant contributions to a topic during conversation/discussion and using appropriate strategies for gaining attention.

Communication Intents (Figure 7): In addition to the teacher survey and the speech-language assessment results, data was collected on student's communication intentions, i.e., gain attention, request, protest, refuse, greet, label, answer questions, ask questions, share information and comment (Wetherby et al., 1988). A comparison of pre and post results for each individual student demonstrates growth in using words and/or symbols for a wider variety of communication intents for all four students.

PILOT PROJECT OUTCOMES

Outcomes for Students with Complex Communication Needs

- Students were engaged and participating more with others during classroom activities; students were meeting their IEP goals
- A decrease in the amount of direct assistance required to understand and complete lessons/tasks was reported; increased language comprehension, possibly due to multiple means of communication and representation and implementation of strategies and tools to support communication was documented
- Increases in receptive vocabulary and expressive communication were documented
- Increased performance in the pragmatic communication areas of Rituals and Conversational skills was documented
- Students demonstrated growth in using words and/or symbols for a wider variety of communication intents
- Students demonstrated an increase in verbal communication, evidenced by echoing the SGCD and using scripted messages/phrases verbally in functional and motivating routines. Importantly, student's verbal communication expanded from mainly communicating using nouns to combining words and using nouns, verbs and descriptors.
- Two students qualified for and received speech generating communication devices

Outcomes for the Whole Class

- Assistive technology and AAC strategies were being used for whole class instruction
- The SMARTboard made modeling AAC strategies, i.e. Aided Language Stimulation, easier and more accessible for all students
- Increased educator knowledge and skills for technology (speech generating

communication devices and mainstream technology) that could assist more students in the class

- Increased educator knowledge in how to support a wider variety of opportunities for communication intents

Outcomes for the School

- The teachers involved in the project plan to share back the results of the project for their students with other teachers

- Leveraging technology to support social and academic participation for all students may spread to other classrooms in the schools and district in which this project took place.

Outcomes for the Family

- Parents and siblings were provided with the opportunity to express the individual student's communication strengths, needs and priorities for programming

- Collaboration between parents, speech-language pathologists, teachers, educa-

tional assistants, occupational therapists, education and behavior program specialists, assistive technology technicians and administrators resulted in establishing relevant and effective programming goals and objectives

- Decisions about how skills and use of technology targeted at school may be generalized to activities at home and the community were made and included supportive coaching to parents

WHAT NEXT?

The results of the Alberta Smart Inclusion Project have important implications.

One implication is that it is possible to increase the percentage of time students with CCNs are engaged and successfully participating during learning activities. Increasing access to technologies while leveraging strategies to increase student comprehension and task completion was documented. Results of the project also indicated it is possible to increase student's receptive vocabulary, rituals and conversational skills, and use of words and/or symbols for a wider variety of communication intents.

A second implication for practice suggested by the outcomes of the project is that the content and conditions under which the skills were taught may have increased the engagement, participation and communication for students with CCN. The merged Beyond Access-SETT framework and the Participation Model identified students' level of academic and social participation and independence within the learning environment. The collaborative process included parents, teachers, educational assistants, speech-language pathologist, occupational therapist, educational programming and behavior consultant, and the assistive technology for learning technician. The effective-

ness of programming and interventions in assisting students to attain their goals was consistently evaluated.

A third implication for practice is students with CCN require direct, explicit and intense instruction in use of AAC supports and assistive technology to facilitate communication and learning. School principals and program administrators need to become aware of the critical link between assistive technology and authentic participation and academic achievement. It is crucial to ensure that classroom programming staff receive the professional development, specialty team support, equipment and time to implement the necessary intensive instruction required. Importantly, ongoing instructional coaching and mentoring is essential for classroom staff.

A fourth implication is that the assessment and implementation practices in the Alberta Smart Inclusion project provide an option for schools to support achievement and participation for all students, including their students with CCN.

A fifth implication is that the focus for this project was on the engagement, participation and communication for students with CCN in the classroom setting. It is recognized that parents are essential partners on the learning team. The ongoing

skill development training and support for parents of students with CCN beyond the scope of the Smart Inclusion Project would likely further facilitate improvements in the areas of student engagement, participation, achievement and communication. Parental involvement also increases the likelihood of functional communication device use across school, home and community environments.

Finally, findings from this project may be useful for those providing instruction in university training programs. Provided with a clear picture of the theoretical underpinnings and strategies of Universal Design for Learning, the Beyond Access Model, the SETT Framework, the Participation Model, Aided Language Stimulation, along with the technology support and the strategies necessary for inclusion of all students, training programs could accurately convey to educators and speech-language pathologists the importance of the implementation of this programming. Further, a common vision for this area of practice would have a positive impact on school board and provincial policies for programming for students with CCN.

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DISKoveries

Apple iPad Mini for Special Needs

By Joan Tanenhaus

Apple has done it again – with the new iPad mini that brings a whole new experience to tablet users! It's smaller than the original iPad but not too small to work well with 775,000 apps (as of January 2013), Safari, Face-Time, books, magazines and videos. The new iPad Mini is 7.87 inches high by 5.3 inches across, only .28 of an inch thick, weighs only .68 of a pound and is 53 percent lighter than the iPad with Retina display. The screen/display size is 7.9 inches, compared to 9 inches on the full size iPad (and it has the same 1024 by 768 pixel resolution as the iPad 2). The design team at Apple worked hard to give us the maximum amount of screen in the minimum amount of space by increasing the size of the screen and reducing the width of the bezels on two side of the display, changing to a single cell battery while maintaining a 10-hour battery life and reducing the size but not power of the camera. The iPad mini recognizes whether your finger is simply resting on the display or whether you are intentionally interacting with it. A new feature is the Lightning connector that is more durable than the older 30-pin connector and is reversible. No more fumbling to get it in the right way – there's no wrong way to plug it in. The iPad mini can be purchased with WiFi only or with WiFi + Cellular capabilities. (No contract is needed for cellular – you can just sign up for a month at a time and cancel whenever you want. You can do this right from the iPad.) In the special needs population, the iPad Mini seems to be a great favorite of the teenagers

Apple iPad Mini

and older individuals – if they have no visual issues. The difference in size of the icons, the keys on the keyboard and the pictures/icons in AAC programs does not seem to be problematic for these older individuals. Actually, many of them seem to prefer it because it's lighter, easier to carry and fits easily into a pocketbook and sometimes even a pocket. Parents and professionals like the less expensive price too. The lighter weight and thinner size also seems to be a help for some chil-

dren who have decreased grip, low tone or decreased upper body strength.

TOP 10 THINGS YOU SHOULD KNOW ABOUT YOUR IPAD AND IPAD MINI

10. Assistive Touch gives the user touch control of many of the more difficult motor tasks required by the iPad. For example, you can take a Screen Shot – a picture of any screen – by pressing the menu button and the power/lock button (on the top edge of the device) at the same time. With Assistive Touch turned on (Settings‡General‡Accessibility), a small moveable icon appears on screen. Touch the icon to open the Assistive Touch menu. Touch Device and another menu opens with options to Lock Screen, Rotate Screen, Volume Up, Volume Down, More (including triple click, shake and multitasking) and Screenshot. Also use this to make your iPad louder, softer, to rotate the screen, to lock the screen, etc. For those individuals unable to drag/scroll with two, three, four or five fingers or pinch to expand/contract a screen, just touch the Assistive Touch Gesture and they can perform these operations with one finger only. You can also put your favorite gestures in one area for quick access.

9. Guided Access (Settings-> General-> Accessibility), new in iOS 6, allows you to lock your iPad to the one app you want the student to have access to. It allows a parent, teacher or administrator to limit an iOS device to one app by disabling the Home button, as well as restricting touch

input on certain areas of the screen. Other Accessibility features include the ability to configure the speed at which you can double-click or triple-click the Home button to access the features associated with these actions: the VoiceOver screen reader, with extended support for Maps, Assistive Touch and Zoom.

8. Create your own social stories by taking pictures/videos of the students with your iPad camera and putting them in one of the many social skills story programs. Add text and voice and you have a personalized social story on any topic you need.

7. Your iPad can be interfaced with your SmartBoard to see the display on a big SmartBoard screen. You can interface your iPad with your television as well. Explore the many uses of the Apple VGA adaptor and the Digital AV adaptor to accomplish this.

6. Use single- and two-switch access and scanning with a Bluetooth switch interface and special apps that support switch use.

5. Dropbox is great for transferring pictures, documents, videos, etc. from computer to iPad, iPad to iPad, teacher to parent, etc.… and it's free.

4. You can use the volume up button on the side of the iPad as a shutter release button – feels like a stand-alone camera. If you own the APPlicator Switch Interface (reviewed below), you can program a switch to be the Volume Up button and the switch user then has switch access to the camera shutter release and can take pictures with the iPad, iPad Mini and iPhone. You can use the forward facing camera for self-portraits or the rear facing camera for taking pictures of families, friends, classroom, trips, etc.

3. Use iCloud so your files sync between your computer, phone and iPad in order to have up-to-date contacts, calendars, notes, music, books, etc. on all your devices.

