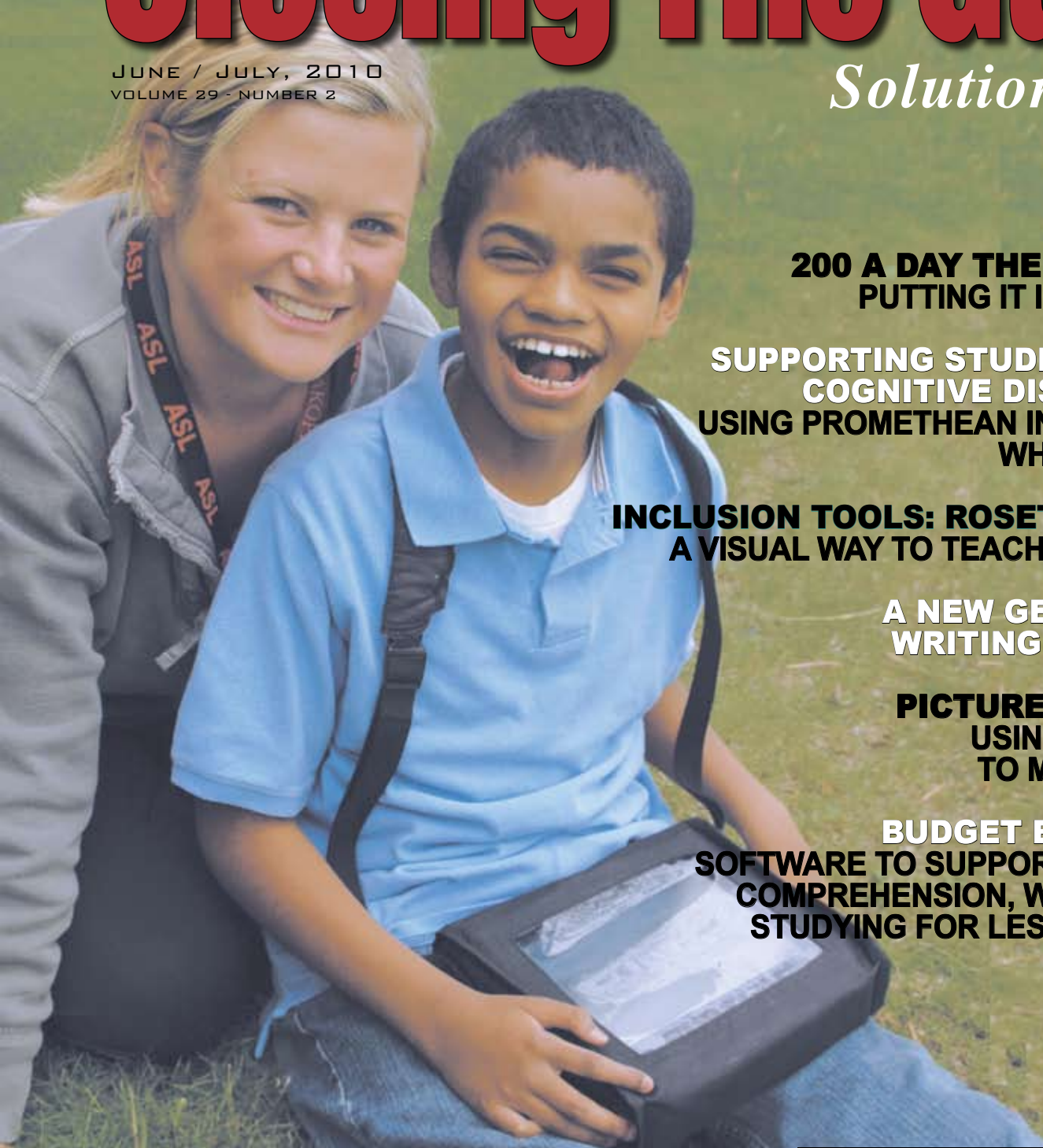


Assistive Technology Resources for Children and Adults with Disabilities

Closing The Gap

JUNE / JULY, 2010
VOLUME 29 - NUMBER 2

Solutions



**200 A DAY THE EASY WAY
PUTTING IT IN PRACTICE**

**SUPPORTING STUDENTS WITH
COGNITIVE DISABILITIES
USING PROMETHEAN INTERACTIVE
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Just because my son Logan can't talk yet...

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CONTACT INFORMATION

Please address all correspondence to Closing The Gap, P.O. Box 68, Henderson, MN 56044. Telephone 507-248-3294; Fax 507-248-3810. E-mail <info@closingthegap.com>; Web site <www.closingthegap.com>.

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Connie Kneip
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200 A Day the Easy Way

Putting it in Practice

By Freda Caufield and Debbie Carrillo

There has been a great deal of attention regarding the need for data driven decision making over the past several years, and rightfully so. As teachers and therapists, we need to show the effectiveness of the tools being implemented and use evidence-based practices when we work with students who are augmented communicators.

Suppose there were few opportunities in which to collect data or allow use of augmentative communication systems. This was one of the driving forces that propelled us down this road.

200 opportunities a day – where does this idea come from? It comes from many years of experience, as well as the plethora of research that has been done over the years by leaders in the field. Linda Burkhart challenged us to provide 200 switch activations a day for students with significant physical disabilities. Goosens, Crain and Elder talked about the importance of engineering the environment and the use of activity-based overlays to increase vocabulary development beyond requesting. Bukelman and Miranda talked about the participation model and AAC users being active participants in classrooms. Other authorities have been Sarah Blackstone, who reminded us of the importance of social networks, as well as Musselwhite and King-Debaun and their work in the area of literacy and use of social scripts. However, probably the biggest influence on our philosophy has come from the work of Janice Light in the area of building communicative competence. Communicative competence is “The ability to communicate functionally in the natural environment and to adequately meet daily communication needs” (Light 1989). From this, our journey began.

OUR JOURNEY

When we first approached our administration with this proposal, we knew we were in for a challenge, not because we

“
**You want us to do
WHAT?**

This was one of the many
initial responses we received
when we challenged our
teachers to help us provide
**200 opportunities a day for
communication.**

”

were asking for something unrealistic – but that we were asking people to change how they looked at communication and how we provide our students opportunities. As speech/language pathologists, we knew the value of having as many opportunities as possible for communication to occur throughout the day. Our task was to help the teachers implement this philosophy in their classrooms.

“You want us to do WHAT?” This was one of the many initial responses we received when we challenged our teacher to help us provide 200 opportunities a day for communication. The classrooms we work in are called Independent Skill Centers or ISCs, located in the Beaverton School District (Oregon). In our classrooms, our students have a variety of disabilities, including autism, mental retardation, orthopedic impairments and other health impairments. They range age from kindergarten to fifth grade.

Why did we choose to take this on? There were many reasons, but the main one was we wanted our students to be competent communicators. We saw our students having missed opportunities throughout the day – at opening, at snack, at recess and at free play. We did not see this as a criticism of teachers or staff, but more an opportunity for us to show them easy ways to promote communication. We saw many of our students requesting and rejecting – a lot – all day long, but did not see a variety of other functions of communication being used or encouraged. We knew that they had potential; we just needed to set the stage. So our goals were:

Teaching our teams why they needed to provide 200 opportunities a day for communication (at a minimum) and how to take data on those opportunities.

To have the teams understand and expect a variety of functions from their students, other than requesting.



Matt tells Teacher Debbie a knock-knock joke. More impressively, he tells his regular education peers a joke every day.

Give them functional, concrete ways to provide those opportunities in activities they were already doing.

Show them how to visually support their students, no matter what form of communication they were using (e.g. pictures, objects, signs, speech generating devices, etc.).

The first thing we needed to do was to define for our team what a communication opportunity was. A communication opportunity is defined (by us) as any situation in which a student could have a chance to partake in any communicative function.

As mentioned, there was a lot of "I want, I want, I want" going on, as well as "no no no!!" There were so many other functions that were not being exploited, for example, asking questions, answering questions, teasing, negotiating and tattling. Table A lists some of the many types of communicative functions. It is not a comprehensive list, but was given to our teachers as a place to start.

A second question our teams asked us was "Why do we need to provide opportunities, don't they just occur?" Our response was to ask the teams and parents if we could video tape to get a baseline and see how we were providing opportunities. We spent about a week video taping interactions. We wanted to give our teams examples of how to provide opportunities across environments. From our videos we discovered both really great examples and areas for improvement. This was not unexpected and, again, we viewed it as an opportunity for team growth. Here is what we discovered:

Teams were trying to figure out how to provide opportunities to a variety of communicators at different levels (e.g. students using speech generating devices while others used picture exchange during an activity).



Example of visual dictionary created for class for words of the day.

Table A - Variety of Communicative Functions

| Function | Example |
|------------------------------------------------------------------|----------------------------------------------------|
| Initiate or Call Attention | "Hey" "Come here" |
| Greet/Close | "Hi" "Good-bye" "What's up?" |
| Accept | "Okay" |
| Reject | "No" "No thank you" |
| Protest | "No way" "Nope" |
| Request objects | "I want that" "Give me the ____" |
| Share and show objects | "Look!" |
| Request information | "What's your name?" |
| Name | "Book" "Doll" |
| Acknowledge | "Okay" "Hi, teacher ____" |
| Answer | "The boy did it" |
| Comment on action/object | "Ball up" "Go in" |
| Express feelings | "Sad" "Mad" |
| Assert independence | "I do it" "Mine" |
| Ask questions | "Where ____" "What one" |
| Share information | "I go beach" "Mommy sick" |
| Relate events | "PE fun" "Music all done" |
| Call attention to how things are related (similar and different) | "2 boxes" "Red bike, red bike" |
| Talk about past and future | "Go store?" "See Santa" |
| Negotiate and bargain | "One more minute" "Two fish crackers" |
| Tease | "You silly" |
| Threaten | "I hit you" |
| Make up stories | "There was a girl who lived in a castle..." |
| Express manners and consideration for others | "I want cookie, please" "Thank you" "You go first" |

Table B - Device "Competencies"

| Tech/Talk and Tech/Speak Competency Checklist | | | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-------------------|-----|-----|-----|-----|-----|
| Device Using: _____ | | | | | | | | | | | |
| Name: _____ | | | | | | Date Range: _____ | | | | | |
| Teacher: _____ | | | | | | School: _____ | | | | | |
| Date | | | | | | | | | | | |
| SKILL: Navigation & Use of tools (Operational) Does the student have the skills needed to operate the device? | +/- | +/- | +/- | +/- | +/- | +/- | +/- | +/- | +/- | +/- | +/- |
| Turn Device on and off | | | | | | | | | | | |
| Put in Overlay | | | | | | | | | | | |
| Turns the speaker volume up or down | | | | | | | | | | | |
| Activate all cells | | | | | | | | | | | |
| Carry device between environments | | | | | | | | | | | |
| Change Overlay | | | | | | | | | | | |
| Overlays used: | | | | | | | | | | | |
| 1. | | | | | | | | | | | |
| 2. | | | | | | | | | | | |
| 3. | | | | | | | | | | | |
| 4. | | | | | | | | | | | |
| 5. | | | | | | | | | | | |
| 6. | | | | | | | | | | | |
| 7. | | | | | | | | | | | |
| 8. | | | | | | | | | | | |
| 9. | | | | | | | | | | | |
| 10. | | | | | | | | | | | |
| 11. | | | | | | | | | | | |
| 12. | | | | | | | | | | | |

As expected, the range of communicative functions was limited (i.e. request, reject).

The communicators were often passive (letting the adults do most of the talking).

Communication partners often ask closed ended questions (do you like this?).

The students we were working with were not demonstrating competence in communication as defined by Janice Light.

WHERE DID WE GO FROM HERE?

After viewing the videos and referring back to our focus on building communicative competence, we realized we needed to instruct our teams on how to make a competent communicator (operation, linguistic, social and strategic competencies). To help teams better understand this in terms of the students who were augmented, we created “competencies” for each device being used in our classrooms. (See Table B).

This not only helped them understand what we were looking for, but gave them a way to keep data on their progress.

We worked with our teams to have them choose activities that allowed for both pre-programmed phrases, as well as generative opportunities (core vocabulary). We asked teams to prioritize these activities, based on frequency of occurrence, how motivating they were for students and using a variety of communication functions.

Based on this information, teams created visual supports for individual students’ needs. For example, during a cooking activity, some students used activity-based overlays for their Techtalk or TechSpeaks, while others used a Big

Mack with a comment, such as “Is it done yet?” or “Yum,” and others used the core vocabulary on their Vantage to generate new and novel messages with teacher support.

BUILDING COMPETENCY

We asked our teams to identify a few students in their classrooms that we would target for building communication competency. We asked them to identify both beginning communicators using low tech speech generative devices, (SGD) as well as more advanced communicators using higher tech SGDs. From there, we began to build each student’s communication competency skills.

Operational competencies are the technical skills needed for students to use their SGD efficiently. For example, Kenneth is a fifth-grade student using a Vantage. When he began, his operational skills included activating icons to generate messages. He is now (several months later) charging it independently and raising and lowering volume, based on environment. The next steps include teaching him how to hook up the device to the computer to print reports.

Linguistic Competencies are how students understand and use language to communicate. Al, who began using his Techspeak with one message, “granola bar,” now has expanded this message to “Teacher Amy, I want a lot”. Kenneth has also expanded his linguistic competence to include requesting staff to program additional vocabulary on his Vantage Lite.

Social Competencies are the pragmatics of language. We have observed this to be one of the hardest areas to teach. This is partly because we spend so much time teaching our students

language and not the social skills needed to be effective communicators. Andy, who is a second-grader using a Techspeak, began by only requesting. He is now commenting, teasing and telling knock-knock jokes using a social script with his general education peers.

Strategic Competency is the ability to take your partner’s perspective, to realize when you are not understood and to repair the breakdown, either using a different mode of communication or by reworking the message. We are still working on this competency with our students.

PUTTING IT INTO PRACTICE

Once we had staff trained, we began to give specific examples and models of opportunities to build competency throughout the day. Here are some examples of what we did.

During opening activities, the following activities were incorporated.

Greetings: We used step-by-steps with a student’s name for a random greeting; had student’s pictures/names on devices for specific greetings; used photos of students and printed names to match and tell who is here and not here.

Calendar: We used an overlay that allowed the student to be the teacher. They could ask their fellow students “what day is it?” “What specials do we have?” etc. In another class, the teacher set up Boardmaker Plus! with the calendar routine; again, there was a group leader that asked the questions.

Word of the Day: Some of our classrooms had the students use either a visual dictionary or a book with PCS symbols to choose a word for the day. Sentences were then generated from the words.

Joke of the Day: Using a social script format, a knock-knock joke was programmed on a step-by-step for a student to tell to his friends. Other devices have also been used for this purpose. This has been particularly important for teaching social competency and the ebb and flow of a conversation.

Song: We have used a choice board for songs (either a choice wheel or device). Once the song is chosen, the students can choose the verse or can use a one message device to say the repetitive line.

Snack and Cooking: We have used snack mats to provide multiple opportunities for not only requesting a snack, but commenting, describing and negotiating (yum, yuck, salty! I want five more big crackers).

Sequencing: Students tell the steps in a recipe, who gets snack, in what order, lunch choices or the menu for Friday lunch and reading the steps of a recipe. They can do this with either low tech or high tech systems.

Teasing and Strategic Competencies: This is where we teach the need for detailed communication. We sabotage students to help



Example of a sentence strip with word of the day.

them problem solve and revise their message e.g. when a student says "put the cake mix in the bowl" we put the whole box in.

Literacy/Reading: With our students, many are at an early literacy level. Use of repetitive line stories and having text with visuals is very important. We have put the repetitive lines on their devices, created overlays for them to comment on the books, ask questions and direct teachers (e.g. turn the page, read that again!).

Play/Leisure: Our take on play and leisure is that it is NOT a free-for-all. It needs to be structured and there needs to be visual supports and modeling for kids to learn how to not only use their language, but how to play.

Turn Taking: My turn, your turn, waiting, sharing and joint focus are all skills that can

be built. Cueing is essential. Or should we say NOT cueing. We use a non-verbal cue hierarchy with a minimum of 10 seconds between cues, that looks like this:

Contextual cues (holding up the bubbles)

Search light/point cue (point to the communication display)

Momentary flashing light/point cue (point to the area of the display)

Constant or flashing light/point cue (point to the targeted symbol)

PHYSICAL ASSIST CUE

Cheating/Conflict Resolution/Negotiating: This is an opportunity to build in higher level skills. Take an extra turn – what do they do? It is important that if you go this route, they

MUST have a way to communicate their frustration, using an overlay, gesture or message.

WHAT'S NEXT?