2. Set up Find My iPhone so you can locate your iPad from your computer or phone if it gets misplaced, lost or stolen.

1. Siri lets you use your voice to send messages, schedule meetings, place phone calls and more. Instead of typing, tap the microphone icon on the keyboard, speak the text you want to enter and tap the microphone again. Works with NotePad, Pages and all apps that use the keyboard. Write messages, take notes, search the Web, update Facebook status, tweet and send Instagrams. The accuracy is amazing. You can also call people, select and play music, hear and compose text messages, use Maps and get directions, read your notification, find calendar information – all with your voice. (Siri requires an iPad with Retina display, an iPad mini or an iPod touch (fifth generation).

There are now three size choices available when evaluating a student for AAC or other

use: iPad, iPad Mini and iPod Touch (about the same size as an iPhone). There is also a new iPad with Retina Display that has 128 GB of memory.

ACCESSORIES FOR THE IPAD

APPlicator Switch Interface (www.inclusivetlc.com) This is a new Bluetooth switch interface for iPads, iPods (third and fourth generations) and iPhones (4 & 3 GS) and is currently the only interface that provides access to both apps and music, with up to four switches. Switch sockets default to the most frequently used settings (space, enter, 1, 3) but you can also re-program them into 24 mouse/keyboard commands (i.e., up arrow, down arrow, play/pause, volume up, down, mute, and others). See tip #4 above for using a switch and the APPlicator to take pictures with the iPad. In QuickMedia Mode, which gives access to the iPad media player, the defaults are play/pause, skip forward, skip back and timed play). The APPlictor also let you bring up the on-screen keyboard manually at any time. The interface measures only 3.5" x 2.5" x .75", has a 64-foot operating range and a rechargeable lithium-ion battery that gets charged through the USB port. The Bluetooth pairs easily without a PIN and has approximately 40 hours of use. There is a signal when the battery is getting low, giving you an indication that you should charge the battery soon. You can continue to use as it is charging.

Go Now Case (Attainment: www.attainmentcompany.com) If you have either an iPad (second, third or fourth generations) or an iPad Mini, check out this new case made by Attainment. The built-in handle makes it easy to carry, while the high-impact plastic exterior with a foam padded interior keeps it safe from bumps and drops. There are no electronics in the case that need charging, but the design does increase the audio quality because it redirects the sound to the front, giving louder and more consistent volume. All iPad controls, including volume, power, charging dock, headphone jack, camera, microphone, lock/unlock and home button are available without removing the case. The case also contains two lanyard loop holes. Cases have a two-year warranty.

Snake Clamp: (www.snakeclamp.com) If you are looking for mountings or mounting systems for your iPad, iPad mini, or iPhone, here's an excellent resource for you. This company has developed many unique mounts for individuals with special needs and will work together with you to answer specific needs or applications. Their iPad and iPad mini mountings offer many options. You can select an iPad SnakeClamp that attaches to a desk with a table clamp, one that attaches to a file cabinet (or other metal surface) with a magnetic base, to a

APPlicator Switch Interface (www.inclusivetlc.com)

Go Now Cases (www.attainmentcompany.com)

Snake Clamp Mounting: (www.snakeclamp.com)

wheelchair with a rail clamp, to a table or surface with screws and a plate mount, or to a round base that stands on a desk or table. You can select a 9-inch or an 18-inch gooseneck for any of these connectors. The nice part is that all pieces are interchangeable and you can order the parts you want for different times and uses and just change them as needed. All hardware required to

assemble your iPad SnakeClamp is included, along with assembly instructions and basic tools needed. Visit the website for pictures of the mounts and all attachments, as well as assembly instructions. If you have a special mounting need, contact them to discuss.

Touchfire Screen-Top iPad Keyboard (touchfire.com) is an excellent accessory for your 9-inch iPad. Made out of silicone rubber, it attaches to the iPad using the built-in magnets, and the non-slip bottom keeps it in place. Since it is completely transparent, you can always see the keys underneath. With it attached, you can rest your fingers on the home row keys without accidentally triggering the touch screen. When you type, the Touchfire keyboard responds and feels like a regular keyboard. When you are not using it, it attaches securely to your iPad's cover. Because it is flexible, you can even roll it up with the cover. (You also get a thin storage case in case you want to remove the keyboard and store it off the iPad.) The keyboard is easy to clean – just run it under tap water and towel dry. A wide number of international keyboards are supported. If you have students who find it difficult to use the touch screen keyboard, this is an excellent alternative.

BubCap Pro for iPad (RJCooper.com) This is a cover that fits over the Home button of the iPad. It is a small aluminum tab that adheres to the Home button and keeps it from being pressed by the student. It prevents students from exiting out of apps that they are working on. RJ has adapted the commercially available product to make it easier for the professional to use to exit. Visit rjcooper.com for more information.

Mount'n Mover (BlueSky Designs: www.mountnmover.com) This mount, previously reviewed in the October/November 2012 issue, is now also available for the iPad mini. This system locks securely but also allows the user to easily and independently move devices to different positions. Visit the website to see videos of how it works.

WHAT ELSE IS NEW FOR SPECIAL NEEDS

Early Years Mix (Lara Mera Software: www.laramera.se) This is an excellent computer software program that works well for home and school use and for computer and SmartBoard use. There are five parts to the program, with each part having nine activities and three different learning levels. The program is available as a download directly from the company's website. You can purchase the complete set of programs (the five parts) or individual parts. The complete set consists of: Teddy Mix consists of sorting activities, creating your own scenes, Dress The Teddy and Teddy Dominoes. Creative

Mix has 2 activities for Go-Togethers, Odd One Out , categorizing with more complex concepts, puzzles, a memory game, creating a short, multi-page story with sound, video and pictures. Number Mix has fun activities for number recognition, matching numbers and counting skills, dot-to-dot activities and a game to listen to and follow directions with numbers to build a caterpillar. Letter Mix has early literacy activities for building letter recognition. Word Mix has nine different activities, such as matching picture to word, alphabetical order, crossword with picture and letter cues, spell the words with letter cues, and word search with picture cues. There is a manual and pedagogical guide too.

Memory Quest: Junior and Senior (Lara Mera Software: www.laramera.se) This program consists of 10 memory training modules with eight different exercises in each module. It is designed to train and improve working memory of students with ADHD, dyslexia and other learning difficulties. The modules are designed to work on memory training through visuospatial exercises with fixed position objects, with moving objects and visuoauditive exercises with fixed position objects. Users remember the order that objects are highlighted or spoken, with objects that remain in the same position, change position or are not visible until after they are named. Exercises in the Junior and Senior modules are similar in design but offer different graphics for the different aged users. The difficulty level of the exercises adjusts automatically following the student's performance, so that the demand on the student's working memory constantly increases. There is a reward system to motivate and stimulate students during training. It can be configured to meet the needs of different users. Daily, weekly and final results can be saved and printed.

Social Skills Quick Take Along Mini Book (SuperDuper: www.superduperinc. com) This little pocket-sized spiral-bound book has 61 pages with 600 questions that cover pragmatic skills of answering questions about 15 social skills, such as apologizing, feelings, initiating conversation, personal safety, requesting, understanding sarcasm and much more. This is a great tool for speech-language pathologists to use with children of all ages. Difficult Situations Fun Deck helps older students discuss how they would react to a variety of situations and is great follow-up tool for the mini book. Each card presents an illustration and asks a question related to a stressful situation the students might find themselves in. Many of the questions relate to topics for adolescents and older teens and help open up discussions on social behaviors when alone and
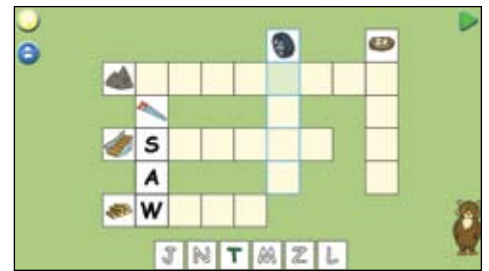
Early Years Mix (www.laramera.se)

Sentence Workout (www.virtualspeechcenter.com)

Kid in Story (www.locomotivelabs.com)

Goal Banks in ATEval2Go (www.smartyearsapps.com)

without parental supervision and faced with dangerous and scary predicaments.

The Processing Program (SuperDuper: www.superduperinc.com) This is an excellent set of two new and revised second editions. It uses a set of picture identification tasks

(Language Web Frameworks) and Altered Auditory Input Technique (AAI). Teachers learn how to identify the type of modifications needed for each child and then how to fade the use of the Altered Auditory Input. The Processing Program – Level 1 targets 46 beginning concepts and vocabulary words from categories including colors, quantities, sizes, prepositions, conjunctions, singular and plural nouns and pronouns. The Processing Program – Level 2 targets 101 advanced concepts for children ages 6-9. Level 3 uses many of the same concepts as Level 2, as well as 17 additional concepts, in longer and more complex command combinations for ages 9 to 12.

NEW AND NOTEWORTHY APPS FOR THE IPAD

* indicates a lite or free version is available.