We have been using this format with our teams for almost a school year. We have witnessed great gains and have also found areas we need to continue to focus on. Because our teams have been so receptive, our plans are to continue to build on the success of this year and increase the students we target with the communicative competency checklists. The greatest success, in our eyes, is how we have influenced teachers' perceptions and understanding of how communication opportunities can be provided.

ABOUT THE AUTHORS

Freda Caufield, AAC Specialist, is with the Beaverton School District, Beaverton, Oregon. She can be contacted at Freda_caufield@beaverton.k12.or.us.

Debbie Carrillo, MS-CCC-SLP, is with the Beaverton School District, Beaverton, Oregon. She can be contacted at Debra_carrillo@beaverton.k12.or.us.

REFERENCES

Beukelman, David and Mirenda, Pat. Augmentative and alternative communication for children and adults (Third Edition). Baltimore, MD: Paul H. Brookes Publishing Co., 2005.

Blackstone, Sarah and Hunt Berg, Mary. Social Networks: A Communication Inventory for Individuals with Complex Communication Needs and their Communication Partners. Monterey, CA: Augmentative Communication Inc., 2003.

Carrillo, Debbie and Caufield, Freda. AAC Competency Checklists. 2009

Goosens, Carol, Crain, Sharon and Elder, Pamela. Engineering the Preschool Environment for Interactive Symbolic Communication (Revised). Birmingham, AL: Southeast Augmentative Communication Conference Publications Clinician Series, 1994.

Light, Janice and Binger, Cathy. Building Communicative Competence with Individuals Who Use Augmentative and Alternative Communication. Baltimore, MD: Paul H. Brookes Publishing Co, 1998.

Musselwhite, Caroline and Burkhart, Linda. Can We Chat? Co-Planned Sequenced Social Scripts. Ramsey and Burkhart, 2001. ■



Example of snack mats used for cooking activity.



A talking pen is used for the students to share the directions with their peers.

Supporting Students with Cognitive Disabilities

Using Promethean Interactive Whiteboards

By Kendra Grant



SOME THOUGHTS BEFORE I BEGIN...

I believe that technology must be used as a catalyst for change. Purchasing technology that reinforces old ways of teaching is wasted money. Especially with the use of interactive whiteboards (IWB), where they look very much like a blackboard, a great deal of thought must be given to how the board will change teaching and, in this case, how the board will support and enhance the learning of students with learning differences. It is important to have a three-plus-year plan to help move beyond the IWB being used as a replacement blackboard (writing/drawing on it, showing movies on it) to a large computer (accessing Web sites, using known software, using some of the IWB's software features) to an integrated digital learning system (using all the features of the IWB to engage and support learners, integrating other software, such as Boardmaker or Kidspiration, using voting devices for summative and formative assessment and building interactive activities using the IWB's software).

USING PROMETHEAN WITH STUDENTS WITH COGNITIVE DISABILITIES

I have used Promethean boards for many years, both as a classroom teacher and as an educational consultant. I now support teachers who work in a variety of school and classroom settings, from regular classrooms, to special education settings, to hospital schools. Promethean supports and engages all learners in each of the different locations. In this article I will narrow my discussion to using a Promethean board for students with cognitive disabilities.

Recently, I was in a high school class for students with developmental delays. The teacher and students were introduced to the use of interactive whiteboards. I put a simple game up on the screen and, with minimal instruction, the students picked up the pen and started the activity. They began to take turns and talk about what they were doing. Seeing how eager the students were to interact with the technology reinforced for me how an interactive whiteboard can add excitement and interest for our students as they learn basic social and life skills.

There are many features of Promethean that I think are uniquely suited to supporting students with special needs. You may use or prefer another board and many of the techniques and features are transferable; however, some of the basic features of Promethean (surface construction, use of a pen), I believe, better support our students with learning differences.

BASIC FEATURES AND CONSTRUCTION

WHITEBOARD SURFACE MATERIAL

The construction of the board is such that it can withstand hits and punctures, just like a kitchen counter top. This is important whether you are in a class with students with behavioural difficulties or students with motor problems where they have difficulty controlling the force of their movements. I remember one young man with cerebral palsy coming up to use the Promethean board and his father telling him to be careful. When he realized that he didn't need to "be careful," the young man was able to interact with the board freely, without worrying that he would damage the board or that he couldn't control what was happening (because his other hand was hitting the surface).

PEN

Promethean offers the choice of single or dual pen boards. A single pen means only one pen will interact with the board at one time. This helps students wait their turn as the pen is passed to the next student. I particularly like the use of a pen, rather than a finger, for this reason. In addition, students can also touch the board as they interact with it. Many students need to rest their hand (or other body parts) on the screen to steady themselves. Because the Promethean doesn't use finger touch, this interaction doesn't interfere with the signal. Also, I like the idea that the students are using a pen at the board as this translates nicely into using a pen for "paper and pencil" tasks. I have also been in classrooms where the pen is rigged to a hat or band so students can interact with the board using head rather than hand movements. Finally, there is also a wand available. This wand is an extension pen that allows students with limited mobility or in a wheel-

chair to interact with more surface space on the board.

For teacher use, the pen is more accurate. You will get pinpoint accuracy that you just can't get with the width of your finger. This is especially helpful when you are using programs like Kidspiration or trying to draw or write on the board. The pen also allows you to "right mouse click," opening up a variety of menus as you work within various software programs.

DUAL PENS

The dual pens allow students to simultaneously work together as they solve puzzles, complete an activity or answer a question. It could be as simple as "With your partner, count to 10" (see image 1 - Count to Ten) or more complex, such as finishing a moving puzzle, where it requires two people to manipulate the pieces. (See image 2 - Dual Pens Puzzle). The dual pen can also be shared between the teacher and the student as they work together on a problem, allowing the teacher to support the student as needed without taking the pen from their hand.

PROMETHEAN SOFTWARE - ACTIVINSPIRE

Promethean comes with its own software, ActivInspire. This software has two different "looks" - ActivPrimary (K-5) and ActivStudio (6-adult). Both software are interchangeable, meaning you can work back and forth between them seamlessly. What I particularly like about ActivPrimary is it has all the same functions as ActivStudio set in a simpler interface. This makes the program more intuitive to use yet doesn't make it feel "primary" so older students enjoy using it. (See Image 3 - ActivPrimary). ActivInspire also has a customizable profile setting that allows you to reduce the number of options available to the student, making their interaction with the program even simpler.

In this next section I will discuss some of the ways you can use the features of ActivInspire to address your student's learning needs.

Built-in activities – Promethean comes with many built-in games and activities related to curriculum and to help build basic skills (See Image 4 - Spot the Difference). This is an excellent place to start when you are unfamiliar with the board's features and want to jump in and get started. In addition, you can sign up for Promethean's teacher site at

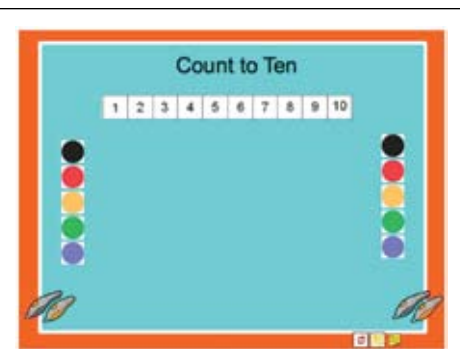


Image 1 - Use dual pens to count to ten.



Image 2 - Dual Pens Puzzle.



Image 3 - ActivePrimary



Image 4 - Spot the difference.

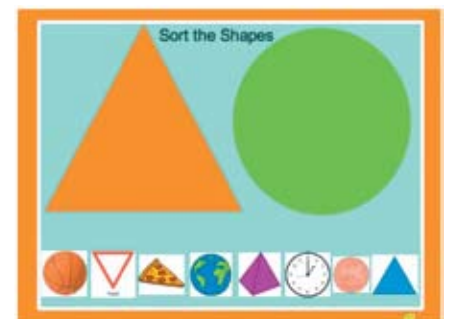


Image 5 - Sort the Shapes.

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<http://www.prometheanplanet.com/>. Here you will find thousands of flipcharts made by other teachers, free to download and use.

Create your own interactive activities – Promethean allows you to create your own activities with built-in sounds (as re-enforcers) or commands (for self correction). In the example shown (See Image 5 - Sort the Shapes), the large shapes will only “grab” the same shape and return the other shape back to its starting point. Students can make mistakes and practice an activity until they master it. The first time you create an activity like this, it takes a few minutes, but it soon becomes fast and simple to make interactive activities that fit your students’ needs.

Promethean’s built-in voice recorder allows you to use sound files in numerous ways. Students could listen to the built-in sound files and identify them or match them to pictures. You could also record text or stories for the students to access, as in the sequencing example shown (See Image 6 - Sequence). In this example, after students complete a simple activity, such as making a sandwich, the teacher records the sentences so that the student can listen to each and put them in the correct order.

Another interactive activity involves hiding images under another larger image. In this example, the lunch bag sits on the top “layer” of the screen and the food images are in the middle “layer” and thus hidden. (See Image 7 - Healthy Lunch). As the students drag out images they talk about whether the food is

healthy or not and trash the unhealthy ones. This activity works with any sorting and identifying activity such as coins, signs, facial expressions, etc.

Resources, images and tools – Using Promethean’s pen, shape, fill tool and record features (See Image 8 - Snowman), students can draw, learn more about basic shapes and record short sentences, such as the shapes they used or the sequence they took. Once you have created a flipchart, such as this snowman activity, a simple right mouse click will give you the option to copy the page. This will provide you with as many copies of the page as you require, allowing students to work on and save the same activity to be shared with the class at a later time.

Another way to use the many tools in Promethean is to create calendars or schedules. (See Image 9 - Schedule) Students can interact with the schedule, discussing and organizing their day or week. The same activity can also be used with the whole class to review the daily schedule, either at the beginning of the day or at the end to highlight positive and negative experiences. Pictures for these schedules can come from Promethean’s large database, the Internet or digital pictures.

ActiVotes – Interactive voters can be purchased with Promethean. The voters allow students to actively participate in all activities. There are two different types of voters, ActiVotes and ActiExpressions. With students with cognitive delays, I prefer ActiVote. The

basic (A-F buttons) interface means students can respond to simple two-choice questions (See Image 10 - Same and Different) without being overwhelmed by the choices. The ActiVote could be used to identify shapes in math, help make a decision in the class or support social skills activities (See Image 11 - What Happened?). All of the voting information is stored in a graph form, allowing you to keep detailed records of each student’s progress and understanding of a topic or skill. While in small group settings, (such as a



Image 8 - Snowman

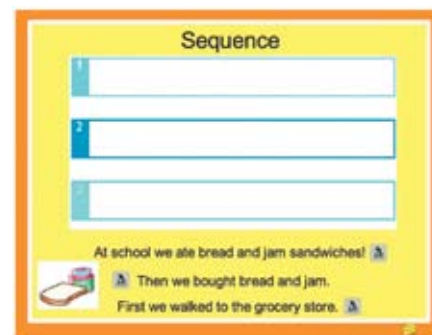


Image 6 - Sequence



Image 7 - Healthy Lunch

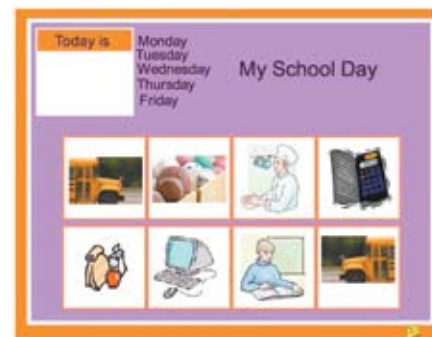


Image 9 - Schedule

special education class) you might not need the voters, as students can vote with a show of hands; however, voters are an excellent way to engage students and collect data if you have access to them.

COMPLEMENTARY SOFTWARE

Because Promethean (and all IWBs) are really just big computer screens, any software can be used with them. Some software and Internet sites particularly lend themselves to the interactive interface of a board. The following are just some of the ways you can use your board with software and resources you already own or have access to.

SCREEN READING TECHNOLOGY

There are many screen readers on the market. Programs like Kurzweil 3000 and WYNN work very well on a large interactive screen. By bringing the software up on the screen you can use the tools from both Promethean and/or the assistive technology

to read stories, highlight text, introduce simple reading strategies and capture pictures to retell the story. One new software program that I particularly like is called Blio (www.blio.com). It is a free technology developed by Ray Kurzweil (Inventor - Kurzweil 3000). In the sample shown (See Image 12 - Blio eReader), Blio is in its "book version," where the pages turn, just like a regular book, at the same time the text is highlighted and read out loud, providing a much more engaging reading session. The program allows for full color, interactive links, highlighting tools and embedded video to help bring books and text books to life.

READING A-Z WWW.READINGA-Z.COM

This site, with its downloadable leveled readers, a favorite of mine for many years, has just introduced "Projectable Books." Each book comes with built-in features, such as pen and highlighter (See Image 13 - Big), allowing

students to read and interact with books at their reading level. In addition, you can use Promethean tools, like the spotlight or camera tool, to focus on certain aspects of the story or capture images to let the students retell the story in pictures.

KIDSPIRATION WWW.INSPIRATION.COM

Kidspiration (and Inspiration) are my favorite tools! Kidspiration lends itself perfectly to the interactive board and allows students to create and interact visually with information. The easily accessible images make dragging pictures into the SuperGrouper shape quick and easy as students can make predictions and then test them out (See Image 14 - Sink or Float). Using pictures and SuperGroupers, students can also develop beginning writing skills. They can drag pictures on to the screen to orally retell an event from their life or a story (See Image 15 - Recount).

CO-WRITER WWW.DONJOHNSTON.COM

By integrating word prediction software, like Co: Writer 6, with Kidspiration (See Image 16 - Co: Writer support), students can write simple sentences about each part of their recount. Using a wireless keyboard and Co: Writer 6's sentence format, students can have

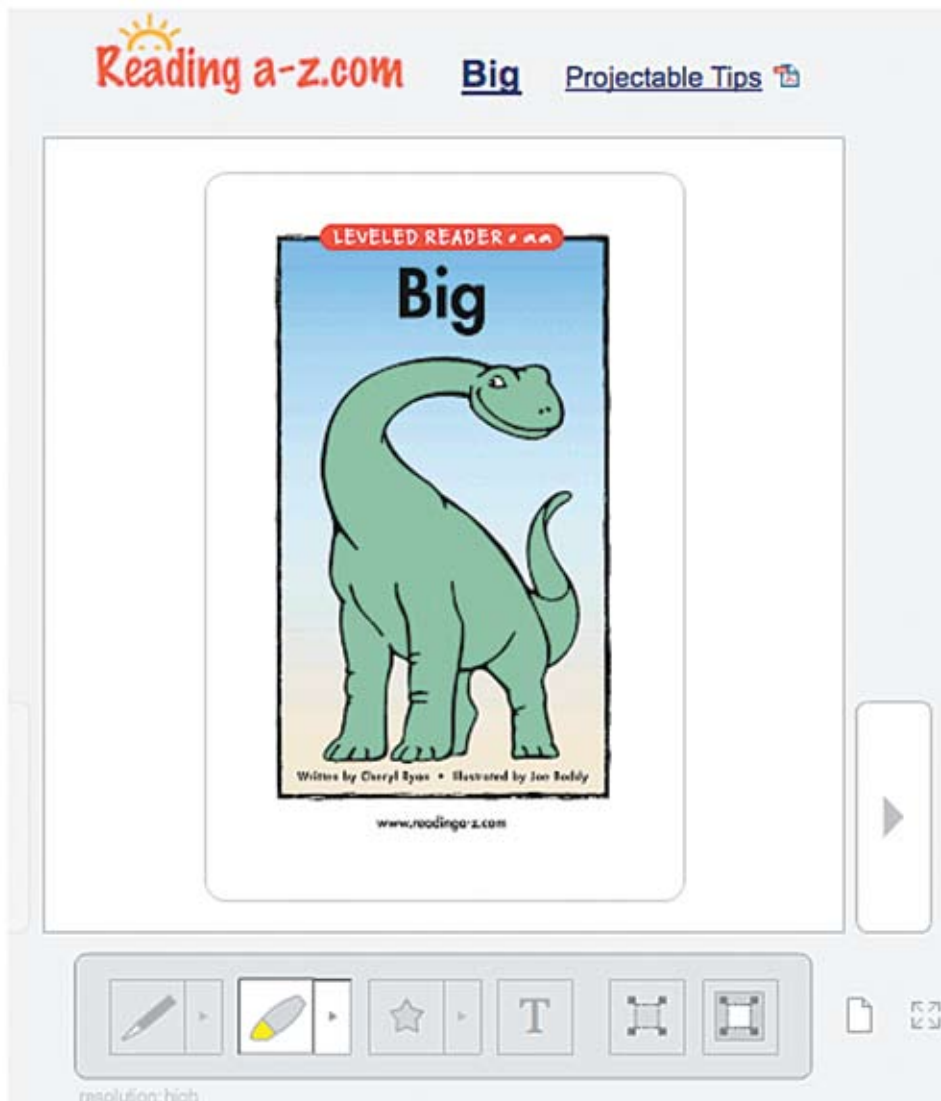


Image 13 - Big

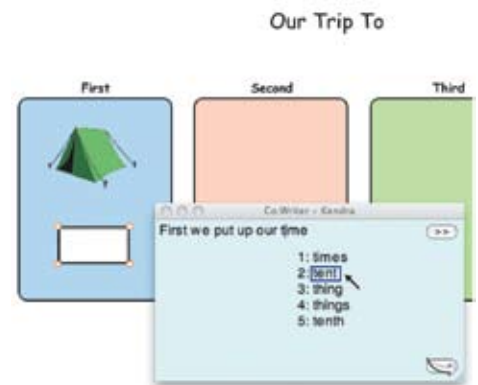


Image 16 - CoWriter Support

words predicted for them (from a topic library) and then read back to them before they add the sentence to the Kidspiration diagram. This lends itself to a group activity where each student helps complete the recount.

BOARDMAKER WWW.MAYER-JOHNSON.COM

Promethean also works extremely well with programs like Writing with Symbols or Boardmaker (See Image 17 - Boardmaker). Any activity you have already created in these programs can be viewed and manipulated on the board. Students can take part in group

activities, use gross motor skills and develop language and writing skills all in an interactive environment.

CONCLUSION

This article has just touched the surface of what you can do with an interactive whiteboard. For students with cognitive disabilities, Promethean is uniquely suited to support their needs with its durable surface, pen interface and intuitive software. Bringing an IWB into your classroom requires time and commitment to make it a truly effective learning tool, but with all the options available to make learning engaging, interactive and meaningful, it is worth your investment in time and learning.

PRODUCT INFORMATION

Visit the Promethean Web site at www.prometheanworld.com/server.php?show=nav.19269 to build your own virtual classroom, see how the board works, get pricing and find a dealer.

ABOUT THE AUTHOR

I was a classroom teacher for 22 years in Ontario, Canada. My areas of specialty are Special Education and Teacher-Librarian. I taught or supported classrooms from K-12 and worked at the district level in Special Education and Assistive Technology. In 2004, as a Teacher-Librarian, I worked with staff to design a Universal Design for Learning environment. All students had access to technology to support their access to,



Image 10 - Same and Different



Image 11 - What Happened?



Image 12 - Blio eReader

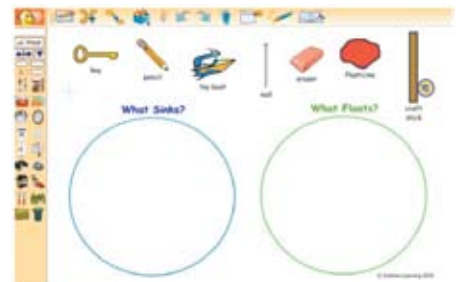


Image 14 - Sink or Float



Image 15 - Recount



Image 17 - Boardmaker

processing of, creating with and sharing of information and learning. In this setting, I also had access to a Promethean Whiteboard and saw the potential it had to enhance and support learning for a variety of learners.

In 2006, I began working with schools and districts to help them implement both small- and large-scale change in the use of technology and assistive technology. Today, I am co-owner of Sublime Learning. We support districts, schools and teachers by providing professional learning that supports:

- The effective use of Kidspiration and Inspiration – going beyond graphic organizers to truly capture the power of Inspiration for 21st century learners.
- The integrated use of various instructional and assistive technologies to support all learners (often within an IWB setting).
- The design and implementation of UDL principles to effectively support, enhance and accelerate learning with the use of technology.

If you have any questions please contact me at kendra@sublimelearning.com or at Kendra Grant, 19 Callisto Court, Mississauga, ON Canada L5M 0A1. ■

Inclusion Tools: Rosetta Stone

A Visual Way to Teach Language

By Pam Corley and Merry Fore



In too many classrooms, there is no expectation that learners with special needs will be able to learn and develop functional reading and writing skills. This is especially true for children with complex communication needs (CCN). Teachers in public schools, trying to teach children with disabilities, who require assistive technologies, to read and write in an inclusive setting may find the task overwhelming.

One of the biggest problems for teachers and therapists working with these students is the lack of ready-made instructional and assessment materials that can be used by learners with a range of physical and cognitive disabilities. Let's face it, adapting materials so that learners with CCN can be actively involved is a tremendous amount of work. Even with the best intentions, there is just not enough

time in the day for teachers to keep up with the general education curriculum and adapt the materials for students with more significant disabilities, like those who cannot use pen and paper or who cannot speak.

While teachers of general education students have pre-made activities (such as exercises, worksheets or other assessment materials) that can easily be downloaded or photocopied for their students to use, teachers of children with disabilities often have to make their own, which is prohibitively time-consuming. Teachers of general education students can find out how learners are progressing by asking questions and receiving oral responses. Teachers of children with CCN cannot rely on oral responses, since a great number of these students cannot speak. In many cases, teachers of individuals with significant disabilities don't even follow a specific reading or writing curriculum. This scenario provides inconsistent outcomes for learners who are most at risk for learning failure.

So, do we just give up on teaching literacy skills for these learners? Of course not! We have to get creative and figure out how we can use ready-made programs and resources in innovative new ways.

This is the first in a two-part series, written to share ideas that work in the inclusive classroom and spark your creativity to think differently about resources you may already have available or can easily acquire. This article will focus on the use of the language learning software Rosetta Stone, not to learn a foreign language, but to teach

and assess language in students with CCN.

These learners often have gaps in their language and literacy development, but it is very difficult to find the gaps or "splinter skills." Many times teachers end up teaching the same things over and over again because they don't know when to move on to the next level due to lack of proper assessment materials. A ready-made systematic language instruction program can help us find the gaps and provide a way for learners who cannot be assessed in traditional ways to demonstrate their literacy skills.

We are not affiliated in any way with Rosetta Stone; we just ordered a demo, wondering if, perhaps, the program could be used in a different way than the designers originally intended, desperate for a tool that we didn't have to design and create ourselves. Once we started using the demo and then the full program, we realized its potential. The more we have used it, the more impressed we have been. Here are some unique features that we feel make Rosetta Stone a great fit as a language-teaching tool for learners with disabilities, such as autism and cerebral palsy.

FIRST, IT IS ENGAGING, ALWAYS A PLUS!

It is an interactive, multimedia computer program that incorporates words, sounds and imagery. Instead of the clip-art we see so often in programs designed for students with disabilities, Rosetta Stone matches spoken words and text with photographic images from real life. The program teaches language by the association of words and meaning derived from images. It presents a series

of vivid photos, and a word or sentence describing the photo is spoken while the text is displayed on the screen. The learner then selects which picture goes with that word or sentence. The learner advances using language they've learned and clues from new images. Learners constantly interact with the program to confirm their intuition and check what they have learned. If they're right, they proceed. If not, they get another chance. It starts simply and builds systematically to the more complex.

The clear, colorful photographs are engaging for all kids, but can be especially appropriate for kids on the autism spectrum who are often visual learners. Dr. Temple Grandin, a prominent author and speaker with autism, wrote: "I think in pictures. Words are like a second language to me. I translate both spoken and written words into full-color movies, complete with sound, which run like a VCR tape in my head. When somebody speaks to me, his words are instantly translated into pictures."

SECOND, IT IS ACCESSIBLE, ANOTHER BIG ISSUE FOR THIS POPULATION

It is ideal for students who do not have the motor skills to do traditional worksheets and grammatical exercises with pen and paper. Also, the layout of the program lends itself for use by learners who do not have the motor skills to use a computer mouse and need a touch screen.

CORE COMPONENTS OF THE PROGRAM

LISTENING: This is a critical skill, but especially difficult for non-speaking students (e.g. the difference between the sounds "king" and "ning" as in "cooking" and "running.") Some of the activity screens in Rosetta Stone are designed to

specifically focus on listening skills. They do not have text. The words are spoken and the learner chooses the picture that best matches the phrase heard.

WRITING: The writing portion can be accomplished by typing a word or sentence using a traditional keyboard or by using the mouse to click the on-screen keyboard. Writing words this way is much easier for learners who struggle with handwriting since they can concentrate on the function of the letters and words and don't have the extra work of trying to write the letters. Users who do not have the motor skills to use a traditional keyboard or a mouse can use their AAC device as input instead. Many dynamic screen devices (such as those manufactured by DynaVox Technologies and Prentke Romich Company) can be connected for either cabled or wireless access via the USB port. Using the device for writing gives AAC device users great practice learning the vocabulary in their devices, as well.

READING: The vivid photos and realistic situation portrayals make reading more interesting. Visual supports can be helpful for students learning to read and write, especially students on the autism spectrum. Some screens in Rosetta Stone are designed to reinforce reading skills. The written word or phrase appears, but is not spoken, and the learner must discern which photo best matches the phrase. Some screens use text as a prompt at the top of the screen to be matched with pictures or text boxes below. For example, one screen might have a prompt, "The dog is swimming." There are four pictures, one of a dog swimming in the water, a close-up of the face of a dog, a close-up photo of a horse and one of a horse running. Just knowing the word "dog" isn't enough because there are two pictures of dogs,



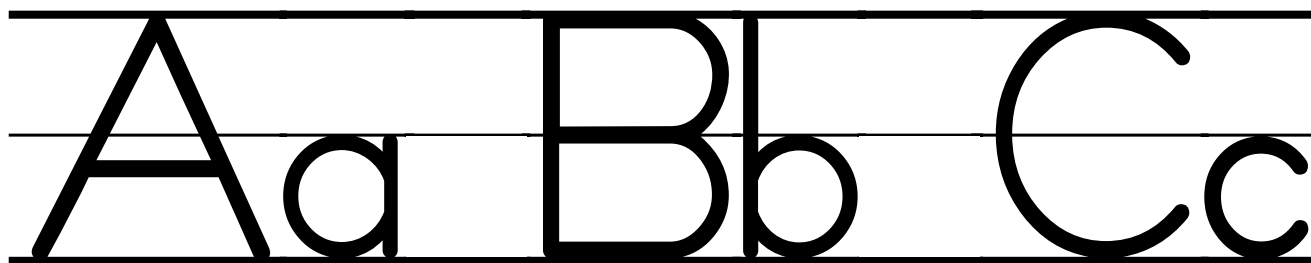
"Reading Practice in Rosetta Stone Level 1"



"Grammar Practice in Rosetta Stone Level 1"

so the user must also know the word "swimming" to respond correctly.

SPEAKING: Wait a minute, isn't that the problem with students with CCN? Why do we say "speaking?" Because this program's sophisticated speech recognition makes it possible for both speaking and non-speaking students to practice "speaking." How does that work, you may wonder? Well, when doing the microphone setup, the user is asked to say ("1, 2, 3, 4, 5") in a normal speaking voice so that the program can recognize the voice. For students who use an augmentative communication device, put the



microphone headset near the speaker on the device and have the device “speak” the numbers. You even have the option to specify whether it is a male or female adult voice or a child’s voice and to specify the speech precision level (i.e. difficult, normal or easy). Sometimes you have to play around with these settings to achieve the optimum level for AAC device users. Once the microphone setup has been done, the AAC device user would then use the device to produce words and phrases in the Speech Practice portion of the program. To make the “speech” of the AAC device easier for the program to distinguish, we have a couple of suggestions. 1) a high-quality microphone is needed, like the USB microphone headset that is included when you purchase the Rosetta Stone program. 2) minimize background noise.

VOCABULARY: Many times teachers only use single meaning symbols to teach simple language concepts to special needs students. In Rosetta Stone, vocabulary words are visually presented in authentic contexts and real life situations. For example, in teaching the word “ladder,” a photo of men in work clothes carrying a ladder appears and the sentence “The men have a ladder” is presented. Then, a photo is shown of a man reaching for light fixtures on the ceiling to change the bulbs, but clearly cannot reach them. This sentence is presented as a prompt: “The man needs a ladder.” Also most helpful for students with autism is the fact that when a photo is presented to teach a specific word, several different photos of the same item are shown. For example, when teaching the word “boy,” photos of many different boys are presented, and when teaching the word “egg,” the program shows a photo of a raw egg in the shell, as well as cooked eggs on a plate.

GRAMMAR: Rosetta Stone teaches grammar concepts, such as subject-verb agreement in naturally-occurring contexts. For example, a photo of a girl with dirty hands in front of a sink is shown with the prompt “She _____ soap.” The choices presented are need/needs. Or a photo of a couple in a market buying vegetables is shown with the prompt “_____ buying vegetables.” The choices presented are they/they’re/their.

PRONUNCIATION: This feature of the program helps kids with natural

speech “breakdown” words. We have not found a way for this to work for AAC device users.

How do these core components fit in with literacy research? “Reading, writing, speaking and listening abilities develop concurrently and interrelatedly, rather than sequentially.” (Koppenhaver et al., 1991; Teale & Sulzby, 1986).

PROVIDES CORE VOCABULARY PRACTICE FOR AAC DEVICE USERS

As a side benefit, Rosetta Stone is also a great tool to help students who use AAC devices learn and practice the use of core vocabulary. The term “core vocabulary” refers to those top 100 words that account for about 50 percent of the words we use every day. We have found that the language taught by Rosetta Stone almost perfectly coincides with core vocabulary, and that was an exciting extra discovery. AAC device users need lots of practice using these core words and learning the motor plan for accessing them on their device if they are to be effective communicators. Since Rosetta Stone was designed as a language-learning software, and anyone trying to master a foreign language must use the new words they are learning over and over again, it provides that practice.

“What a fabulous idea to use Rosetta Stone software to help students with severe communication disabilities enhance their language and literacy skills. Rosetta Stone can easily be incorporated into curriculum by educators and SLP’s.” Nancy L. Inman, M.A.T., CCC-SLP

The school version of the program offers teacher and administrative tools to view students’ progression through lessons, note potential areas of additional focus, and access easy-to-read reports and graphs. A curriculum editor lets teachers customize courses for individual or classroom development needs. Rosetta Stone Homeschool offers several course options and a full-year lesson plan, complete with lessons, worksheets, quizzes, tests and answer keys, and is easy for parents to use. A mother who is using Rosetta Stone to help her non-verbal son with autism and auditory processing deficits learn language concepts reports the following about her experience:

“Using Rosetta Stone, I have been able to quickly determine my son’s areas

of weakness and provide him with direct instruction and activities in those areas. I can print out the words targeted in each lesson and pre-teach them in preparation for a lesson, or use them to generalize. He is successfully advancing and increasing his auditory comprehension skills, word recognition skills and reading skills. For example, at first he had difficulty discriminating between the words “woman” and “women,” but the lessons and practice in Rosetta Stone helped him to master those words. Also, I appreciate the value of the realistic photos in Rosetta Stone. I have realized that, although my son could match a written word to a picture symbol on a worksheet, he was not generalizing this knowledge to his real life experiences. Completing the Rosetta Stone lessons that are rich with actual photo representations of language and concepts has helped my son to improve his understanding of words in his daily life.”

This is just one example of how we can utilize resources and programs in novel ways to give students with disabilities the extra help they sometimes need to be successful. Our next article in this series will discuss ideas for combining readily-available resources and programs to quickly and easily create literacy lessons for your students.

AUTHOR INFORMATION

Pam Corley is a technical trainer/facilitator who is also the parent of a child with complex communication needs. She can be contacted by e-mail at <pamcorley@stx.rr.com> or by phone at 361-288-5733.

Merry Fore is a teacher with 18 years of special education teaching experience who maximizes the use of assistive technology in her teaching strategies to ensure access to the general education curriculum for all students. She is a former teacher of students with significant disabilities, including many who used augmentative and alternative communication. She can be contacted by e-mail at <merrycuatro@yahoo.com>. ■

A New Generation Writing Solution

For People with Learning Difficulties – Ginger Software offers a contextual grammar and spell checker, as well as statistical data to track students' progress.

By Miki Feldman-Simon and Edina Fitzpatrick

BACKGROUND

According to the National Institutes of Health, as many as 37.5 million people in the United States have learning disabilities (LD). Approximately 30 million of these individuals have associated reading (dyslexia) and spelling disorders. Within the US public school system, almost three million children (ages 6 through 21) have some form of LD and receive special education services. In fact, more than half of all children who receive special education have a learning disability.