Virtual Speech/ www.virtualspeechcenter.com		Well designed,motivating, all have auto-scoring, multiple students, disable written words, audio recording feature, track correct/incorrect responses, email
Articulation Games		40 English phonemes, arranged by placement of articulation; thousands of flashcards; can record audio; four game formats - flashcards, memory game, two board-games
Word Retrieval		Designed to help those with word retrieval difficulties to improve their abilities to access already known words and increase their retrieval of words.
Wh Question Island		Flash cards and board game for comprehension and expression activities for 480 wh questions
Sentence Workout		For ages 6 and up; practice sentence structures in oral and written forms; "say it" (answering questions) and "build your sentence" (creating sentences from scrambled words); over 350 sentences with 37 different sentence structures
Inclusive/www.inclusivetlc.com		Fun & very motivting; 1- & 2-switch, cause & effect activities that reinforce and teach pointing, touch, and simple switch skills; works with all switch interfaces
Five Little Aliens		Learn counting skills & numbers 1-5 with this catchy song; touch or press switch to move the story on; play two other activities
Big Bang Pictures		Excellent app for individuals with complex neeeds and visual impairments; press switch or touch to animate pictures on-screen and hear the music; large common objects; choose picture & background color; use one or two switches
Big Bang Patterns		Similar to Big Bang Pictures but with high contrast patterns with sound effects and music; try different color combinations to assess user's preferences
Train Tracker		Drag track pieces to the play area, join them to make a railway, click the play button to start the train on its journey; works with Touch or with 1 or 2 switches
Bumper Cars		Press or touch to knock the bumper car off the screen; reinforces counting skills, turn-taking; clear graphics work for those with visual & perceptual problems
Space Shooter		Wait for the target to move over an alien and then click or press switch to shoot; good for beginning scanners
Finger Paint with Sounds	*	Free app from Inclusive - Finger Paint on screen, pick your color and see your design along with music or sound effects
Night &Day/www.nightanddaystudios.com		
Cat Doorman's Little Red Wagon		Sing along and open-ended play to the classic song; choose musical instrument, visit Bakery, Dairy, Garden and Orchard to gather things for picnic
	*	Night & Day has some free apps too.
Oceanhouse/ www.oceanhousemedia.com		Great classic stories; professional narration; words are highlighted; autoplay mode too or read page by page; now lets you record your own voice & share
Just Shopping With Mom		Little Critter goes shopping with Mom and his little sister to the grocery store and the mall. Also has a Find the creature mini-game.
The Berenstain Bears Hug & Make Up		What happens when the whole Bear family wakes up in a grouchy mood one morning
500 Hats of Bartholomew Cubbins		"Hats off to the King" but poor Batholowmew - every time he takes off his hat, another hat appears on the top of his head.
McElligot's Pool by Dr. Seuss		Classic Dr. Seuss - imagine what's in McElligot's Pool; record your own voice; share voice tracks with others who own the app; sound effects; hot spots; alerts
5 Little Monkeys Play Hide & Seek		Five Little Monkeys find the perfect hiding place where even their babysitter can't find them. Encourages children to count aloud with the story.

Just Going to the Dentist by Mercer Mayer		Little Critter is off to the dentist for checkup and cleaning, x-rays and even a cavity - reassures young readers about going to the dentist. Record your own voice and share with others.
	*	Oceanhouse has many free apps to try.
Creative Communicating/ www.creative-communicating.com		Creative Communicating apps work with touch and with switches; cause and effect; errorless learning with repetitive phrases
Adapted PlayBook - Dirty Duds		Fun interactive book; reads aloud or sings with repetive storyline; complete the lines by picking pictures; has scanning, step-scan, auditory scanning; use with switch interface or with direct touch.
LocoMotive/ www.locomotivelabs.com		Create your own social stories
Kid in Story		Make personalized story books using templates or on your own. Let's you put children's pictures into ready-made stories, narrate, personalize the text, share with others or print. 6 templates included and more coming. Great idea and well done.
Logan Technologies/ www.proxtalker.com		
ProxTalker App		Make labels for ProxTalker devices - create pages of labels, use your own photos, images, clip art and symbols. For classroom, create communication "books" with multiple pages, generate & print pictures with labels, print or export as a PDF. Easy to use - select picture, edit, add label; more templates coming. Make your labels talk by applying them to ProxTalker Sound Tags and use with ProxTalker communication device.
Smarty Ears/ www.smartyearsapps.com		Excellent apps in a wide range of areas - each have extremely helpful video tutorials to assist you in using the full capacity of the apps
ATEval2Go		System to record information while evaluating/observing technology needs of students, class. Take pictures, record audio & input text. Create banks of goals, accommodations, recommendations or use built-in banks, create comprehensive reports, print and/or share. Very flexible to meet individual needs
Language Empires		For elementary age students, each empire targets a skill area (answering how, why and which questions; inferencing; vocabulary; predicting; figurative language and sequencing) Each location has 50 questions, each with picture that that provides context. Play with 1-5 students; has data tracking capabilities.
Reading Rehabilitation Toolkit		For adults with reading difficulties. Includes word to picture match, picture to word match, phrase to picture, picture to phrase, read & answer, and phrase building (composing simple phrases); can automatically increase difficulty level and select/deselect specific vocabulary; data tracking & customizable report. No audio since it is designed as a reading exercise, not auditory comprehension, has recording option for student reading aloud. Very well done.
Syntax City		Visit 8 skill areas in the city (irregular past tense, plurals, pronouns, past tense verb agreement); each has 50 targets phrases that are spoken aloud; pick correct answer; collect treasures; has recording capabilites; single or multiplayer modes with different levels; data tracking
Therapy Report Center	*	This is a centralized location for student files from all Smarty Ears apps. You can export all of the students to each newly downloaded app. Keeps all data organized. One app keeps student's progress reports and let you add notes and images.

Joan Tanenhaus, M.A., CCC, Speech-Language Pathologist/Assistive Technology Specialist, is Founder and Executive Director of Technology for Language and Learning, Inc., a non-profit organization dedicated to advancing the use of computers and technology with children and adults with Special Needs. (e-mail: ForTLL@aol.com) ■

31st Annual CONFERENCE

Closing The Gap

OCTOBER 9-11, 2013
Preconference Workshops
October 7-8, 2013
DoubleTree by Hilton Hotel Bloomington
MINNEAPOLIS, MINNESOTA

The best educational assistive technology conference in North America

Assistive Technology in Special Education and Rehabilitation

A TRADITION OF EXCELLENCE

Over the years, the annual Closing The Gap Conference has become known as the best educational assistive technology conference in North America.

Through shared best practices and research, networking, training, hands-on opportunities and an expansive exhibit hall, participants have found information, strategies and products that have proven beneficial and, oftentimes, unsurpassed for use in their work and in their lives.

The 31st Annual Conference runs Monday, October 7th through Friday, October 11th and is held in Minneapolis, Minnesota.

Preconference workshops are scheduled for Monday and Tuesday, October 7th and 8th, and the Conference officially begins with a preview of the exhibits on Tuesday evening, followed by three days of presentations, hands-on labs and exhibitions.

Varied levels of participation are available, with registration options listed on page 38.

Inside the next few pages, you will find detailed listings of the 19 all-day preconference workshops, exhibitors contracted to date and academic credit/CEU, air travel, hotel and registration information. The titles and descriptions of the one- and two-hour presentations, including hands-on labs and iPad workshops, and the additional contracted exhibitors will be available online and in print in August.

With multiple registration options available, numerous and diverse discounts, group savings and preconference workshop bundling, we invite you to participate and encourage you to bring your team!

Closing The Gap promises to work hard to insure that the content and learning opportunities are many, varied and exceptional throughout the conference week.

19 PRECONFERENCE WORKSHOPS

Closing The Gap preconference workshops are all-day, in-depth workshops presented by experts in the field in very practical and effective ways. The content and delivery are unsurpassed and the resulting outcomes for persons with disabilities are overwhelmingly positive and bright.

Many of this year's workshops are new, some advanced, with state-of-the-art technologies being addressed and best practices demonstrated and taught.

OVER 200 PRESENTATION HOURS

Practical and expert-lead presentations during the Closing The Gap Conference will include over 200 one- and two-hour sessions that describe and/or demonstrate successful applications of assistive technology for persons with disabilities. Select handouts will be available onsite and online following the conference.

COMMERCIAL EXHIBITS

An impressive and varied scope of AT products will be on display and will range from low tech to high tech and represent solutions for all disabilities and ages. Daily regular AND exclusive hours are scheduled to give participants quality time to explore, try, learn and ask questions, first-hand and face-to-face.

A second brochure detailing the over 200 presentation hours will be available on or about August 1, 2013. Details will also be posted at our website.

LEARN MORE AT WWW.CLOSINGTHEGAP.COM

WHO SHOULD ATTEND? ANYONE interested in finding practical and readily available AT solutions for ALL disabilities, mild to significant, infant through adult.

- Teachers
- Administrators
- Speech Language Pathologists
- AT Consultants
- Physical Therapists
- Occupational Therapists
- Technology Specialists
- Consumers
- Parents
- Students

WHY ATTEND? Participants will have numerous and unique opportunities to learn, first-hand, from experts in the field, network, ask questions, and see and try the latest AT products and strategies available today.