Spelling requires matching the sounds of language to the appropriate letters. This is necessary to accurately communicate and convey messages in written language (Wanzek, et. al, 2006). Unfortunately, students with LD often struggle with mastering the phonological structure of language needed to map the sounds of language to print, making spelling quite challenging (Good, Simmons, & Smith, 1998). In fact, spelling is one of the most common difficulties for students with LD (Bos & Vaughn, 2006). Spelling difficulties can remain a persistent problem for individuals with LD (Raskind, Goldberg, Higgins & Herman, 1999; Spear-Swerling, 2005), even with remedial interventions.

A widespread strategy for helping these individuals compensate for their spelling problems is the use of electronic and computer-based spell checkers (Raskind, 2003). However, although spell checkers may be helpful to some individuals with

“
The students learned
how to use Ginger
very quickly; they
saw Ginger as fun.
They thought it was
cool and easy to use.
Ginger supported
their independence
in writing.
”

LD (Lewis, Ashton, Haapa, Kieley, & Fielden, 2000; MacArthur, Graham, Haynes, & La Paz, 1996; McNaughton, Hughes & Clark, 1993), they have serious limitations. Frequently, spell checkers are unable to recognize the misspellings of persons with LD and often offer wrong/inaccurate suggestions for the correct spelling of a desired word. In many instances, the spelling of persons with LD is “too far off” or unconventional for spell checkers to recognize. In fact, MacArthur, et al. (1996) indicated that spell checkers only suggest the correct spelling for 58 percent of

identified errors, and as little as 37 percent for all spelling errors. In other words, 63 percent of the spelling errors made by persons with LD may not be detected by spell checkers.

Furthermore, spell checkers often fail to identify a correctly spelled word that is not the desired word of the writer (“misused words”), including homonyms. For example, a spell checker would not pick up the underlined errors in the following sentence:

The boeys cold not go their becuz the care was barokn.

In light of research which indicates that 30 to 40 percent of the spelling errors made by these individuals are “other real words,” this is a substantial limitation of spell checkers for persons with LD (Dalton, Winbury & Morocco, 1990). It is also important to note that research has indicated that even when the correct word is suggested, students with LD may have difficulty finding the correct word in the suggestion list (MacArthur, et al. 1996; Montgomery, Karlan, & Couthino, 2001) and that a word’s position in the selection list –higher in the list being best—may affect the user’s ability to recognize/select the correct word (Garfinkel, Fernandez, & Gopal, 2003; Peterson-Karlan & Parette, 2007).

As Raskind (2003) notes, “Even when the correct word appears in the correction list, it may be difficult for persons with LD to recognize the correct word” (keeping in mind that that many of these individuals have reading disabilities). In such cases, text-to-speech may help the user decode the words in the list by hearing them aloud. The use of text-to-speech as a means to help persons with LD decode text is supported by

several studies (e.g., (Elkind, Black, & Murray, 1996; Elkind, Cohen, & Murray, 1993; Higgins & Raskind, 1997; Leong, 1995; Olofsson & Lundberg, 1993).

Individuals with LD have also been historically described as having grammatical difficulties in writing (Myklebust, 1965; Johnson & Myklebust, 1967). Research on both adults and children with LD has confirmed such difficulties (e.g., Hughes & Smith, 1990; Newcomer, Nodine, & Barenbaum, 1988). To date, there have not been any text correction tools that are able to successfully identify and correct spelling and grammatical errors and to help people with LD compensate for these difficulties.

GINGER SOFTWARE - THE NEXT GENERATION OF TEXT CORRECTION

With all the technological advances in computerized assistive technology (AT), Ginger Software recognized that there is no solution provided for people with LD and people whose English is not their first language that enables them- to independently produce error-free texts. Identifying that spelling is one of the most common difficulties for this group of people and that the spelling difficulty can persist even with remedial intervention for people with LD, Ginger Software took a creative and innovative approach to correcting text. The Ginger Software team created a tool that examines the context of the whole sentence and thus is able to identify and automatically correct unusual spelling mistakes, misused words and grammatical errors.

Ginger's philosophy is to enable writers to write fluently with no interruptions. Mistakes are not marked in the original document as users are writing, like in Microsoft Word, and there are no pop-up windows, like in word prediction tools. These interruptions often interfere with writing fluency and are especially disruptive to people with LD who may have difficulty, not just with writing, but also with converting their ideas into text. Ginger corrects whole sentences containing multiple errors with one click, providing a very efficient way to work. "Ginger Software provides a life-changing experience for children and adults with learning difficulties," says Yael Karov, founder and CEO of Ginger Software. "With Ginger Software, people with learning differences are able, for the first time, to independently produce error-free texts of unprecedented accuracy for school, business and personal use."

By looking at the context of the sentence, Ginger is able to decipher unusual spelling mistakes, like those that people with dyslexia make. Unlike the statistics mentioned above, (63 percent of the spelling errors made by

persons with LD may not be recognized by spell checkers), Ginger is able to correct 95 percent of the errors people with dyslexia make, with only 5 percent of the errors not recognized.

In the following example:

The djadje ruled agensht him.

Ginger automatically corrects the whole sentence in one click:

The judge ruled against him.

Any other spell checker does not offer the correct alternatives for the errors. Microsoft Word, for example, offers for 'djadje': jade or diadem. For 'agensht': agents, agent, agents', ageist. The writer would most likely end up with a sentence: 'The jade ruled agents him,' which makes little sense and does not reflect the writer's intent.

As we know, people with LD find it difficult to choose from a list of alternatives – Ginger does it automatically for them. Ginger chooses the correct alternative for the user. When a writer clicks 'F2' to correct their text using Ginger, the Ginger toolbar expands and the writer is presented with the original sentence and the corrected sentence. Errors are highlighted in the original sentence and corrections are highlighted in the suggested sentence. The toolbar display attributes, such as background color and font style, can be customized to complement users' abilities and preferences. When the writer clicks 'Approve,' the corrected sentence replaces the original sentence within the document. For any corrected word, Ginger offers alternatives that are accompanied with sample expressions containing the word, enabling writers to understand what the word means, see and hear how it is used in context and learn how the word sounds. Writers are able

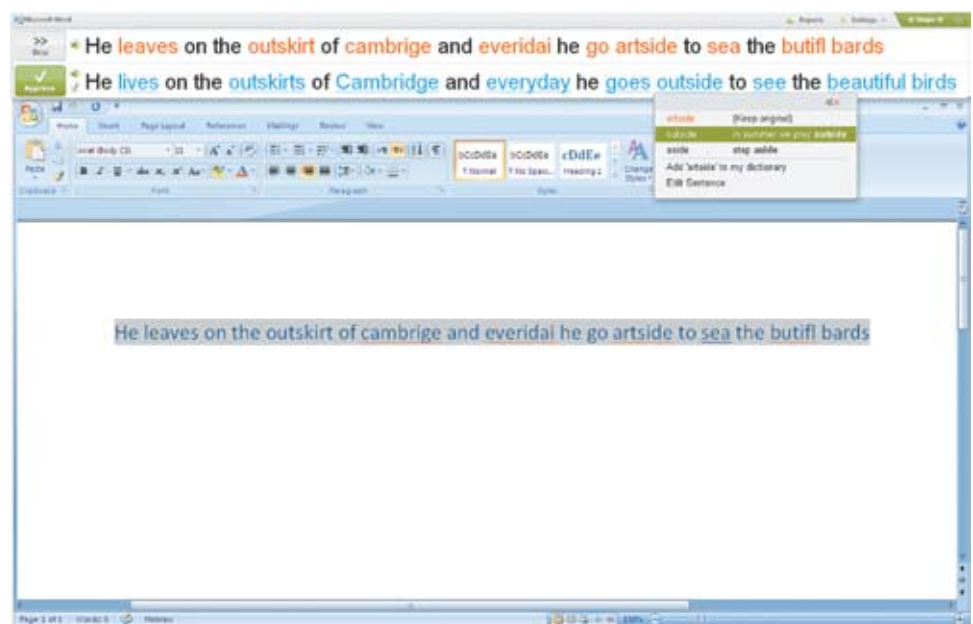
to differentiate between the alternatives and make informed choices, not just guess or pick the highest alternative on the list.

Ginger also corrects misused words, not just homonyms. In the example mentioned above:

"The boeys cold not go their becuz the care was barokn." Ginger corrects the whole sentence with one click: "The boys could not go there because the car was broken."

In the following example, "He leaves on the outskirts of cambrige and everidai he go artside to sea the butifl bards," Ginger corrects the homonyms 'leaves' to 'lives,' 'sea' to 'see' and 'bards' to 'birds,' even though they sound nothing alike. Ginger also corrects 'outskirt' to 'outskirts,' the grammatically correct option in this context, as well as 'go' to 'goes' and all the other spelling mistakes, including the unusual spelling of 'artside' for 'outside' and 'butifl' for beautiful. Thus, with a click of one button (F2), you receive a correction for the whole sentence with an accuracy that is unmatched by any other text correction tool: He lives on the outskirts of Cambridge and everyday he goes outside to see the beautiful birds.

The Norman Howard School in Rochester NY has been using Ginger Software for the past year. Edina Fitzpatrick, Coordinator of Instructional Technology at the school, has experienced Ginger at work. "Some of our students struggle so much with the spelling that it hampers their writing in general. Ginger lowered that barrier for them. They were able to accomplish legible text on their own. Their confidence in writing increased and it contributed to their confidence as learners."



Using Ginger Software within Microsoft Word.

| | | | | |
|----------------------------|--|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|
| User Report | | Name: <input type="text" value="Stacy Smyth"/> | Back to Group Report Sign Out | |
| My account | | Report From: <input type="text" value="November 05, 2009"/> | To: <input type="text" value="January 05, 2010"/> | <input type="button" value="Go"/> |
| Summary | | Sentences Checked: 59 Sentences Corrected: 55 Words Checked: 795 Words Corrected: 112 | | |
| | | Spelling Mistakes: 88 (79%) Grammar Mistakes and Misused Words: 24 (21%) | | |
| User Statistics | | Personal Report | | |
| Mistake Type | | Correct Word | Total Occurrences | Written As |
| Grammar and Misused | | really | 5 | rely |
| Spelling | | favourite | 2 | favourite |
| | | | | favort |
| Spelling | | people | 3 | |
| | | | | pepl |
| | | | | pepal |
| | | | | popel |
| Grammar and Misused | | mbuys | 1 | bus |
| Grammar and Misused | | spell | 1 | smell |
| Spelling | | Wiss | 1 | works |
| Spelling | | ther | 1 | ther |
| Spelling | | was | 1 | wuz |
| Spelling | | named | 1 | namd |
| Spelling | | pedestrian | 1 | pedstrian |
| Spelling | | pediatrician | 1 | pedetnicon |
| Spelling | | am | 1 | m |
| Spelling | | Edinburgh | 1 | endburg |
| Spelling | | architecture | 1 | archteecture |
| Spelling | | process | 1 | proccss |
| Spelling | | microscopic | 1 | microspopic |
| Spelling | | school | 1 | shool |
| Grammar and Misused | | will | 1 | well |
| Grammar and Misused | | were | 1 | where |
| Spelling | | doctor | 1 | docter |
| Spelling | | parameters | 1 | parameters |
| Spelling | | structural | 1 | struchural |
| Spelling | | No suggestions | 2 | |
| | | | | inprof |
| | | | | inprof |

The Personal Report details the most frequent errors a user has made, listing them in two categories: spelling mistakes or grammar mistakes and misused words.

| | | | | |
|----------------------------|--|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Group Reports | | All Users | <input type="button" value="Add Group"/> <input type="button" value="Edit Group"/> <input type="button" value="Delete Group"/> | Sign Out |
| My account | | Report From: <input type="text" value="November 05, 2009"/> | To: <input type="text" value="January 05, 2010"/> | <input type="button" value="Go"/> |
| User Statistics | | Group Report | | |
| User Name | | Sentences Corrected/Total | Words Corrected/Total | Mistakes Type |
| | | | | Spelling |
| | | | | Grammar and Misused |
| David | | 22/47 (47%) | 51/268 (19%) | 44 (88%) |
| Diana | | 47/114 (41%) | 75/1111 (7%) | 67 (89%) |
| Edward | | 22/48 (46%) | 31/542 (6%) | 23 (74%) |
| Emma | | 32/95 (34%) | 64/916 (7%) | 53 (83%) |
| Jackson | | 19/36 (53%) | 27/483 (6%) | 19 (70%) |
| James | | 43/116 (37%) | 57/1437 (4%) | 37 (65%) |
| Jessica | | 57/143 (40%) | 101/1323 (8%) | 88 (87%) |
| Julia | | 50/104 (48%) | 138/1110 (12%) | 126 (92%) |
| Leslie | | 101/217 (47%) | 266/2541 (10%) | 234 (88%) |
| Maya | | 61/137 (45%) | 131/1919 (7%) | 101 (77%) |
| Mike | | 32/77 (42%) | 40/796 (5%) | 13 (33%) |
| Mia | | 34/73 (47%) | 79/667 (12%) | 62 (78%) |
| Paul Kirby | | 46/56 (82%) | 145/384 (38%) | 115 (79%) |
| Rebecca | | 37/252 (15%) | 60/2937 (2%) | 52 (87%) |
| Sam | | 20/43 (47%) | 42/481 (9%) | 30 (71%) |
| Stacy Smyth | | 56/69 (81%) | 112/796 (14%) | 88 (79%) |
| Tom | | 27/27 (100%) | 55/472 (12%) | 43 (78%) |
| Tyler | | 64/177 (36%) | 82/2002 (4%) | 45 (55%) |

The Group Report provides data on the amount of sentences and words corrected, as well as the amount and types of errors corrected for each student.

Ginger Software is designed as a compensatory tool and also as a learning platform. The errors in the original sentence are highlighted and so are the suggested corrections, providing the users with visual feedback. Ginger's text-to-speech (TTS) also provides auditory feedback, enabling users to hear their errors and their corrections. The words are highlighted as they are read aloud and users can associate the sound with the spelling and also learn the correct pronunciation of the words.

"Ginger's text-to-speech feature has been a huge benefit to our students. They are able to listen to their own sentences and they can hear their errors," says Fitzpatrick. Ginger Software's TTS enables users to hear their original sentence as it is read to them phonetically; it also reads the alternatives offered and the sample expressions accompanying them. "The students can listen to the sentence they wrote; it helps them recognize errors and omissions. They can also listen to the suggested corrected sentence and to the alternative options and decide what to choose when they do not visually recognize the words presented," says Fitzpatrick. She also noted, "The TTS is a great help to the students in the proofreading stage." Some students find reading their own writing so difficult that, without the TTS, they would not bother reviewing it at all.

Ginger tracks the errors that users make and provides reports of the users' frequent errors over time. The reports contain statistical analyses of the most frequent errors, listing them in two categories: spelling mistakes or grammar mistakes and misused words. The number of words and sentences corrected and a list of repeatedly misspelled words are also provided. Through the reports, teachers can identify students' needs, track their progress and, in turn, personalize instruction. This statistical data on the students' writing also provides invaluable support in tracking Individual Education Plans (IEP) and Response to Intervention (RTI). "The reports have helped our teachers in the diagnostic process. We can clearly see from the data if the students are not understanding the rules," says Fitzpatrick. "They also enable the teachers to look for patterns and trends in the students' writing."

Ginger works in the familiar environments of Microsoft Word, Outlook, PowerPoint and Internet Explorer. "We wanted people to work in the same environments as everyone else and not feel different. The idea is to empower struggling writers and to enable them to work independently and write with confidence," says Yael Karov. Ginger works with the software programs most used at school, at home and in the workplace. It is very simple to use and writers can learn to use Ginger within minutes. At the Norman

Howard School, the students appreciated this. "The students learned how to use Ginger very quickly; they saw Ginger as fun. They thought it was cool and easy to use. Ginger supported their independence in writing," says Fitzpatrick.

"Ginger is a great tool to have in your pocket for any writing assignment. Ginger falls in the realm of tools the students can take with them at any age, to communicate on social networks, at college, at work and they will benefit from it in the long run," summarizes Fitzpatrick.

Ginger Software is used in many schools in the US, UK, Canada and Australia. Writers worldwide are enjoying Ginger's benefits at home and in the workplace. Ginger Software can be purchased for less than \$100. Ginger works with Microsoft Windows XP SP2 or higher, Vista, or Windows 7. To use Ginger, an Internet connection is required. To learn more about Ginger Software, please visit Ginger Software's Web site: www.gingersoftware.com

You may download a free 14-day trial of Ginger Software using this link:

http://www.gingersoftware.com/download_premium

ABOUT THE AUTHOR

Miki Feldman-Simon has an MSC in Organizational Behavior and a BA in Psychology and Educational Counseling. She is the Vice President of US Operations at Ginger Software. She can be contacted by phone at 617-755-0160 or via e-mail at <mikif@gingersoftware.com>.

Edina Fitzpatrick is the Coordinator of Instructional Technology at The Norman Howard School, serving grades 5-12 in Rochester, NY. She can be contacted by phone at 585-334-8010, ext. 203 or via e-mail at <EFitzpatrick@normanhoward.org>.

ABOUT GINGER SOFTWARE, INC.

Ginger Software empowers students to dramatically improve their written communication. The company offers automatic error correction through Ginger, a downloadable software program that corrects misused words, grammar and spelling mistakes, based on the context of each sentence. Additional functionality is available through Ginger Premium, which includes text-to-speech and progress reporting. Founded in 2007, Ginger Software is a global company with offices in the United States, the United Kingdom and Israel.

Ginger Software, Inc. can be contacted at 405 Waltham St, Ste. 371, Lexington, MA 02421; Phone: 617-755-0160; Fax: 1-888-658-6618.

REFERENCES

24th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2002

Bos, C. S., & Vaughn, S. (2006). *Strategies for teaching students with learning and behavior problems* (6th ed.). Boston: Allyn & Bacon.

Dalton, B., Winbury, N. E., & Morocco, C. C. (1990). Two fourth-grade boys with learning disabilities learn to use a computer spell checker. *Journal of Special Education Technology*, 10 (4), 177-199.

Elkind, J., Black, M., & Murray, C. (1996). Computer-based compensation of adult reading disabilities. *Annals of Dyslexia*, 46, 159-186.

Elkind, J., Cohen, K., & Murray, C. (1993). Using computer-based readers to improve reading comprehension of students with dyslexia. *Annals of Dyslexia*, 42, 238-259.

Garfinkel, R., Fernandez, E., & Gopal, R. (2003). Design of an interactive spell checker: Optimizing the list of offered words. *Decision Support Systems*, 35(3), 385-397.

Good, R. H., Simmons, D. C., & Smith, S. B. (1998). Effective academic interventions in the United States: Evaluating and enhancing the acquisition of early reading skills. *School Psychology Review*, 27(1), 45-56.

Higgins, E. & Raskind, M. (1997). The compensatory effectiveness of optical character recognition/speech synthesis on reading comprehension of post-secondary students with learning disabilities. *Learning Disabilities: A Multidisciplinary Journal*, 8, 75-87.

Hughes, C.A. & Smith, J.O. (1990). Cognitive and academic performance of college students with learning disabilities: A synthesis of the literature. *Learning Disability Quarterly*, 13, 66 - 79.

Johnson, D. & Myklebust, H. (1967) *Learning disabilities; educational principles and practices*. New York: Grune & Stratton.

Leong, C. K. (1995). Effects of on-line reading and simultaneous DECtalk auding in helping below-average and poor readers comprehend and summarize text. *Learning Disabilities Quarterly*, 18, 101-115.

Lewis, R., Ashton, T., Haapa, B., Kieley, C., & Fielden, C. (2000). Improving the writing skills of students with learning disabilities: Are word processors with spelling and grammar checkers useful? *Learning Disabilities*, 9, 87-98.

MacArthur, C. A., Graham, S., Haynes, J. A., & De La Paz, S. (1996). Spelling checkers and students with learning disabilities: Performance comparisons and impact on spelling. *Journal of Special Education*, 30, 35-57.

McNaughton, D., Hughes, C., & Clark, K. (1993, February). An investigation of the effect of five writing conditions on the effect

of spelling performance of college students with learning disabilities. Paper presented at the 30th International Conference of the Learning Disabilities Association of America, San Francisco.

Montgomery, D., Karlan, G.R., & Coutinho, M. (2001). The effectiveness of spell check programs to produce target words for misspellings generated by students with learning disabilities. *The Journal of Special Education Technology*, 16, 27-41.

Myklebust, H. (1965). *Development and disorders of written language* (Vol. 1). New York: Grune & Stratton.

Newcomer, P., Nodine, B., & Barenbaum, E. (1988). Teaching writing to exceptional children: Reaction and recommendations. *Exceptional Children*, 54, 559-564.

National Institutes of Health, *Learning Disabilities: Multidisciplinary Research Centers Guide*, Volume 23, Number 37, October 21, 1994

Olofsson, A., & Lundberg, I. (1993). Can computer speech support reading comprehension? *Computers in Human Behavior*, 9, 283-293.

Peterson-Karlan, G. R., & Parette, H. P. (2007). Supporting struggling writers using technology: Evidence-based instruction and decision-making. Illinois State University, Department of Special Education, Special Education Assistive Technology Center.

Raskind, M. H. (2003). Assistive technology for students with learning disabilities in higher education. In S. A. Vogel, G. Vogel, V. Sharoni, & O. Dahan (Eds.), *Learning Disabilities in Higher Education and Beyond*, Baltimore, MD: York.

Raskind, M.H., Goldberg, R.J., Higgins, E.L., & Herman, K.L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. *Learning Disabilities Research and Practice*, 14 (1), 35-49.

Spear-Swerling, Louise (2005). *Spelling and Students with Learning Disabilities*. LD Online. <http://www.ldonline.org/article/5587>

Wanzek, J., Vaughn, S., Wexler, J., Swanson, E. A.; Edmonds, M. Kim, A-H. (2006) A synthesis of spelling and reading interventions and their effects on the spelling outcomes of students with LD. *Journal of Learning Disabilities*, 39, 56-73. ■

Picture Planner: Using Pictures to Make Plans

By Val Stilwell

We've all heard the expression that a picture is worth a thousand words. For many students with cognitive disabilities, however, the idea has special meaning. Pictures, symbols and icons function as the words they can't read or speak as they learn to communicate and manage their daily living activities. For students with significant cognitive disabilities, many of whom have limited capacity to use print materials, routine but important tasks, such as activity scheduling and time management, present challenges that can limit their capacity for personal competence and self-determination.

Effective tools and strategies to support development of these kinds of self-management skills are an important element of elementary and secondary education and, as students advance toward graduation, they are key in facilitating effective transition and in developing the sense of self-determination that leads to positive post-secondary outcomes. With its release last year of Picture Planner, the icon-based visual calendaring application for individuals with cognitive disabilities, Cognitopia Software of Eugene, Oregon hopes to help meet this need.



The Group Report provides data on the amount of sentences and words corrected, as well as the amount and types of errors corrected for each student.

WHY IS PERSONAL ORGANIZATION SO IMPORTANT?

Personal organization is an important component skill that can increase the likelihood that students will have the opportunities to express personal choices and behave in a self-determined way. Special education researchers, Wehmeyer, Agran, and Hughes (2000) wrote in the *Journal of Special Education*, that "one of the primary instructional activities that can promote student self-regulation of learning and, ultimately, promote self-determination, is the use of student-directed learning strategies..." which include self-management strategies." In their view, the construct of self-determination is appropriately seen as consisting of compo-

nent elements, including decision-making and self-management skills, as well as skills in self-advocacy, problem-solving, goal-setting and self-awareness.

In Wehmeyer, et al.'s survey of special education teachers, a high percentage of respondents indicated familiarity with the term "self-determination" and felt that instruction in its component elements was important, but only 22 percent indicated that all their

students had IEP goals in this area, and 31 percent said none of their students had such goals. The authors recommended that self-determination instruction not be a stand alone, but that it be infused across academic and functional content. They further highlighted the need for specific methods, materials and instructional strategies that can enhance self-determination and the need for teachers "to learn strategies...to teach students to self-regulate and self-manage their learning."

Consider for a moment the many ways in which we all use information to prompt us through a more competent performance of daily activities. Many of us would be lost without our paper-based or electronic personal organizer to help us keep track of

our appointments. Often we rely on cookbook recipes and instructional manuals to perform basic household tasks. We navigate from one place to another using the information provided by traffic signals, dashboard displays or public transit signs and schedules. And, of course, we use personal computers and smart phones to access Web pages, to schedule appointments, find out how to get to them, find out about movie listings or community events, and communicate with friends and business associates. These are all systems for personal organization that, by and large, are inaccessible to students who lack reading skills or who need simpler systems to use.

WHY ARE INDIVIDUALS WITH SIGNIFICANT COGNITIVE DISABILITIES OFTEN EXCLUDED FROM THE BENEFITS OF INFORMATION TECHNOLOGY?

Computers offer a powerful multimedia tool for development and maintenance of personal organization skills, but most commercial applications are inaccessible to students with cognitive disabilities, in part, because of user interface complexity and dependence on the user's reading ability. There is also a lack of cognitively accessible software targeting the end user with cognitive disabilities and functional life management needs.

Given the capabilities of computers and other technology to organize and present information in ways that extend our capabilities – to serve as cognitive prosthetics in effect – it is ironic that, as a result of these barriers, the population of individuals with

the greatest need for augmented cognition has the least access to the technology that can help them.

Transition-aged students have perhaps the greatest need for technology solutions in light of the challenges of postsecondary life. Improved technology-based access to information can improve the lives of students with cognitive disabilities, providing means for both self-administered prompts and external prompting to be delivered in a comprehensible format and serving as aids in the completion of daily activities, such as managing a class schedule, tracking homework and materials, personal activity planning, performance of household management tasks, engagement in community settings, utilization of public transportation and social interaction with friends and family.

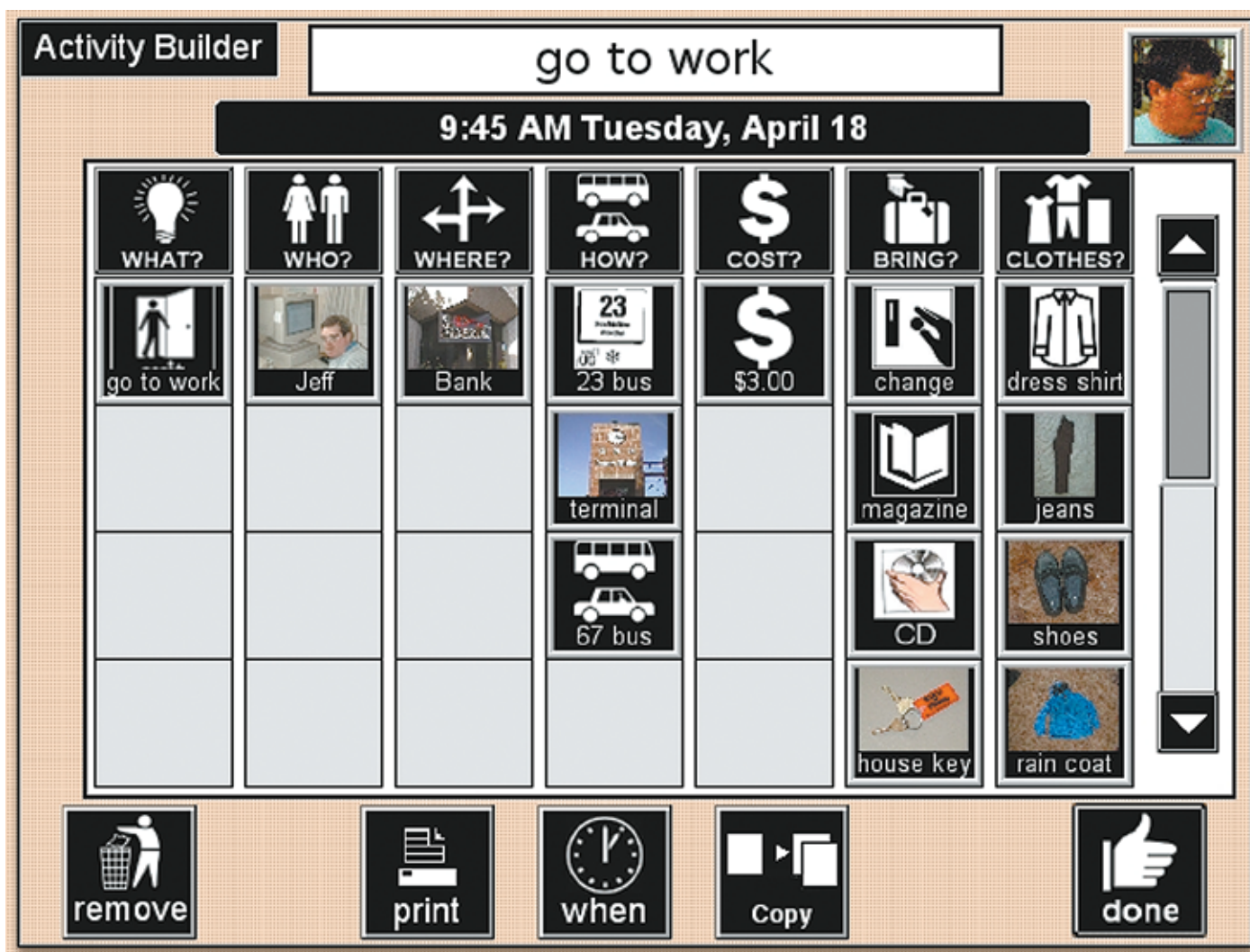


Figure 1. Picture Planner displaying activity-building pictures and icons for a task.

MEETING A REAL NEED FOR STUDENTS

Recognizing this important need, Leah Eskine, Coordinator of Vocational Services for Students with Special Needs at Jefferson Parish Public School System in Louisiana recently decided to implement Cognitopia Software's Picture Planner as a personal organization system to ensure that students would understand their schedules and build their self-management skills. Program directors and teachers prioritized development of the personal organization skills their students need, beginning in elementary school and moving through transition into adulthood. According to Ms. Eskine, "Our students needed an accessible way to create daily schedules and know what they were doing throughout the day."

Picture Planner is a versatile tool for scheduling daily and weekly activities that facilitate personal choice. The personalized pictures and icon-driven software interface provide users with cognitive disabilities a means to construct and manage their activity schedules and receive reminders prompting them to stay on task. Picture Planner functions, in essence, as an electronic tool for self-management and prompting, but teachers are finding it cuts across other important skills at the same time.

"It's really far more than just self-organizational skills that we can teach using Picture Planner," says Patrice Drewes, a teacher in a high school transition classroom in Jefferson Parish School System. "It crosses over so many more areas – we got a wonderful surprise. With Picture Planner, we can assess kids on following verbal directions and discover their abilities. We can teach about working in groups, typing, how to break down activity steps, use picture communication and much more."

Picture Planner is a tool for teaching a higher level of self-sufficiency than would be available if the student were only given access to a typical paper and pencil system. "Crossing over age boundaries, our elementary students use Picture Planner to learn about time frames, planning an activity, working with pictures, sharing ideas and more. In high school, the kids use it as a bridge for transition and building independent living skills," says Pat Almquist, a Job Trainer/Placement Specialist with the Department of Special Programs for JPPSS. "Picture Planner definitely gives us a very concrete way to address a multitude of standards."

HOW DOES PICTURE PLANNER WORK?

Picture Planner is a picture-based scheduling system that provides a simplified and intuitive tool for time management and activity planning for individuals with cognitive disabilities. Users create activities by making selections from a customizable image library to select a time, describe what the activity is and add other information, such as who is doing it, where it will happen, things to bring and so on.

"Picture Planner is a tool to help people with cognitive disabilities learn how to manage their own schedules and be more independent," says Lead Developer, Tom Keating, Ph.D. "It enhances self-management and quality of life for individuals who need help to plan activities and stay on track with the help of multimedia prompts and reminders."

With its use of symbols and pictures, along with text-to-speech feedback, and an all single-click interface, Picture Planner is designed for people with a wide range of cognitive abilities. From young students in a classroom needing reminders of re-occurring activities, to homes with family members needing assistance, Picture Planner provides support for activity scheduling and expression of personal choice.

"The use of customizable icons means that users can make their planners as personalized as they wish. Users can import images of people they know and the things they do," says Keating. "The more familiar the program is for someone, the more comfortable it becomes. It's all about providing opportunities to learn better self-management and creating cognitively accessible software programs toward that end."

Picture Planner serves as a full-featured activity organizer while incorporating a number of design features that make it cognitively accessible to users with limited reading ability and a need for a simplified software interface. You can use it on a desktop and print out schedules, but it's also portable. In the current version of the application, Picture Planner 2.0, you can view schedules on a Windows Mobile handheld computer or smart phone. But Cognitopia is weeks away from introducing Version 3.0, which will expand portability through iPhone/iPod touch compatibility and will provide the ability to synchronize Picture Planner with Google Calendar, enabling users with cognitive disabilities to benefit from the kind of information sharing typified by such Web 2.0 applications.