CONFERENCE SCHEDULE

Sunday, October 6
5:00 pm - 8:00 pm ..Registration Desk Open

Monday, October 7
7:00 am - 8:00 pm ..Registration Desk Open
8:00 am - 4:30 pm ....Preconference Workshops

Tuesday, October 8
7:00 am - 9:00 pm ..Registration Desk Open
8:00 am - 4:30 pm ....Preconference Workshops
5:30 pm - 8:00 pm .... Preview of Exhibits

Wednesday, October 9
7:00 am - 5:30 pm ..Registration Desk Open
8:00 am - 4:30 pm .... Presentations
*10:00 am - 5:30 pm..... Commercial Exhibits

Thursday, October 10
7:30 am - 5:30 pm ..Registration Desk Open
8:00 am - 4:30 pm .... Presentations
*10:00 am - 5:30 pm..... Commercial Exhibits

Friday, October 11
7:30 am - 2:00 pm ...Registration Desk Open
8:00 am - 1:30 pm .... Presentations
9:00 am - 1:30 pm .... Commercial Exhibits
*The exhibit floor will close for an exhibitor break from 12:30 pm - 1:30 pm.

AAC INSTITUTE CEUS

AAC Institute will again provide CEUs for both the conference and pre-conference workshops. CEUs will be offered for all sessions without charge. AAC Institute CEUs that relate to the practice of speech-language pathology and audiology can be used for ASHA certification maintenance. RESNA accepts AAC Institute CEUs for ATP/ATS credential maintenance. Most state licensure systems accept AAC Institute CEUs or other forms of self-reporting. Pre-conference work-

shops are offered for up to 1.4 CEUs. The conference is offered for up to 2.0 CEUs. For additional information visit www.aacinstitute. org/CEUs.

CEU details and self-reporting forms will be available at the Closing The Gap registration desk located on the second floor of the DoubleTree.

CERTIFICATES OF ATTENDANCE

Closing The Gap-issued Certificates of Attendance for conference participation will be available upon request at no additional fee. All preconference workshop participants will receive a Closing The Gap-issued, presenter-signed Certificate of Preconference Workshop Attendance upon completion of the workshop.

ACADEMIC CREDIT

Graduate-level academic credit from Hamline University is available for a variety of levels of conference attendance. Participants will have the option of one, two or three full semester credits.

ONE FULL SEMESTER CREDIT
Cost: $150
Requirements:
- 12 contact hours
- An outside assignment
(12 contact hours require conference participation or two preconference workshops.)

TWO FULL SEMESTER CREDITS
Cost: $300
Requirements:
- 24 contact hours
- An outside assignment
(24 contact hours require conference participation AND at least one preconference workshop.)

THREE FULL SEMESTER CREDITS
Cost: $450
Requirements:
- 36 contact hours
- An outside assignment
(36 contact hours require conference participation Wednesday - Friday AND two preconference workshops.)

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 31st Annual Conference, October 9-11, 2013 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 2nd.

www.closingthegap.com/conference/call_for_participation.lasso

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 $75!

- CEUs, Academic Graduate-level Credit and Certificates of Attendance are available for workshop participation.

PRECONFERENCE WORKSHOPS

Monday and Tuesday, October 7-8, 2013

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.

**Monday and Tuesday, October 7-8, 2013
8:00 am - 4:30 pm**

PC-1 Multi-Modal Communication Strategies for Children Who Have Complex Communication Needs (Official PODD Course) - Two-Day Workshop

Children who are non-speaking or have only limited speech, in addition to other challenges, often struggle to interact and communicate. This may include children who have physical disabilities, multiple disabilities, sensory processing challenges, limited social interaction skills and/or a range of cognitive limitations and learning difficulties. This two-day workshop will demonstrate the use of a Pragmatic Organization Dynamic Display (PODD) approach developed by Gayle Porter (Melbourne, Australia). Generic templates for multi-page "light tech" communication books have been carefully designed to support genuine communication for a variety of functions throughout the day. These templates can be customized for a range of access methods and other individual needs. Come learn strategies for creating multi-modal language learning environments that provide receptive models and expressive opportunities for language development. Learn strategies for teaching and using PODD with children and their communication partners. Videos and case examples will be shared. Participants will have an opportunity for hands-on practice with PODD communication books. There is a $17 fee for the PODD course manual in addition to the $475 cost of the two-day workshop.

Linda J. Burkhart, B.S., is a Special Educator/ Augmentative Communication Specialist/ Technology Integration Specialist in private practice, Eldersburg, MD, and Dale Gardner Fox, M.S., RPT, is an Assistive Technology Consultant, Hampshire Educational Collaborative, CCATT, Northampton, MA.

**Monday, October 7, 2013
8:00 am - 4:30 pm**

PC-2 Literacy Tools to Improve Writing and Reading Comprehension of Social and Abstract Concepts in Students with Autism: Technologies for Android, PC and iPad

In this workshop, participants will learn how to recognize the comprehension impairments of students with ASD in single word, sentence and narrative contexts and to remediate these deficits using technology. Participants will learn how to use a variety of tools on mobile tablets, SmartBoards and PCs that will allow them to construct appropriate comprehension therapies. Specific examples include building explicit visualizations of complex word meanings, providing word context through visual maps, using predictive questions and highlighting to extract intention and emotion of author and character and other inferencing tasks. A focus will be on mind mapping tools and multimedia software to make abstract information more concrete (VizZle, Inspiration, book creators, mobile education apps, StoryPals, Abilipad, Draft Builder, Livescribe pen, Opposites, Synonym and Idiom plus Intel and Google Play apps). In addition, a number of tools to improve reading and writing comprehension, text-to-speech, word prediction, images and speech-to-text, will be presented. Participants are strongly encouraged to bring their own wireless-capable computer or Android or iOS device (with flash browser, such as Rover or Puffin for iPads), and with iBook Creator or Creative Book Builder, Voice Dream, a text-to-speech engine, such as IVONA or SVOX, and a mind mapping app (e.g., Inspiration), all preinstalled. Mobile Education's Conversation Builder, Abilipad, StoryPals, Blio voices and iScroll are optional to install.

Katharina I. Boser, Ph.D., is the President, Individual Differences in Learning, and the Technology Coordinator, Glenelg Country School, Ellicott City, MD.

PC-3 Accessible Assessments

Educational reform efforts continue to emphasize the importance of standardized assessment as an accountability measure of student learning. However, the accessibility of standardized assessments continues to be a significant problem that impacts students with disabilities. The purpose of this workshop is to provide participants with an overview of contemporary assessment issues in American schools. Hands-on activities will allow participants to create formative assessments for the classroom to engage students in test-preparation exercises. In addition, we will review the current status of national outcome assessment work being conducted by PARCC, Smarter Balanced and Dynamic Learning Maps in preparation for national HIGH STAKES assessments that will begin in 2014-2015. Participants will receive a resource guide with information on technical issues, legal issues and research. Given the practical nature of this hands-on workshop, participants MUST bring their own laptop or tablet computer that includes a wireless card, Web browser and word processor to the workshop.

Dave L. Edyburn, Ph.D., is a Professor, Dept. of Exceptional Education, University of Wisconsin-Milwaukee, Milwaukee, WI.

PC-4 MORE Sensory Processing, Sensory Integration and Seating and Access

Access remains the number one "problem" for many of the children we serve, especially those who have increased tone and are seated in wheelchairs. Sensory processing directly affects visual convergence, focus, attention and postural control. To assist these children in wheelchairs with developing and using "access" to AT devices, we must also better understand how their bodies work functionally (rather than pathologically) and what different seating equipment is needed. Throughout this workshop, the presenter will share strategies and equipment that work and that provide children opportunities to use their sensory processing so that increased, consistent access to AT can be supported and become efficient.

Karen M. Kangas, OTR/L, ATP, is an Occupational Therapist, AT Specialist, Seating and Mobility Specialist and Clinical Educator in private practice, Karen M. Kangas OTR/L, Shamokin, PA.

PC-5 Extreme Makeover: Rethinking Morning Meeting and Other Daily Groups to Reflect Best Practices Using iPads

In special education classrooms, morning meeting and other daily group routines often remain essentially the same from kindergarten through high school and thus become developmentally inappropriate. This time could be used on developing the key skills of reading, writing and com-munication. Introduction of the iPad may offer the opportunity to "shake things up." The focus of this workshop is to develop new educational practices for incorporating reading, writing and communication goals into daily group activities. We will cover relevant instructional techniques and look at a range of iPad apps that can be used to implement or complement these techniques. We will then split into small groups that will work on constructing a model lesson plan for morning meeting or another common daily group activity. We encourage teams (parents, teachers, therapists) who work together in the schools to attend this workshop as a group, but individual participants are welcome as well. An iPad lab will be provided.

David Niemeijer, Ph.D., is the CEO, AssistiveWare, Amsterdam, Netherlands; Mark Coppin, M.S., is an Apple Distinguished Educator and the Director of Assistive Technology, Anne Carlsen Center for Children, Jamestown, ND; Jennifer Marden, M.S., M.A., is a Speech Language Pathologist and an AAC Specialist, AssistiveWare, Amsterdam, Netherlands; Kate Ahern, M.S.Ed., is an AT Specialist, Easter Seals Massachusetts, Haverhill, MA; and Pam Harris, ATACP, is a Customer Support Team Member and Parent of an AAC User, AssistiveWare, Winthrop Harbor, IL.