Picture Planner tends to resonate with parents and teachers looking for practical tools to develop self-determination skills. Perhaps this is because Picture Planner grew from lead developer Keating's personal experience living with and supporting his adult brother James, who has autism, and figuring out how technology could enhance self-management, as well as caregiver support. "I understood many of the challenges he faced



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and believed that with the right technology, he could have a tool to stay on track, remind him of appointments and overall, make his life better. It helps that we both love computers," says Keating.

Picture Planner offers a potential tool to teachers looking for a systematic context for development and exercise of personal organization skills and, through included data reporting features, for providing quantitative documentation of student progress toward meeting standards and accomplishing related IEP goals.

WHAT DO THE STUDENTS THINK?

In a recent conversation with JPPSS teacher Patrice Drewes and her class of secondary transition students, she let the students speak for themselves as they discussed their introduction to Picture Planner and how they are using it. Cory Plaisance plays baseball on Thursday at 6 pm – he can schedule that and take pictures of his gear, the field and make reminders of what else to bring, like money for the bus.

Nicholas Camese's favorite thing about Picture Planner is "to see himself and hear the computer speak his name" and the

words he types in. He loves going to the zoo and can take pictures of the animals, the park and how to get there to put in his planner.

Jabari Aaron works at a hospital emergency room and has a DVD collection at home. He uses Picture Planner to schedule his volunteer time and time to spend with his DVD collection.

Nigelle Gray used Picture Planner to remind her about a speaking engagement she recently had at a self-empowerment conference. She spoke about finding jobs and how important they are for individuals learning to live more independently.

"Picture Planner," says Pat Almquist, "meshes beautifully with so many other teaching moments – letters, words, applications – it expands into many lifelong lessons." http://www.istockphoto.com/file_thumbview_approve/12554365/2/istockphoto_12554365-happy-family-taking-self-portrait-at-beach.jpg

REFERENCES

Wehmeyer, M. L., Agran, M., & Hughes, C. A. (2000). A national survey of teachers' promotion of self-determination and

student directed learning. The Journal of Special Education, 34, 58-68.

ABOUT PICTURE PLANNER'S CREATOR

Tom Keating, Ph.D., is the Director of the Eugene Research Institute, which conducts assistive technology research and development, with an emphasis on cognitively accessible computing and design of systems for community living support, including the creation of the Picture Planner icon-based personal organizer. He is also managing partner for Cognitopia Software, LLC, and is an Adjunct Assistant Professor in the Computer and Information Sciences Department of the University of Oregon. Dr. Keating's work over the past 15 years has focused on the role of assistive technology in the lives of students and adults with cognitive and physical disabilities, on human interface design and development of cognitively accessible software for activities of daily living, and on intelligent systems for remote caregiving. His perspective in all of his work is strongly influenced by his role as primary care provider for a brother with autism. He can be contacted at tkeating@cognitopia.com or 866-573-3658. ■

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BUDGET BOOSTERS!

Software to Support Reading, Comprehension, Writing and Studying for Less Than \$50!

By Sherri Parkins and Kevin Reinhardt

Every day, people with learning disabilities wage a battle to understand and to be understood. The disability can impact not only the times that they are in school or work, but also their social and recreational lives as well. Individuals struggling with literacy are often in

environments with restrictive budgets. We set out on a mission to seek and find software that cost less than \$50. We categorized the software we were seeking under reading, comprehension, writing and studying supports. We wanted to be able to support both online and day-to-

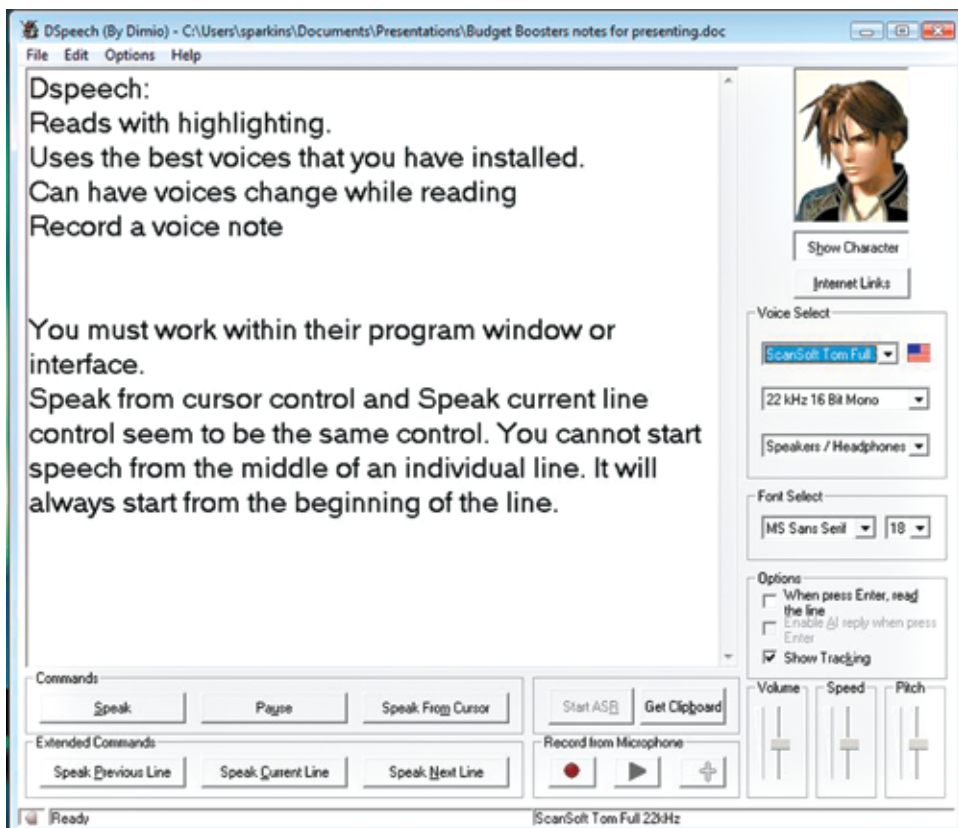
day activities, such as using a word processor, writing and reading e-mail, filling in forms, etc. We also considered whether the program could run independently from the Internet. We recognize not everyone has Internet access. Sometimes in our search we found a multitude of programs. To make this as useful as possible, in this article we discuss who the "winner" was and who the "runner up" was in each of the categories. An accompanying grid will list all software we felt worthy of note.

READING (TEXT-TO-SPEECH)

When a student's reading efforts are totally invested in decoding words, there's little energy, attention and/or working memory available for comprehension. Perfetti (1985) explains that inaccurate word reading can impact understanding by interfering with the quality of information processed. Text-to-speech tools support decoding. Since the development of reading programs that used speech as an important part of their methods, such as Heckelman's neurological impress method in 1969, the value of text-to-speech has been recognized (Heckelman, 1969). Our searches for text-to-speech programs focused on students being able to utilize text-to-speech with any with selectable text.

D-SPEECH

D-Speech was our text-to-speech winner. It is free, reads with highlighting and uses the best voice you have installed on your computer. It is available from: <http://dimio.altervista.org/eng/>. D-Speech has a unique feature that allows you to have the voices change while reading. Any



D-Speech runs in its own interface.

BUDGET BOOSTERS TABLE

| | Reads | Reads w/highlighting | Convert to MP3 | Dictionary | Thesaurus | Word Completion | Mind Mapping | Studying | Speech to Text | Program | Runs on Website | MAC | Where to Get | Cost | Notes |
|-----------------------------|-------------|----------------------|----------------|------------|-----------|-----------------|--------------|----------|----------------|---------|-----------------|-----|-----------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------|
| Text-To-Speech | | | | | | | | | | | | | | | |
| D-Speech | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | | | | www.dimio.altervista.org/eng/ | | must also download Lame MP3 Converter to change voices while reading, need PDF converter to open PDF files |
| TextAloud | ✓ | ✓ | ✓ | | | | | | ✓ | | ✓ | | www.nextup.com/TextAloud/download.html | \$29.95 | can have different voices read text |
| Spell Catcher | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | www.rainmakerinc.com/ | \$39.95 | |
| Natural Reader | ✓ | ✓ | ✓ | | | | | | ✓ | | ✓ | | www.naturalreaders.com/ | | upgrade includes convert to MP3 and better voices |
| ReadPlease | ✓ | ✓ | | | | | | | ✓ | | | | www.readplease.com/ | | |
| WordTalk | ✓ | ✓ | | | | | | | ✓ | | | | www.wordtalk.org.uk/About/ | | Works only in Microsoft Word |
| Dictionary/Thesaurus | | | | | | | | | | | | | | | |
| WordWeb | ✓ | | | ✓ | ✓ | | | | ✓ | | | | www.wordwebsoftware.com/ | | includes synonyms, parts, types, etc. |
| Visual Thesaurus | ✓ | | | ✓ | ✓ | | | | ✓ | | ✓ | | www.visualthesaurus.com/ | \$39.95 | Spider like visual presentation of words and synonyms similar to different languages including Spanish, German, French, Italian |
| TheFREEDictionary | "word only" | | | ✓ | ✓ | | | | | ✓ | ✓ | | www.thefreedictionary.com/ | | idioms, includes pictures, word games |
| Talking Dictionary | ✓ | | | ✓ | ✓ | | | | ✓ | | | | www.rwfts.com/html/buying.html | \$34.95 | |
| The Sage | ✓ | | | ✓ | ✓ | | | | ✓ | | | | www.sequencepublishing.com/thesage.html | | |
| Open Office | | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | www.openoffice.org/ | | need to get the Easy Dictionary extension |
| Word Completion | | | | | | | | | | | | | | | |
| Spell Catcher | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | www.rainmakerinc.com/ | \$39.95 | |
| LetMeType | | | | | | ✓ | | | ✓ | | | | www.clasohm.com/lmt/en/ | | turn off learn to avoid it learning incorrect spellings |
| Open Office | | | | | | ✓ | | | ✓ | | ✓ | | www.openoffice.org/ | | |
| Typing Assistant 4.3 | | | | | | ✓ | | | ✓ | | | | www.cnt.lakefolks.com/ | \$29.95 | |
| Click and Type | | | | | | ✓ | | | ✓ | | | | www.lakefolks.org/cnt/ | | on screen keyboard |
| Study Skills | | | | | | | | | | | | | | | |
| Cue Card | | | | | | | ✓ | | ✓ | | ✓ | | www.wadeb.com/cuecard/ | | |
| StudyMinder Flash Cards | | | | | | | ✓ | | ✓ | | ? | | www.studyminder.com/buy.html | \$14.95 | |
| Mind Mapping | | | | | | | | | | | | | | | |
| FreeMind | | | | | | ✓ | ✓ | | ✓ | | ✓ | | www.freemind.sourceforge.net/ | | |
| Webspiration | | | | | | ✓ | ✓ | | | ✓ | ✓ | | www.mywebspiration.com/ | | Beta |
| Mindomo | | | | | | ✓ | ✓ | | | ✓ | ✓ | | www.mindomo.com/ | | |
| Convert to MP3 | | | | | | | | | | | | | | | |
| ABC2MP3 | ✓ | | ✓ | | | | | | | ✓ | ✓ | | www.abc2mp3.com/ | | |
| AudioBook Creator | ✓ | ✓ | ✓ | | | | | | | | | | www.audiobookcreator.com/ | \$29.95 | |
| D-Speech | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | | | | www.dimio.altervista.org/eng/ | | |
| Natural Reader | ✓ | ✓ | ✓ | | | | | | ✓ | | | | www.naturalreaders.com/ | \$49.50 | |
| Spesoft | | | ✓ | | | | | | | | | | www.spesoft.com/news.asp#news_326 | | |
| TextAloud | ✓ | ✓ | ✓ | | | | | | ✓ | | | | www.nextup.com/TextAloud/download.html | \$29.95 | can have different voices in text |
| Vozme | | | ✓ | | | | | | | ✓ | ✓ | | www.vozme.com/index.php?lang=en | | |
| YeoSoft | ✓ | | ✓ | | | | | | ✓ | | | | www.text-mp3.com/ | \$19.95 | |

text that is in quotations can be read by one additional voice. You can only have two voices; one for quoted text, one for unquoted text. You also lose the highlighting of the words as it reads when this feature is engaged. The navigation interface is a bit confusing with options of Speak, Speak from Cursor, Speak Previous Line, Speak Current Line and Speak Next Line. We discovered that Speak from Cursor provided the best control, although it would start reading from the beginning of the line that the cursor was in. In addition to reading text, you can also insert voice notes into the document. You could use these voice notes to prompt a reader to find some information or even to prompt them to see if they are still attending! D-Speech uses its own interface and so text must be copied and pasted into the interface or opened from a text file. It will not display pictures.

NATURAL READER

This program is also free! Initially, it also presents as a program that works within its own interface, but has an option of running as a "Mini-Board" floating toolbar. This toolbar allows



Natural Readers' floating Mini Board toolbar.

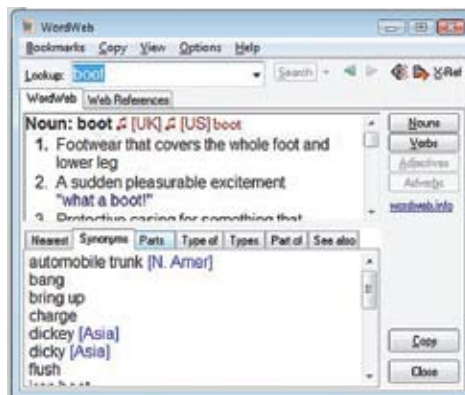
you to read any selectable text in any program using the best installed voice. When using the Natural Reader's interface, it will highlight, but while using the Mini-Board toolbar, highlighting of text is absent. Natural Reader can be downloaded from: <http://naturalreaders.com/>.

COMPREHENSION TOOLS

Research has demonstrated that the use of reference tools, such as a dictionary and encyclopedia, improves comprehension (Reinking, 1988). Comprehension is aided by a dictionary, but, students with spelling difficulties resist their use. A positive aspect of using computer dictionaries is they never get lost and are easier to use. Multi-featured dictionaries go beyond the look-up a word task and can also support language retrieval and spelling difficulties. Tools, such as "part of," "type of," "synonyms," "idioms," etc., are extremely supportive. We located multiple dictionaries providing these powerful supports.

WORD WEB

Our winner in the dictionary category was the free WordWeb program available from <http://www.wordwebsoftware.com/>. As you enter a word into the search box, it activates a word completion feature. If you don't see the word on the list and continue to type, and June / July, 2010



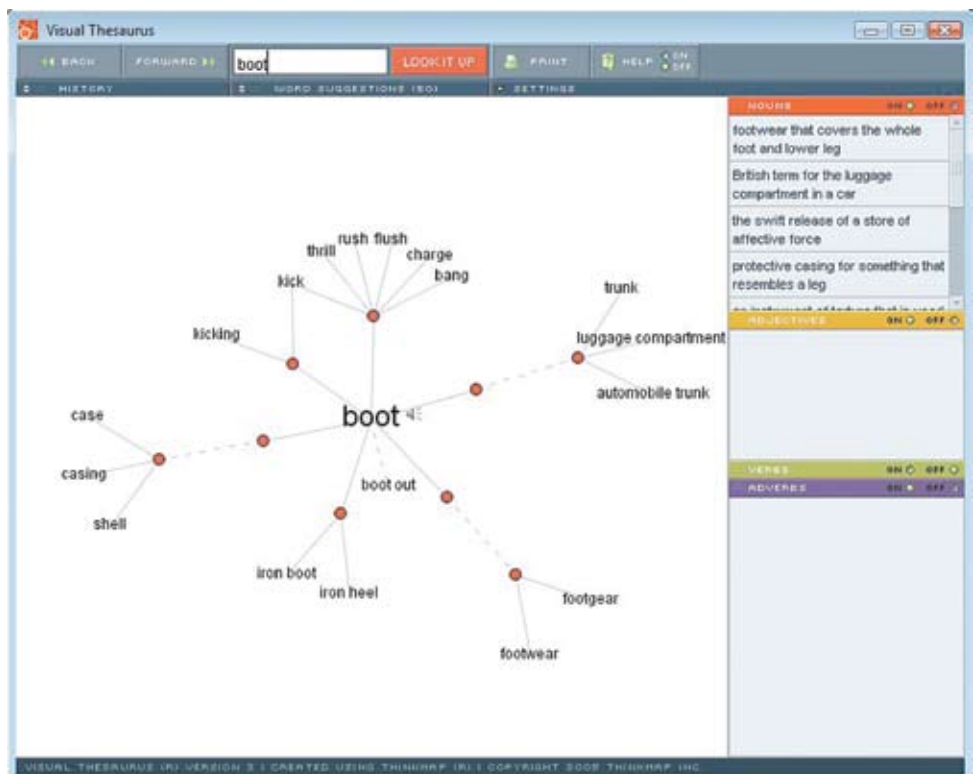
WordWeb

you make a spelling error, it will present with a "word not found; try..." list. This can support those creative spellers. Once a word is looked up, the program will speak the word. If you copy and paste the definitions into the search box, it will read the pasted definition using the speech tool. The dictionary displays the part of speech as you click on the definitions, or you can select the part of speech you are looking for in the interface and it will display appropriate definition words. The dictionary displays synonyms. In addition to the "regular" features of a dictionary, it also provides "Parts" of the word looked up. So, for example, if you look up the word "boot" it will provide all the different parts of a boot from "bootlace" to

"vamp". Yes! Vamp is a "Piece of leather forming the front part of the upper of a shoe"! The "Part of" feature displays what the word looked up might be part of. Boot, for example, is part of a car if you are British! In fact, you can turn on the language of origin indicators. The abbreviation of the language of origin will appear in brackets beside the word. In addition, this powerful dictionary has a "types" feature that allows a user to find out the different types of a certain item. For example, if I look up the word "law," under the "types" tab of WordWeb's interface I am presented with a list of types of law, such as "Kepler's law," "anti-trust law," etc. For words that are easily confused, such as "allusion," "affect," or "assent," a sounds-like feature is activated and helps the user confirm the word they have looked up. What a powerful free dictionary!