PC-6 Rett Syndrome: Communication and Learning (Tots to Women)

Rett Syndrome is a complicated disorder that often baffles the most seasoned special service providers. Understanding the core deficits is key to a girl's ultimate success; engineering the environment to support and respond to fluctuating sensory needs is paramount. Add to that the daunting task of building communication that is truly communicative and can support literacy and world learning, and now we have a workshop! Come and be inspired! See extensive videos of babies, girls and woman communicating and learning that will help you see what is possible. Leave with strategies for sensory supports, communication set-ups and a working literacy framework for instruction. You will see girls, ages 2 to 30, as they learn to communicate using everything from soft tech to high-tech eye gaze devices. Girls with Rett Syndrome are complicated in that their severe apraxia masks ability that is often underestimated and untapped. Yet shining through their very real and pervasive issues is this eye gaze that often pierces the hearts and minds of those that work with them. Come spend a fast-paced day of immersion in Rett learning and communication strategies.

Susan Norwell, M.A., is an Educational Specialist in private practice/Focused Learning Solutions and Instructor, Northeastern Illinois University, Buffalo Grove, IL, and Judy Lariviere, M.Ed., OTR/L, is a Senior Occupational Therapist/Communication Specialist, Children's Hospital and Research Center (Katie's Clinic for Rett Syndrome), Rancho Cordova, CA.

PC-7 Somewhere Lost in the Middle: Serving Students who Struggle with Executive Skills, Processing, Working Memory and Retention

Students who struggle with memory, processing, retention and executive skill issues require very specific kinds of accommodations, AT supports and teaching strategies. A good majority of these kids are served in the general education classroom and can be perplexing and challenging for teachers. School district teams often struggle with placement issues for these students as they need extra support to learn in the general education classroom, but are too high functioning to be enrolled in a more restrictive setting. Hence, the students are often lost somewhere in the middle and left without the assistance they so desperately need to succeed. This workshop will focus on helping professionals identify the particular educational barriers that interfere with this population's access to the curriculum and offer specific ideas for compensating for neurologically-based deficits. Participants will leave with tools and techniques to address attention, working memory, auditory memory, internal/external distractibility, initiation, planning, follow-through and organization. Attendees will also make and take sample supports to address target areas for their students. There is a $25 materials fee in addition to the cost of the workshop.

Keri Huddleston, M.A., CCC-SLP, is an Assistive Technology Specialist, Moira Soulia, M.S., CCC-SLP, is an Assistive Technology Specialist, and Teru Langsdale, M.S., CCC-SLP, is a Special Education Consultant, all, Washoe County School District, Reno, NV.

PC-8 Creating eBooks and Assessment Activities, Broadcasting and Sharing

Learn how to create accessible eBooks and e-content, including stories, educational content for learning and more, for iPads, Androids and computers, using a wide variety of free and inexpensive apps, programs and online solutions. Next, learn how to create/integrate assessment activities, such as comprehension questions from/into that content using a variety of apps and Web- and computer-based programs. We will also be covering how to move eBooks from one app, program, device or platform to another. Finally, we'll show how you can broadcast your books onto an IWB (such as a SmartBoard) as a "Big Book," allowing your students to highlight points within, or even broadcast an eBook live from your computer or iPad to multiple devices in the class at the same time. Switch accessibility to eBooks on iPad and Android platforms will be demonstrated and - as always - much more! Mac/PC lab provided - BYOD for iPads, tablets, etc.

Dan Herlihy is an Assistive Technology/Technology Resource Specialist, Connective Technology Solutions, Inc., Hoosick, NY, and Liz Medvetz is an Applications

Training and Support Specialist, University at Albany, Albany, NY.

PC-9 Getting Started with AAC: From Light Tech to iPad and/or Devices

This workshop is perfect for those teachers, therapists or parents who want to learn how to get started with communication for students who have severe and multiple disabilities. This highly successful program is supported by three years of research with students 5-18 years old. Participants will learn step-by-step instructional strategies for teaching social skills, linguistic skills and literacy skills, from light tech to high tech. Participants will create a variety of materials, including a starter light-tech book, a sample eye-point board, a portable word wall, an electronic book, a game board and adapted tools for accessing the iPad, and will receive a CD with a selection of ready-to-use support materials. In addition to the make-and-take activities, a computer and iPad lab will focus on hands-on time for creating and using communication and literacy materials. Participants are encouraged to bring their own iPads for this session; however, it is not mandatory. There is a $20 materials fee in addition to the cost of the workshop.

Pati King DeBaun, M.S., is a Speech Language Pathologist/Consultant specializing in assistive technology, Creative Communicating, Park City, UT; Sue Alderfer, M.S., is a Speech Language Pathologist and Assistive Technology Training Consultant, Montgomery County Intermediate Unit, Perkiomenville, PA; and Rachael Skinner, B.A., QCS, is the Director, Standing Tall, New York, NY.

Tuesday, October 8, 2013
8:00 am - 4:30 pm

PC-10 Visual Math Technologies for Students with Attention Impairments: Japanese Abacus (Soroban) Skills for Mental Calculation and Number Sense

In this workshop, participants will learn how to use the Soroban (Japanese abacus) using iPads, iPods and other tablets (Android or PC) as Soroban devices, in order to begin using the Soroban with their students. The workshop will begin with a brief history and background to understand the development of number sense and neuropsychology of brain areas used in math calculation. Participants will understand how to gradually introduce Soroban skills, from early number setting and place value, to addition and subtraction with the principles of complementary numbers. Visual flashcards will be provided that can be used in a memory match or card game for tablets, SmartBoards or off-line. Participants will be given Web resources for more advanced activities and will be guided through several different abacus and Soroban technologies, including a finger counting abacus-based program.

All are available for the SmartBoard, iPad or Android/PC tablet with touch screen. Participants are strongly encouraged to bring their own wireless-capable computer or Android or iOS device (with flash browser, such as Rover or Puffin for iPads), and with WizCom Abacus, Algebra Touch, Long Division, Abakus Tiamo, MathTapper's Find Sums, Japanese Soroban, Aloha Abacus, MyScript Calculator, Algebralator all preinstalled.

Katharina I. Boser, Ph.D., is the President, Individual Differences in Learning, and the Technology Coordinator, Glenelg Country School, Ellicott City, MD.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-11 A Writing Teacher's Toolbox: Technology-Supported Instruction for Students with Disabilities

Writing is frequently "under-taught" to students with disabilities. Adults assign and evaluate compositions and even set high standards for expected growth. However, none of these actions teach student writers how to actually organize thoughts, choose words carefully, sequence words into descriptions or arguments or polish successive drafts to best meet composition goals. In this workshop, we will demonstrate and discuss what, when and how to teach students to plan, draft, revise and edit. Workshop participants are encouraged to bring laptops and iPads in order to engage in technology-supported lessons and mini-lessons that help students learn how to write and, ultimately, how to write better.

David A. Koppenhaver, Ph.D., is a Professor, Dept. of Reading Education and Special Education, Appalachian State University, Boone, NC and Barbara Wollak, M.S., CCC-SLP, is a Speech Pathologist, AAC and Assistive Technology Specialist and Consultant, St. Paul, MN.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-12 Transparency of Switch Access to AT (especially for those students with the most complex bodies)

Switches, their placement and expectation of use can frequently alter actual learning. Access (e.g., automatic single-switch scanning) to activity is frequently decided upon by the switch chosen. Then, the activity itself is altered (smaller scanning array, slower speed) as well. This seems to be backwards. Shouldn't we first be interested in the child's engagement in the activity and then her management of the activity? With the use of electronic switches (zero pressure), we can provide children who have the most complex bodies with more direct involvement in the activity the switch is controlling. This will be a hands-on lab, too!

Karen M. Kangas, OTR/L, ATP, is an Occupational Therapist, AT Specialist, Seating and Mobility Specialist and Clinical Educator in private practice, Karen M. Kangas OTR/L, Shamokin, PA, and Lisa Rotelli, A.S. in Physical Therapy, is an Educational

Consultant, Adaptive Switch Labs, Inc., Spicewood, TX.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-13 Advanced Proloquo2Go and Proloquo4Text Hands-On: Taking Implementation to the Next Level

Successful implementation of an AAC solution requires in-depth knowledge of the needs of the user, of the customization and configuration options of the AAC app and strategies to match the two. This hands-on workshop will use well-established AAC and AT frameworks and strategies as the foundation for matching user needs with the multitude of customization and configuration options of Proloquo2Go and Proloquo4Text. Intended for people already familiar with either Proloquo2Go 2 (or later) or Proloquo4Text, this workshop will cover advanced switch access configuration, advanced vocabulary customization techniques, multilingual configuration, vocabulary sharing and advanced appearance and interaction settings. Participate, and enhance your ability to implement Proloquo2Go and Proloquo4Text effectively to better serve those persons with whom you work. An iPad lab will be provided.

David Niemeijer, Ph.D., is the CEO, AssistiveWare, Amsterdam, Netherlands; Jennifer Marden, M.S., M.A., is a Speech Language Pathologist and an AAC Specialist, AssistiveWare, Amsterdam, Netherlands; Mark Coppin, M.S., is an Apple Distinguished Educator and the Director of Assistive Technology, Anne Carlsen Center for Children, Jamestown, ND; Cathy Kingeter, M.A., is the Director of Sales and Marketing, Origin Instruments Corp., Grand Prairie, TX; Pam Harris, ATACP, is a Customer Support Team Member and Parent of an AAC User, AssistiveWare, Winthrop Harbor, IL; Anne Verhulp, B.A., is the Communication and Training Manager, AssistiveWare, Amsterdam, Netherlands.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-14 Technology Solutions for Literacy Learning for Girls with Rett Syndrome

This hands-on computer lab, with practical computer training on software that has proven to support the literacy development for individuals with Rett, will add to the theoretical learning about girls/women with Rett Syndrome. Hands-on lab will include Classroom Suite, Boardmaker Plus/Studio, Tobii Communicator and My Own Books2Go to create books and/or writing activities. Participants will create books and/or writing templates with Abilipad, Clicker Sentences, GoTalkNow, Scene and Heard and Book Creator on the iPad. Participants are encouraged to bring their own iPads with the above apps preinstalled. (Load the ones that fit your needs, we will demo the rest.) Come spend the day learning the coolest apps and most effective software to build your literacy tool belt and increase your skills. We will have all day to learn and we will share our activities via a Wiki developed for this workshop. Participants

need to be intermediate computer users to enjoy the pace of this workshop and to get the most out of the day.

Susan Norwell, M.A., is an Educational Specialist in private practice/Focused Learning Solutions and Instructor, Northeastern Illinois University, Buffalo Grove, IL, and Judy Lariviere, M.Ed., OTR/L, is a Senior Occupational Therapist/Communication Specialist, Children's Hospital and Research Center (Katie's Clinic for Rett Syndrome), Rancho Cordova, CA.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-15 QR Code Crazy!

QR Codes or Quick Response Codes have been popping up all over - on billboards, in magazines, on product packaging and now, at last, in the classroom! Imagine creating classroom materials that your students will access with their iPads/phones/computers that are multimedia and differentiated for their individual needs! Join this hands-on workshop as we create QR codes that will talk, sing, play video, provide direction, provide access to visual schedules and manual communication displays and much more. Participants will create QR codes that are color coded or personalized with images. Participants will also have access to a resource-filled website with additional supports and resources. Participants are encouraged to bring their own wireless-capable computer with an Internet browser AND an iOS or Android device with QR code reader app installed.

Paula Walser, M.S., CCC-SLP, is the Director of E-Learning/Assistive Technology, CESA 6, Fond du Lac, WI.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-16 Using Technology as Evidence-Based Practice! Addressing the Learning and Behavioral Needs of Students with Autism Spectrum Disorder

There are a vast amount of interventions, methodologies and treatments for students with ASD, with new options emerging frequently. However, since not all interventions are equal, how does one sort through the plethora of information to determine "the best" treatment approach? This workshop will provide participants with a method to do so, by considering interventions that researchers have proven to be effective by meeting criteria as evidence-based practice. Numerous practical, evidence-based practices that use various modes of technology, as identified by The National Professional Development Center on Autism Spectrum Disorder, will be discussed and reviewed, identifying key features for effective school-based programs. This workshop will assist participants to determine practices that match individual learner's specific needs because not every identified practice is appropriate for every learner. Attendees will participate in reflection and planning activities for immediate and successful implementation of these practices to address the specific learning and behavioral needs of students with ASD. Participants will leave this workshop with a wealth of information

5th ANNUAL

ACCESSING THE

ARTIST WITHIN

ART CONTEST AND ADAPTED ART SHOW

The Anne Carlsen Center of North Dakota is opening a contest for artists using adaptive equipment

SUBMISSIONS ACCEPTED:

- Paintings
- Drawings
- Photography
- Digital Art
- Video
- Film
- Musical Composition

Submissions are currently being accepted by the Anne Carlsen Center and they will be posted as they are received.

Requirements: Age 5 - 21. Each artist must use some type of assistive technology to create his/her work of art.

A minimum of 10 pieces of art will be selected to be shown at

Closing The Gap

Conference: October 9-11, 2013

For more information

www.accessingtheartistwithin.org

1-800-568-5175

and resources related to evidence-based practices that blend low- and high-tech strategies as tech tools for students with ASD. Participants are strongly encouraged to bring a wireless-capable laptop/netbook/SmartPhone/iPad for interactive participation.

Susan L. Stokes, M.A., CCC-SLP, is an Educational Autism Consultant and Trainer in private practice, Fond du Lac, WI.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-17 The iPad Creation Station: Supporting Struggling Students

Polluting your iPad with so many apps that you don't know where to begin? Roll up your sleeves in this hands-on workshop and walk away with powerful ideas that will provide you with an endless supply of iPad materials by using specifically chosen tools and a collection of resources. Instead of using hundreds of apps, we'll share step-by-step instructions on how to create your own iPad activities and tips and tricks for iPads in the classroom. Participants will learn the ins and outs of a variety of apps, including switch accessible materials, addressing content standards and the individualized needs of all students, including students with severe and multiple disabilities. We will work with Clicker Docs, Sentences, Book Creator for iPad, MyOwnBooks2Go, Panther Math, Flash Cards, Voice Dream,

Sounding Board, Panther Connect and some new apps not yet released, as well as online resources and computer tools to create your own learning materials.

Pati King DeBaun, M.S., is a Speech Language Pathologist/Consultant specializing in assistive technology, Creative Communicating, Park City, UT and Dan Herlihy is an Assistive Technology/Technology Resource Specialist, Connective Technology Solutions, Inc., Hoosick, NY.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-18 Five Steps to Successful Implementation of AAC Apps in Classrooms

Implementation doesn't come with a download. Whether your student is using a free AAC app, a simple app, a complex app or an app that costs hundreds of dollars, student and partner strategies probably aren't as easy as the click was to install the app. Well there is no need to get discouraged and think that you have to download another app to get to AAC utopia! Let Kelly and Scott share with you the five steps to success that they've used in real classrooms with real people, working really hard, with real kids. These strategies have been blended over the years from a variety of AAC device implementation approaches and now updated for today's AAC apps. Together they are ready to walk you through the process. Step 1: Have a Plan. Seems simple? This

workshop will begin with an overview of the different classroom-based implementation strategies that are available, giving you a foundation of choice for your variety of students. Step 2: Everybody Onboard. Again, seems simple? This section is about all of the classroom stake-holders who make - and break - the implementation of AAC in the classroom - how to bring them around and to see it as the trainer and AAC implementer do. Step 3: Teaching Communication. Seems simple? Everyone needs to know where the student is headed communicatively, not just the SLP, and that using AAC needs to be taught during real activities in a classroom setting, not just at a table being fed to touch a button. Steps 4 and 5? Join them and find out....

Kelly Fonner, M.S., is an Assistive/Educational Technology Consultant, Lake Geneva, WI and Scott Marfilius, M.S., is an Assistive/Educational Technology Consultant, Milton, WI.

Tuesday, October 8, 2013   8:00 am - 4:30 pm

PC-19 The Art of AT Service Delivery for Birth to Three: Fun, Functional and Family Friendly

From assessment to intervention to coaching caregivers, the art of providing assistive technology services to children, birth to three, and their families requires entering into collaborative arrangements with

families. Extensive videos of young children and their families will demonstrate how to enhance the social, conversational and literacy skills in young children with motor impairments and complex communication needs, autism spectrum disorders and those who are ambulatory and delayed. The close relationship between play and language will be explored, with consideration for augmentative communication strategies and tools chosen. Emphasis will be on coaching family members to provide effective interventions in daily routines and play contexts. Discussion as to how the iPad fits into activities will be shared. Hands-on opportunities with equipment and make-and-take will be included. Participants will receive a CD with resources, multi-page communication books and PowerPoint templates, and make-and-take projects to print later. There is a $10 materials fee in addition to the cost of the workshop.

Karen M. Casey, M.A., CCC-SLP, is an AT Consultant, Durham Children's Developmental Services Agency, Durham, NC.

STATE-OF-THE-ART COMMERCIAL EXHIBITS (Contracted companies to date.)

Tuesday evening through Friday, October 8-11, 2013

ASK QUESTIONS, GET ANSWERS — **Companies exhibiting at Closing The Gap represent an impressive and varied scope of AT products and strategies from around the world, including knowledgeable reps and professionals with substantial experience in the field to best explain and demonstrate their solutions.**

AAC TechConnect, Inc.
www.aacTechConnect.com
A unique company that helps you make the best choice for the best AAC voice by providing workshops, evaluation toolkits, and online clinical tools.

AbleNet, Inc.
www.ablenetinc.com
AbleNet is an industry leader in providing assistive technology and curriculum solutions to help children and adults with disabilities lead productive and fulfilled lives.

Adaptivation, Inc.
www.adaptivation.com
Adaptivation manufactures communication aids, switches and ECUs. Stop by our booth to see all our products and many fun and functional application ideas.

Adaptive Switch Laboratories
www.asl-inc.com
ASL is dedicated to designing and adapting devices that allow individuals with severe disabilities to achieve independent movement, environmental control and computer/communication access.

Alexicom Tech
www.alexicomtech.com
Alexicom AAC and Elements Apps work on iPad, Android, PC/Mac anytime, anywhere. Features include AT&T voices, scanning, text-to-speech, direct camera acquisition, 1500+ premade pages and word prediction.