VISUAL THESAURUS

Students with disabilities that affect language and English as additional language learners often struggle with semantic relationships. We looked for programs that might present material in different modalities. Words presented in a visual display that shows the relationships between words may enhance comprehension. Our runner up in the dictionary category, Visual Thesaurus, does this by presenting the word and its synonyms in a spider like presentation. There is some support for a creative spelling of a word; a list of suggested words appears if the dictionary



Visual Thesaurus displays words and their synonyms in a graphical spider like display. This display shows the nouns turned on and the verbs turned off for the word "boot."

is unable to find a word spelled the way it was entered. The word looked up will have a speaker button displayed beside it, allowing a person to hear word pronunciation. Unfortunately, there is no way to have the definitions of the displayed words read by a text-to-speech program.

Photo 4 Visual Thesaurus Visual Thesaurus displays words and their synonyms in a graphical spider like display. This display shows the nouns turned on and the verbs turned off for the word "boot."

The interface that appears along the side allows the user to identify parts of speech. Within the visual representation, different colored dots also identify the different parts of speech. Hovering the mouse over the dots provides further explanation of the word usage. The parts of speech can be turned on or off, simplifying the display. These features can improve understanding of how to use words. Visual Thesaurus can be downloaded from <http://www.visualthesaurus.com/> and, after a trial period, can be purchased for \$39.95.

WRITING SUPPORT

How to support writing? Programs support writing through spelling suggestions, frequently called prediction. Students can benefit from training or cueing. Word prediction cues writers, allowing them to write more, concentrating less on spelling and more on writing (Wiig & Semmel, 1980). Students access broader vocabulary, which encourages more ideas (Laine & Bristow 1999). Wanzek, Vaughn, Wexler, Swanson, Edmonds, and Kim (2006) found "evidence from studies employing reading interventions and interventions aimed at spelling with assistive technology also suggested positive effects on student spelling." The programs

that we identified are completion programs, meaning that they do not present a list of words until the first letter of a word is entered. We found some robust programs that provide word completion support.

SPELLCATCHER

Our winner, SpellCatcher, provides spelling support, word completion support and abbreviation expansion anywhere text can be entered! It is available for a 14-day trial period from <http://www.rainmakerinc.com/products/>. The cost is \$39.95 and site licensing can be negotiated.

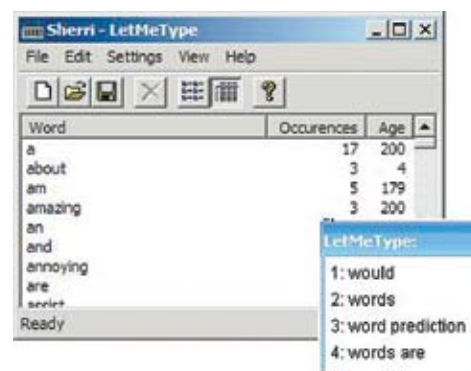
SpellCatcher does not have an interface as such, but runs in the system tray. As you type, you will be presented with a "Phrase completion" pop-up window, a "Spelling correction" pop-up window or a "Shorthand Glossary" pop-up window. Words presented as options can be chosen by a left mouse click, typing the number or using the mouse. The colors of the pop-up windows can be changed, as well as the font type and size. By default, the pop-up windows displays up to 10 items. The optional sound alert cues the user to attend to the visual choices to make a correction, choose a word or phrase or insert an abbreviation expansion.

SpellCatcher learns what you type. The user can turn off this feature so that it does not learn all the typos and mis-spellings that we all make. When this feature is turned off, SpellCatcher will use preloaded dictionaries or any new words or phrases that you deliberately add.

The phrase completion window is how SpellCatcher emulates a word prediction program. Based on what you have typed or added to the phrase completion lexicon, the user is presented with the "Phrase completion" pop-up

window. The phrase completion lexicon can be populated simply by opening the SpellCatcher phrase file and dragging the icon of the saved .txt file into it.

The "Shorthand Glossary" feature deserves



This is LetMeType's prediction and settings window.

an article of its own! Many people are familiar with auto-correct in typical word processing programs, such as Microsoft Word. This feature corrects our typing when we type "teh" when we meant to type "the." You can make up your own auto-corrects. If you need to type repeatedly a particular word or phrase, you can set it up as an auto-correct. For example, I can set up "phm" to auto-correct to the textbook title, "Psychology of the Human Mind." A very convenient feature!

If you have a student who frequently spells a word incorrectly, but consistently, you could set up an auto-correct to help correct spelling. For example, if your student frequently spells "honest" as "onist," an auto-correct could

1 - the air
2 - there is
3 - there
4 - thanks
5 - think

Esc • Ignore
F3 • Edit / View

Word Completion

ws ->
Hello,
Which Session would you like to come to?
Session 1: 10:45
Session 2: 12:35
Session 3: 2:25
Sherri Parkins, B.A., M.A.
Coordinator, Assistive Technologies and
Learning Strategies

Esc • Ignore
F3 • Edit / View

Shorthand glossary

1 - philosophy
2 - philosophic
3 - philosophize
4 - philosophies
5 - fellowship
6 - filespec
7 - feasibly
8 - flshpot

Esc • Ignore
F2 • Learn
F3 • Shorthand

Spelling error

SpellCatcher's different pop-up windows support writing in three ways – spelling, word completion and a shorthand glossary that is similar to auto-correct.

correct it. "Chat speech" could be expanded to traditional spelling by setting up auto-corrects for "lol" and "pos." Obviously, auto-corrects are not a good thing if we were replacing every "u" with "you"! SpellCatcher's auditory and visual prompts allow the user to control whether they wish to make the replacement using the suggestions in the Shorthand Glossary window or not. The other powerful part of this feature is that it can be used anywhere text can be entered – in e-mail, in online forms, etc.!

Spelling correction is just that and requires little explanation. The big difference is that the SpellCatcher program immediately pops open the spelling correction window and suggests a list of items from which to pick. You do not have to go back through the document and respond to colored lines under words or other error indicators.

There is a SpellCatcher version for use on a USB. There is even text-to-speech and a dictionary! What a powerful program!

LETMETYPE

Our runner up in Writing Supports is LetMeType. It is available from <http://www.clasohm.com/lmt/en/>.

LetMeType's interface is quite simple. It is accessed by right clicking the LetMeType icon in the system tray. "Settings" allows access to changing the color and font of the suggestion box, the option of having the word completion suggestion box fixed or following the cursor, having single word completion, and how many words appear in the list. The settings for learning or not learning text and displaying or hiding the completion list is best controlled through a right mouse click on the icon and selecting which setting you want to turn on or off. Red lines through the system tray icon signifies which of these options are turned on or off, but might be difficult to remember which is which! Similar to SpellCatcher, it learns to predict from what you type. If you are a perfect typist, you may wish to leave this feature on. If not, you want to turn this off immediately! Double clicking on the LetMeType icon gives access to the File menu, where you can import text. By default, LetMeType will delete unused text after a set number of days unless the file is set as "Read Only." This prevents vocabulary that is used year after year, such as language of Shakespeare, from being deleted. Periodically, in Microsoft Word, there were spacing problems after a word was selected from the prediction. There is no text-to-speech functionality or dictionary, but previously discussed software titles like Natural Reader and WordWeb could add such support.

OH YES YOU CAN TAKE IT WITH YOU: CONVERT TO AUDIO TOOLS

Students seem to always be connected to a device attached to their ears. We can take advantage of this "techno-cultural" phenomenon by converting text to MP3 audio format.

With text-to-MP3 tools, students can prepare audio readings, study notes and prepare for tests and exams.

D-SPEECH

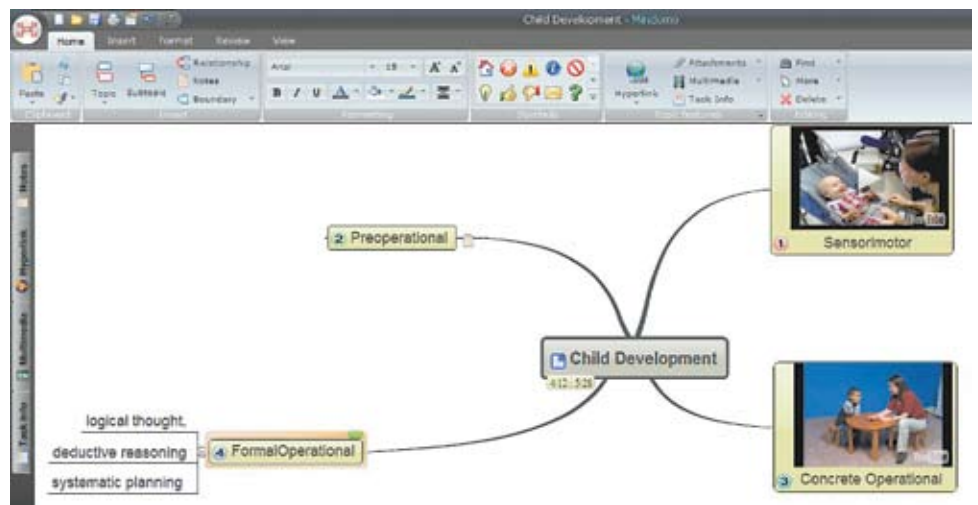
Our winner in this convert to MP3 category was indeed D-Speech! Yes, it was our text-to-speech winner tool! D-Speech has an "Audio Book creation" option. You can "split" your MP3 files at set intervals, of five minutes, 10 minutes, etc. or at custom intervals. We confess to not understanding the custom intervals, as the lengths of the files were not exact. You can, however, appreciate how the set "Split" options can make the files you save "bite sized" for the consumption of users, depending on their preferences or capabilities.

ABC2MP3

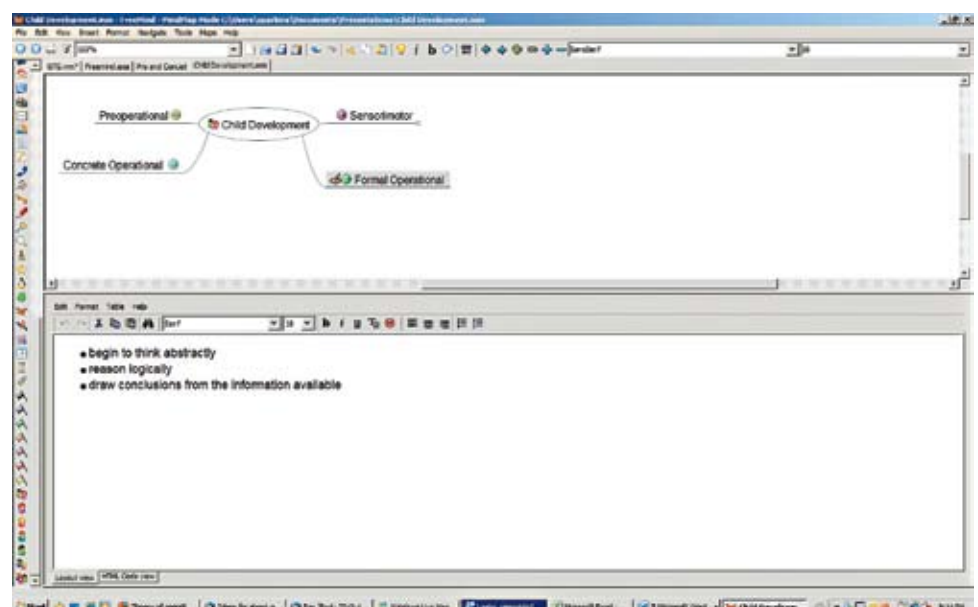
ABC2MP3 was our runner up in this category. It is an online service located at <http://www.abc2mp3.com/> and is available free, without registration, for text up to 2000 words. It sends your MP3 converted file to your e-mail. The conversion takes a while before the e-mail arrives, usually about an hour. Files can be stored on their site for one week. ABC2MP3 also allows you to subscribe and make your files available to others on a Web page. However, downloaded files from your e-mail can be permanently saved. The only drawback to ABC2MP3 is that you must be online to do a conversion.

MIND MAPPING

"A picture is worth a thousand words." Duke and Pearson (2002) state that, "A visual display helps readers understand, organize and



Mindomo is easy to use and can include different multimedia.



FreeMind installs to the user's computer.

remember some of those thousand words". Students frequently struggle with organization and initiating writing. MacArthur and others (1991) found struggling writers don't spend time planning what their writing will contain. Computer-based concept mapping (CBCM) can assist students to organize their writing. Typically CBCM software helps users brainstorm ideas, supports arranging them into conceptual groups and then visually assists with linking ideas together. CBCM can also support sentence construction. CBCM programs allow easy changes without erasing and rewriting. Students use CBCM programs for organization and note keeping (Knight, 1998). Research on the impact on reading comprehension scores of students with learning disabilities using semantic organizers have proven to significantly improve their scores (Ae-Hwa Kim, B., Vaughn, S., Wanzek, J., & Shangjin Wei, J. 2004). Additionally, mind maps can be powerful study tools.

MINDOMO

Although we usually shied away from Internet-based programs, Mindomo provided

many interesting supports for students who benefit from a mind mapping program. It requires a free membership set up at < <http://www.mindomo.com/>>. First of all, Mindomo was simple to use. You can import files (XML, MMAP or FreeMind files – the other mind mapping program we discuss below). There is the option to include embedded video, audio or images on the mind map.

The simple toolbar has a "ribbon" approach, similar to Microsoft Office products with home, insert, format, review and view tabs. The home ribbon allows the addition of topics and sub topics and changes to colors, font, etc. of the map's bubbles. There are a few symbols that can be used to help visually organize a map. The formatting ribbon allows for quick changes to the style of the map. In addition to the mind mapping functionality, a user can also set up task information, such as when a task is to be started and when it has to be completed. Notes can be inserted into the map to provide additional supports or to capture thoughts. There is a spell check available. Once a mind map is completed, it can be exported from the

Internet site to a computer as a Microsoft Word file. The free membership also allows you to access other people's mind maps, but you can only post yours if you upgrade to the premium edition. This is based on a yearly subscription of \$97! We'd stick with the free!

WEBSPIRATION

Inspiration, a recognized mind mapping program was, at the time of publishing, offering a free subscription to the beta version of Webspiration. It looks very similar to the computer-based Inspiration program. This is certainly worth exploring as an option and can be found at: <http://www.mywebspiration.com/>

FREEMIND

Since we had identified two programs that we felt were worthy of note but both were Web-based, we wanted to include FreeMind that is, well, free and not Internet based. It is available for download from: <http://freemind.en.softonic.com/>

FreeMind is a bit more awkward to use. We noticed, for example, that when you were navigating around the mind map, you needed to know exactly where to click in order to edit "nodes." You can hyper link nodes to saved files so that a mind map could have multi-media capabilities. We discovered that you could not resize pictures to fit to a specific area. There are some simple graphic symbols that can be used to organize the map. Notes can also be added.

STUDY TOOLS

Can we change the read/write/rehearse approach to studying? We considered some inexpensive software that allows students the opportunity to use different learning styles in their approaches to studying. The use of sound files, pictures or a mixture of media can engage all learners!