AMDi
www.amdi.net
AMDi, leading manufacturer of low tech AAC communicators, is now offering durable amplified cases for the iPad and the new iPad mini.

AssistiveWare
www.assistiveware.com
AssistiveWare offers a portfolio of innovative solutions for physical, vision and communication impairments designed for Mac OS X and iOS, including award-winning Proloquo2Go.

Atomic Learning
www.atomiclearning.com
Atomic Integrate offers a cost-effective PD, technology integration and support solution that empowers educators to effectively utilize technology to impact student achievement.

Attainment Company
www.attainmentcompany.com
Attainment Company produces the GoTalk, research-based curricula to meet standards, e-pubs, videos, new software, instructional materials and develops GoTalk NOW and educational iPad apps.

Augmentative Resources, Inc.
www.augresources.com
AAC Communication Books, Choice Boards, Picture Schedules and Interactive Language Books. New - Communication Charm Bracelets, Easy-Push Talking Pockets and Time-a-Task Schedules.

BlueSky Designs
www.mountnmover.com
BlueSky Designs manufactures the Mount'n Mover, an independently movable mounting system. This mount offers flexible, secure positioning of iPads, speech devices, laptops, cameras, eating and reading trays.

Cadan Computers dba Technology for Education
www.tfeinc.com
iPad accessories, Interact AS (Deaf - HOH) software, Flick camera controlled by computer for classroom use, Tecla product allows wheelchair joystick to navigate iPod and iPad.

Cambium Learning Technologies
www.cambiumlearningtechnologies.com
The leading educational software company focused on creating instructional products that serve the needs of at risk and special student populations.

Closing The Gap
www.closingthegap.com
Try, first-hand our online edition with its archived articles, assistive technology product guide, searchable content, and now archived webinars that offer unique learning opportunities and truly represents an educational and training resource on demand!

Cognitopia
www.cognitopia.com
Self-management made simple - for cognitive disabilities: visual scheduling, video modeling and more. Supporting self-determination and independent living through cognitively accessible UDL, iPad compatible.

Creative Communicating
www.creativecommunicating.com
Creative Communicating by Pati King-Debaun specializes in universally accessible materials for children with disabilities. Including books, software, apps and online resources.

Crick Software
www.cricksoft.com
Crick software is dedicated to raising literacy levels. Clicker 6, ClozePro and Writeonline are powerful tools designed to support students of all abilities.

Daedalus
www.daessy.com
DAESSY Mounting Systems "Making Technology More Accessible". The leader in mount systems for AAC devices and computers. Visit Booth #500 to see the latest.

Don Johnston, Inc.
www.donjohnston.com
We've been developing core reading and writing technologies for over 33 years, including school favorites like Co:Writer, Read: Outloud, SOLO, and Start-to-Finish.

Dynavox Mayer-Johnson
www.dynavoxtech.com
DynaVox Mayer-Johnson is the leading provider of communication devices and educational software designed to assist individuals in overcoming their speech, language and learning challenges.

EnableMart
www.enablemart.com
EnableMart is the worldwide leader in Assistive Technology distribution offering more than 3,000 assistive devices with guaranteed best pricing and unbeatable support.

Inclusive TLC / HelpKidzLearn
www.inclusivetlc.com
Internationally recognized in the special education field, providing the best software, wireless access, curriculum-based apps and communication aids, as well as a Web-based resource site.

Infogrip, Inc
www.infogrip.com
Infogrip has creative computer access solutions for people with all types of disabilities. Alternative keyboards and mice, switches, screen readers, magnifiers and educational software.

JABBLA
www.jabbla.com
Jabbla develops AAC devices and software that assist people with communication challenges. Jabbla products are known for their industry leading innovative technology.

Judy Lynn Software
www.judylynn.com
Special needs age-appropriate software for the iPad and Windows. Covers early childhood through transition. Stop by booth 404 for a catalog and demo.

Komodo Open Lab Inc.
www.komodoopenlab.com
Komodo Open Lab develops inclusive technologies that facilitate the daily lives of people with disabilities. Our product, Tecla Shield, provides switch access to smartphones and tablets.

LC Technologies, Inc.
www.eyegaze.com
Eyegaze Edge: Eye-controlled speech, PC/Mac access, Internet, email, IR remote, Facebook, Kindle, children's programs. Use it in any position, requires only one eye. FDA-approved.

Lightspeed Technologies, Inc.
www.lightspeed-tek.com
Your voice. Their mind. A clear connection. Established in 1990, Lightspeed is the trusted provider in classroom audio.

Marblesoft
www.marblesoft.com
For over 30 years, Marblesoft-Simtech has produced outstanding special needs software for infants through adults. Stop by booth #305 and see our new apps!

ModularHose
www.modularhose.com
Loc-Line Modular Hose is a plastic hose system that is flexible but yet self-supporting and repositionable. Great for holding switches and small devices.

N2Y, Inc.
www.n2y.com
Description not available at this time.

Nasco
www.enasco.com
Nasco's Special Education Catalog offers a full line of products and resources for the special education teacher K-12, including software and assistive technology.

Origin Instruments
www.orin.com
Origin Instruments delivers hardware and software solutions for computer access, switch-based access, speech and low vision. The HeadMouse Extreme is the company's flagship product.

Prentke Romich Company
www.prentrom.com
See PRC's new Accent family of devices, LAMP: Words for Life application, new training opportunities and services and updates to our AAC Language Lab.

Proxtalker.com LLC
www.proxtalker.com
Proxtalker manufactures communication and learning aids for non-verbal individuals with autism and low incidence syndromes who require the use of tangible objects for learning and communication.

Read It Once Again
www.readitonceagain.com
Read It Once Again offers 40 preschool curriculums based on children's literature. Curriculums contain goals, objectives, 100 plus activitites and CDs with colored reproducible graphics.

Read Naturally, Inc.
www.readnaturally.com
Read Naturally's innovative, research-proven reading programs provide high quality interventions and differentiated instruction for struggling readers. The programs focus on fluency, phonics, vocabulary and assessment.

REHAdapt
www.rehadapt.com
REHAdapt Engineering is a worldwide leader in manufacturing of specialized mounting systems. Our virtual mounting solution services offer unique customizing to the individual user.

RESNA
www.resna.org
RESNA is the premier professional organization dedicated to promoting the health and well-being of people with disabilities through increasing access to technology solutions.

RJ Cooper and Associates
www.rjcooper.com
iPad Stuff Galore, and also known around the world as someone to speak with concerning unique situations, since 1984, RJ has created needed tech stuff at your request.

Saltillo Corporation
www.saltillo.com
Saltillo Corporation manufactures and distributes portable augmentative communication for individuals who cannot speak. Visit our booth to see our NOVA Chat family and TouchChat application.

SpecialNeedsWare
www.autismate.com
SpecialNeedsWare aims to improve the lives of those with special needs through modern technology. AutisMate provides caretakers with the first integrated communication and behavioral learning platform for individuals with autism.

Switch In Time
www.switchintime.com
Switch In Time offers engaging games and music software for people of all ages and abilities.

TabAccess/Access4Kids, Georgia Institute of Technology
www.facebook.com/tabaccess
With TabAccess/Access4Kids, configure your switch actions to access numerous apps on your tablet! Engage in free robot-programming workshops provided by Georgia Tech engineers!

TalkRocket by MyVoice
www.myvoiceaac.com
MyVoice Inc. is the creator of TalkRocket Go and RocketKeys. AAC apps with innovative features, personal expression and extreme accessibility for speech, motor and vision disabilities.

TAP * it
www.teachsmar.org/tapit
The TAP*it platform, touch accessible platform for interactive technology, revolutionizes accessibility and easily integrates with educational assistive software to foster transformative learning for individuals with special needs.

Texthelp, Inc.
www.texthelp.com
Texthelp provides literacy software including: Read&Write GOLD, reading/writing/research tools that integrate with mainstream applications and Fluency Tutor, online solutions for developing/assessing reading fluency and comprehension.

The Center for AAC and Autism
www.aacandautism.com
Improving language and communication skills of kids with autism through AAC.

Tobii ATI
www.tobiiati.com
TobiiATI is the premier developer of hardware and software solutions for people with physical, cognitive and speech disabilities. Let us help you find your voice!

Virtual Speech Center
www.virtualspeechcenter.com
Virtual Speech Center is a leading provider of speech therapy apps. Our apps incorporate the latest technologies in mobile app development and include high-quality photos.

VizZle by Monarch Teaching Technologies
www.monarchtt.com
Award-winning Web-based autism and special needs software for technology-based, visually supported access to curriculum. Customize peer-reviewed, pre-made lessons or create your own.

Writer Learning
www.writerlearning.com
New from Writer Learning, the Forte has outstanding battery life, a cool new look and a very low price tag. Come by and check out what's new!

Conference - Wednesday, Thursday, Friday, October 9-11, 2013 — Includes Preview of Exhibits – Tuesday, October 8, 5:30 pm - 8:00 pm

Registration Received	On or Before June 30	July 1 - September 5	September 6 - September 26	September 27 - Onsite
Standard Rate **Group Discount - 5 or more** **Group Discount - 8 or more** *All group registrations must be received at the same time.*	**$435** Groups 5+ Deduct $30 Groups 8+ Deduct $50	**$465** Groups 5+ Deduct $30 Groups 8+ Deduct $50	**$505** Groups 5+ Deduct $30 Groups 8+ Deduct $50	**$535** Groups 5+ Deduct $30 Groups 8+ Deduct $50
Parent Rate *(A letter describing your child's disability must accompany registration)*				$275
Full-time Student Rate *(Proof of full-time student status must accompany registration)*				$275
Presenter Rate				$335
Exhibitor Rate				$335

Single Day and Exhibit Hall Only Registration	Price
Thursday Only - October 10	$275
Friday Only - October 11	$125
Exhibit Hall Only - Tuesday evening through Friday, October 8-11	$175

Preconference Workshops - Monday and Tuesday, October 7-8, 2013 (Includes Preview of Exhibits – Tuesday, October 8, 5:30 pm - 8:00 pm)	Price
Monday, October 7 *(Some preconference workshops carry an additional fee for materials)*	$275
Tuesday, October 8 *(Some preconference workshops carry an additional fee for materials)*	$275
BUNDLED PRICING! **Monday and Tuesday Bundle ($75 savings)**	$475

$30 RETURN DISCOUNT

A $30 "return" discount is available to **ANY** past conference registrant and must be used by June 30, 2013. 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.

CONFIRMATION

All who register will receive confirmation.

CONFERENCE DIRECTORY

The official Closing The Gap Conference Directory will be given to registrants at the conference site; many of the conference details will be posted on Closing The Gap's Web site.

CANCELLATION POLICY

Cancellations must be received in writing by Closing The Gap on or before October 1, 2013. There will be a $75 cancellation fee for each one-day preconference workshop, each one-day conference registration, or each exhibit hall only registration; a $125 cancellation fee for each three-day conference registration. Replacements are welcome and must be submitted in writing.

No refunds after October 1, 2013. Unpaid balances are due in full.

SCHOLARSHIPS

A limited number of scholarships are available for persons with disabilities or parents/guardians of children with disabilities. These scholarships cover registration fees for the conference only (Wednesday - Friday), and do not cover preconference workshops, food, lodging or travel. Scholarships are awarded on a first come, first served basis and one time only per person. Persons that have previously received a scholarship from Closing The Gap are not eligible.

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.

CONFERENCE HEADQUARTERS

DoubleTree by Hilton Hotel Bloomington, 7800 Normandale Blvd., Bloomington, Minnesota is the official hotel of the conference. All conference activities are held at this hotel located just 10 minutes west of the Minneapolis-St. Paul International Airport. Limo, taxi and mobility assistance services are available. Hotel-airport shuttles are available for DoubleTree Hotel.

TRAVEL

Minneapolis-St. Paul International Airport (MSP) has one airfield and two terminal buildings. Numerous commercial passenger airlines service the airport.

Conference goers are encouraged to choose the airline that best meets their needs and budget.

For detailed airport information, please visit www.mspairport.com/

For those interested in flying **Delta**, Closing The Gap has arranged for them to offer discounted conference rates. Reservations/ticketing is available via www.delta.com or by calling Delta at 800-328-1111, Monday through Friday, 7:30 am – 7:30 pm Central Daylight Time (US and Canada only), referencing **Meeting Event Code NMF5U**. A Direct Ticketing Charge will apply for booking by phone. When booking online, enter **Meeting Event Code NMF5U** in the box provided on the Book A Trip page.

ACCESSIBLE TRANSPORTATION

To arrange for accessible transportation while visiting the Minneapolis area, have your ADA certifying agency fax your certification information along with the address where you will be staying and dates you plan on being in Minneapolis to 651-602-1660 four weeks prior to your arrival date. Riders must be ADA certified in the state in which they live. For questions regarding certification, call Cheryl Schmidt at 651-602-1673. If you are not ADA certified, call Airport Taxi at 612-331-8294 (special assistance provided if requested).

HOTEL RESERVATIONS

Hotel reservations can be made by contacting the hotel directly. Please refer to the "Closing The Gap Conference" when making your reservations to receive conference room discounts when and where applicable. The hotel has a limited number of handicapped accessible rooms. If you require an accessible room, state your needs when making your reservations and reserve your room early to better insure a room that will best accommodate you.

A deposit of one night's room rate plus tax is required to reserve a guest room for the Closing The Gap Conference.

CONFERENCE SITE HOTEL
DoubleTree by Hilton Hotel Bloomington

7800 Normandale Blvd.
Bloomington, MN 55439
Phone: 952-835-7800; **Fax**: 952-893-8419

$149 - single occupancy   **$169** - triple occupancy
$159 - double occupancy   **$179** - quad occupancy
(South Tower.)
(Plus applicable state and local taxes.)

Complimentary Internet in all guest rooms
Complimentary airport shuttle service

Cancellation policy for the hotel: Guest rooms may be cancelled up to two weeks prior to arrival with no cancellation penalty and your total deposit refunded to you. Any guest room cancelled less than two weeks prior to arrival will be subject to forfeiture of the entire deposit.

2013 CLOSING THE GAP CONFERENCE REGISTRATION FORM

First Name_____ Last Name_____

Mailing Address (home/work - please circle one) _____

City _____ State / Country_____ Zip Code / Postal Code_____

Daytime Phone_____Fax_____Email _____

Employer_____Occupation_____

Is this your first time attending? ❏ Yes ❏ No If no, most recent year attended _____ How did you hear about the conference? _____

*SPECIAL SERVICES ❏ MS DOS text file   ❏ Macintosh text file (Text file will be e-mailed.)   ❏ Sign interpreter

*For persons with disabilities only – must be requested by September 1, 2013.

Conference - Wednesday, Thursday, Friday, October 9-11, 2013 Includes Preview of Exhibits – Tuesday, October 8, 5:30 pm - 8:00 pm				
Registration Received	**On or Before June 30**	**July 1 - September 5**	**September 6 - September 26**	**September 27- Onsite**
❏ **Standard Rate**	**$435**	**$465**	**$505**	**$535**
❏ **Group Discount - 5 or more**	Groups 5+ Deduct $30	Groups 5+ Deduct $30	Groups 5+ Deduct $30	Groups 5+ Deduct $30
❏ **Group Discount - 8 or more** *All group registrations must be received at the same time.*	Groups 8+ Deduct $50	Groups 8+ Deduct $50	Groups 8+ Deduct $50	Groups 8+ Deduct $50
❏ **Parent Rate** *(A letter describing your child's disability must accompany registration)*				**$275**
❏ **Full-time Student Rate** *(Proof of full-time student status must accompany registration)*				**$275**
❏ **Presenter Rate** (Presentation title:			)	**$335**
❏ **Exhibitor Rate** (Company name and booth number:			)	**$335**

$_____

Single-Day and Exhibit Hall Only Registration	**Price**
❏ **Thursday Only - October 10**	**$275**
❏ **Friday Only - October 11**	**$125**
❏ **Exhibit Hall Only - Tuesday evening through Friday, October 8-11**	**$175**

$_____

CONFERENCE SCHOLARSHIP (See page 38 for complete information.)

$ $0.00   ❏ I am applying for a conference scholarship. A letter describing your/your child's disability and telling us why you would like to attend the conference must be included.

Preconference Workshops - Monday and Tuesday, October 7-8, 2013 (Includes Preview of Exhibits – Tuesday, October 8, 5:30 pm - 8:00 pm)	**Price**
❏ **PC-1 Two-day PODD Workshop, Monday and Tuesday, October 7-8**	**$475**
❏ **Monday, October 7** 1st Choice PC-_____ 2nd Choice PC-_____	**$275**
❏ **Tuesday, October 8** 1st Choice PC-_____ 2nd Choice PC-_____	**$275**
❏ **BUNDLED PRICING!** Monday and Tuesday Bundle ($75 savings)	**$475**

$_____

❏ **MATERIAL FEE(S), IF APPLICABLE** (The materials fee equals the cost of the materials provided.)

PC-1 - **$17** materials fee   PC-7 - **$25** materials fee   PC-9 - **$20** materials fee   PC-19 - **$10** materials fee

$_____

ACADEMIC CREDIT (See page 32 for complete information and requirements.)

$_____   ❏ One Semester Credit **$150**   ❏ Two Semester Credits **$300**   ❏ Three Semester Credits **$450**

SUBSCRIPTION - AN ADDITIONAL NON-CONFERENCE OPTION

Archived Webinars now included as part of any online subscription! FREE 2-day trial available at www.closingthegap.com

❏ One-year ONLINE subscription – **$110**   ❏ One-year PRINT subscription – **$39** (In the US)   ❏ Combination subscription

$_____   ❏ One-year ONLINE student subscription – **$50**   **$55** (To Canada)   One-year PRINT and ONLINE subscription – **$125** US and Canada only

$_____ **TOTAL AMOUNT** (Payment or purchase order must accompany registration.)

PAYMENT INFORMATION My check # _____ for $ _____ is enclosed.

Please Charge to my ❏ Visa ❏ MasterCard Card Number _____-_____-_____-_____

Exp Date: _____ Cardholder Address:_____

Please bill my agency or school district PO # _____(Purchase order must accompany registration.)