CUE CARD

Cue Card is a free study program that can be used for review. A user can utilize pictures, text or voice to set up prompts or answers. A bit of preparation has to be done prior to using media, such as pictures or sound. The media files need to be saved to the computer prior to making the study cards, as one cannot record using Cue Card's interface. Questions and answers can be presented as text only, text plus pictures, text plus audio or any mix or combination of those formats.

Students can use the program to study a language, learn definitions or tackle anatomy. Preparing study cards can be a group project with the results being shared. If the cards are text-based, they can be printed as study cards or notes. The link to download Cue Card is: http://download.cnet.com/CueCard/3000-2051_4-10075304.html. There is also an online



Cue Card: There are lots of different formats questions can be prepared in!



Study Minder: There are five different ways reviews can be set up in Study Minder.

forum to share cards at: <http://www.wadeb.com/cuecard/forum/>.

STUDY MINDER

Study Minder costs \$14.95 and is available for download from: <http://www.studyminder.com>. The registered version comes with over 5,000 SAT words and definitions. Users can produce their own cards to study math, languages, history, etc. The only drawback to Study Minder is that the presentation of questions can only be in text. What Study Minder lacks in its presentation options, it makes up for in its different test modes. One can have matching (warning: limit number of cards in a file or it gets awkward to use), multiple choice, true/false and exact answer. The exact answer mode is perfect when spelling or exact phrasing is a goal. The answers must reflect word for word, letter for letter what was set up.

The previously discussed spelling support programs, such as SpellCatcher, will interact with Study Minder and thus support students who struggle with spelling in the exact answer mode. Natural Reader, in its Mini Board mode, can be used to read text aloud. Text files can be imported into Study Minder if they are set up using the format of:

Question 1 <enter>

Answer 1 <enter>

Question 2 <enter>

Answer 2 <enter>

Flash cards can be printed out. There is even a U3 version available for portability.

CONCLUSION

Assistive technology and software can greatly enhance the lives of persons with learning disabilities. It can be a tool to use to bridge the gap between potential and performance. What can you do with less than \$50? Text-to-speech, comprehension tools, writing supports, conversion to audio, study tools and combinations of these tools! In addition, there are the tools we have not discussed in this article but are built into current operating systems like speech-to-text, magnification, etc.! To answer our question, "What can you do?" LOTS!

ABOUT THE AUTHORS

Sherri Parkins; M.A., and Kevin Reinhardt; M.A., C.Psych.Assoc. frequently present internationally at conferences on assistive technology, learning strategies and disability. They also train professors, teachers and the general public on issues related to disability and the power of assistive technology. In addition, they coordinate the Assistive Technology and Learning Strategies Services and direct the Summer Transition Program for students with learning disabilities at Seneca College in Toronto, Ontario. Kevin also regularly conducts Psycho-Education Assessments. Together they

offer over 70 years of combined experience in disability and education!

PRODUCT LISTING

D-Speech

Company: Dimitrios Coutsoumbas
Address: Via Larga, 52 - Bologna (Italy)
Phone: 393-208-626514
E-mail: cyberdimio@gmail.com
Web Address: <http://www.softpedia.com/get/Office-tools/Other-Office-Tools/DSpeech.shtml>

Natural Reader

Company: NaturalSoft Ltd.
Address: #208-1455 West 71 Avenue,
Vancouver BC Canada, V6P 3B6
E-mail: support@naturalreaders.com
Web Address: <http://naturalreaders.com/>

WordWeb

Company: WordWeb Software
Address: 4 St Mark's Court, Cambridge CB3 9LE,
United Kingdom
E-mail: wordweb@wordweb.info
Web Address: <http://www.wordwebsoftware.com/>

Visual Thesaurus

Company: ThinkMap Inc
Address: 155 Spring Street, Suite 3A, New York,
NY 10012
E-mail: support@visualthesaurus.com
Fax: 212-285-8999
Web Address: <http://www.visualthesaurus.com/>

SpellCatcher

Company: John Tytler, Rainmaker Research, Inc.
Address: Toronto, Canada
E-mail: info@rainmakerinc.com
Web Address: <http://www.rainmakerinc.com/>

LetMeType

Company: Clasohm
E-mail: webmaster@clasohm.com
Web Address: <http://www.clasohm.com/>

ABC2MP3

Company: Rendition Technologies
E-mail: info@ABC2MP3.com
Web Address: <http://www.abc2mp3.com/index.php>

Mindomo

Company: Expert Software Applications
Address: Str. Independentei, Nr. 2B, Et. I, 300207
Timisoara, Romania
E-mail: info@exswap.com
Phone: +40 (0)256 486 430
Fax: +40 (0)356 401 964
Web Address: <http://www.mindomo.com/>

Webspiration

Company: Inspiration Software, Inc.
Address: 9400 SW Beaverton-Hillsdale Hwy,
Suite 300, Beaverton, OR 97005-3300
E-mail: CustomerService@inspiration.com
Phone: 800-877-4292
Fax: 503-297-4676

Web Address: <http://www.mywebspiration.com/>

FreeMind

Company: FreeMind
Web Address: http://freemind.sourceforge.net/wiki/index.php/Main_Page
Cue Card
Company: Cue Card
E-mail: wadetb@gmail.com
Web Address: <http://www.wadeb.com/cuecard/>
Use-Support Forum: <http://www.wadeb.com/cuecard/forum/>

Study Minder

Company: StudyMinder Software
E-mail: info@studyminder.com
Web Address: <http://www.studyminder.com/flashcards.html>

REFERENCES

Ae-Hwa Kim, B., Vaughn, S., Wanzek, J., & Shangjin Wei, J. (2004). Graphic Organizers and Their Effects on the Reading Comprehension of Students with LD: A Synthesis of Research. *Journal of Learning Disabilities*, 37(2), 105-118. Retrieved from Academic Search Premier database.

Duke, N.K. & Pearson, D. (2002). "Effective Practices for Developing Reading Comprehension." In A.E. Farstrup & S.J. Samuels (Eds.). *What research has to say about reading instruction*. (3rd ed., pp. 205-242). Newark, DE: International Reading Association.

Heckelman, R. G. (1969). A neurological-impress method of remedial-reading instruction. *Academic Therapy Quarterly*, 4 (4), 277-282.

Knight, K. (1998). Using Inspiration to organize writing and reading, *Learning Disabilities Online*. Internet available at: http://www.ldonline.org/ld_indepth/technology/inspiration.html

Laine, C. J. & Bristow, A. (1999). Using manual word-prediction technology to cue students' writing. Paper presented at California State University Northridge, 14th Annual Conference: technology and Persons with Disabilities, Los Angeles, California (March 18).

Perfetti, C. (1985). *Reading ability*. New York: Oxford University Press. Reinking, D. (1988). Computer-mediated text and comprehension differences: The role of reading time, reader preference, and estimation of learning. *Reading Research Quarterly*, 23, 484-498.

Reinking, D., & Schreiner, R. (1985). The effects of computer-mediated text on measures of reading comprehension and reading behavior. *Reading Research Quarterly*, 20, 536-552.

Wanzek, Vaughn, Wexler, Swanson, Edmonds, and Kim (2006) The effects of reading interventions on social Outcomes for elementary students with reading difficulties: a synthesis. *Reading & Writing Quarterly*, 22: 121-138, 2006.

Wiig, E. H., & Semmel, E. M. (1980). *Language assessment and intervention for the learning disabled*. Columbus, OH: Merrill. ■

Students Develop Self Advocacy Skills with “Vision Video” Web 2.0 Application

Travis is a handsome 14-year-old boy with severe physical and mental disabilities. He is working in a class of 5th graders to develop a goal-oriented vision video of his desired future. He has an aide working with him, but he comes up with the words for his video. He also finds the photos, chooses the music and sets the style. On “Movie Night,” he is sitting on his mom’s lap when his video is shown. She begins crying. Crocodile tears stream down her cheeks. Asked later about her reaction, she said, “This is the first time I’ve ever believed Travis could have a vision for his life.”

WHAT IS TEL.A.VISION?

TEL.A.VISION is an international movement that provides a simple, but powerful, multi-media tool that enables young people to exercise their “visionary imaginations.”

Students bring their own personal goals, priorities and dreams to life by creating a vision story of who they want to be and what they want to do in the future. By creating a personal TEL.A.VISION, students develop a three-minute video that becomes a compelling, multi-sensory “guided tour” through their own desired future. Throughout the creation of vision videos, the development of self-advocacy skills will be enhanced as students are able to understand and learn to articulate their strengths, needs and preferences and to problem solve their annual, career, life and topical goals. There are several other practical and important ways to use the TEL.A.VISION process with students receiving special education services including annual reviews, visions for the coming school year and career and transition visions as students prepare for life after school.

The curriculum guide is written for the special educator working with a wide range of student needs and offers a syllabus to support planning for instruction. It contains tools, including lesson plans that the teacher can use to document, plan and provide the instruction used to implement vision videos for the individual.

A team from the Special Education District of McHenry County, Woodstock, Illinois, wrote the curriculum guide. The team was lead by Dr. Christy Chambers, the district’s former Superintendent and former President of The Council of Administrators of Special Education (CASE).

Dr. Chambers had this to say about TEL.A.VISION, “Often our special education students become their disability. TEL.A.VISION helps them see their unique abilities.”

MY STUDENT’S BEHAVIOR IS MORE GOAL ORIENTED

Eric is a high school writing teacher with a large special education population in his classroom. Here’s what he says about TEL.A.VISION. “I found that the visionary aspect, the creative freedom and hands-on approach empowered previously unengaged students. Since the project, I have seen that by referring back to the goals set in the video, students are connecting daily work to long term goals in a more concrete manner.”

“From the first day that we started using TEL.A.VISION, there seemed to be an instant connection between the students and the program. The special education students in my class seem to be more comfortable writing and processing information on the computer than with a pencil and paper. TEL.A.VISION allowed them an opportunity to have success in the classroom in a format that permitted them to focus on what they were saying rather than the format that they were using.”

“I would recommend TEL.A.VISION to ANY teacher trying to get students to rise to their full potential.”

HOW CAN I LEARN MORE?

You can go to <http://telavision.tv/> to learn more about TEL.A.VISION or to request a free trial.

TEL.A.VISION is sold as a subscription service for schools and classrooms. Pricing begins at \$250 for up to 30 students. Each student receives his/her own personal account. Everything a student needs to complete a vision video is available on the site. Finished video can be downloaded and put on DVDs.

There are a curriculum guide and lesson plans on the site for teachers. All of the lessons can be taught using online tutorials.

TEL.A.VISION is a 501c3 non-profit organization. Classroom subscriptions can be made as a tax exempt donation.

To learn more about TEL.A.VISION visit us at this year’s Closing the Gap Conference. ■

RJ Cooper and Associates Announces Positioning, Mounting and Speaker Options for the iPad

Longtime developer of software and hardware solutions for individuals with disabilities, RJ Cooper announces several iPad positioning and mounting solutions for iPad users

iPAD MOUNTS

The iPad itself is attached to either Arm by one of two methods. The first and very secure method is with my Device Adapter, a two-piece system, with the Universal Base attaching, via Super-Velcro, to the back of the iPad and the Device Adapter screwed to the end of either Arm.

The Articulating Arm is attached to the wheelchair tubing by the very versatile (included) Super-Clamp. The Arm's tubes are shortened (they 'telescope').

The Mini-Arm works perfectly for situations where 3 to 13 inches of reach is needed. Very positionable, but very secure. The Super-Clamp, at the bottom of both Arms on this page, clamps to just about anything (wheelchair tube or support, bedrail, table, desk).



The Articulating Arm



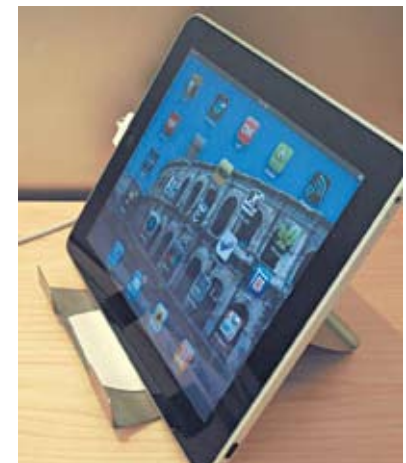
The Mini-Arm

iPAD SPEAKER

The volume of an AAC device is critical, especially in any type of noisy environment. And in my opinion, the iPad is not loud enough by itself. Hence, a need for an external speaker. I do this with my Auggies. There are some nice iPod speakers but they are all wired and run on AA or AAA batteries, and they drain pretty quickly. So I investigated Bluetooth speakers and came up with a winner! You see, Bluetooth never caught on with computers because each time either the speaker or the computer turned off, you usually had to re-'pair' the speaker to the device. A real pain and not do-able by our users! But the iPad is basically a big iPhone/Touch and it stays paired to the Bluetooth speaker, regardless of which was turned off/turned on first/last. It's great! So I am now offering a specific Bluetooth iPad Speaker which is small, LOUD, rechargeable, and works great!



iPad Stand with iPad Speaker



iPad Stand

iPAD STAND

Each iPad Stand comes with Stick & Suck, which allows the iPad to be positioned at many angles. It is also used to hold the Stand in place.

For more information and to order, visit www.rjcooper.com ■

Grembe releases iCommunicate 1.2.1 for iPad

Grembe Inc. is pleased to announce the release of iCommunicate 1.2.1 for Apple's revolutionary new iPad. iCommunicate allows the user to create customized storyboards and visual schedules. An in-app purchase will allow you to record audio in any language. We redesigned the app to take advantage of the larger iPad screen. The larger multitouch screen size will enable individuals with fine motor, coordination or visual challenges to access the app with greater ease.

Lisa Brandolo Johnson, a physical therapist, and Jeffrey Johnson, a software engineer, combined their skills, along with their personal experience, to found Grembe Inc. Grembe's mission is to create quality, versatile, affordable apps for parents and professionals. The release of iCommunicate for the iPad stays true to that mission.

Jeffrey Johnson says, "We are thrilled to bring iCommunicate to the iPad. We see the potential of the larger screen size, popovers, and how beautiful the pictures look, as something we can expand on in later releases. Popovers, with tips for use, and having more functionality on one screen are two things we are exploring."

Melanie Austin, MS, CCC-SLP, director of speech and language services at South Shore Therapies says, "The iCommunicate application provides a nice multisensory way to provide schedules, make requests and create storyboards. Most of our therapists use the iPod touch within our daily treatment sessions in order to access apps like iCommunicate and iReward. These apps are effective and useful for a variety of purposes. Another added bonus is that most children nowadays are extremely motivated by technology, regardless of age or disability." iPad is the latest in assistive technology.

DEVICE REQUIREMENTS

- iPad only
- Requires iPhone OS 3.2 or later
- 14.9 MB
- This app does not convert text to speech automatically. Audio must be recorded.
- We have a separate app for iPhones and iPod touches

PRICING AND AVAILABILITY

iCommunicate for iPad 1.2.1 is available on the iTunes App Store for the price of \$4.99 (USD). Custom audio in app purchase is also \$4.99 (USD).

PURCHASE AND DOWNLOAD

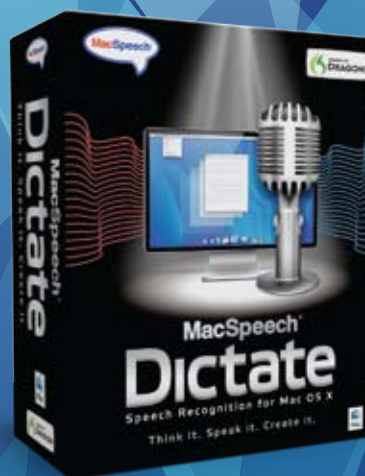
We are a husband/wife team with three children who develop apps that help families and professionals live happier lives. We know how much our children love the iPhone, and knew that if we could create apps that both parents and children use on a daily basis, we could create happier families. We strive to bring you quality, versatile, customizable apps at an affordable price. ■



You talk. It types.

MacSpeech Dictate

Premier speech recognition for the Mac.



www.macspeech.com

Available from MacSpeech, Apple, and other fine Macintosh retailers.
Visit the MacSpeech website for a complete retailer listing.



~~Type.~~ Talk!



Kurzweil 3000 Version 12 for Windows

More than a text reader, Kurzweil 3000 is an integrated literacy solution

Building on our long tradition of developing educational technology solutions that address the critical, day-to-day needs of the nation's struggling students, Kurzweil Educational Systems is pleased to announce the release of Kurzweil 3000 Version 12 for Windows.

Kurzweil 3000 is a powerful literacy learning tool for all students. In schools across America, Kurzweil 3000 technology provides reading, writing and test-taking supports that represent the core principles of Universal Design for Learning (UDL).

Students with learning disabilities, students who have the cognitive ability but not the reading ability to learn from grade-level content, and second language learners are among the many student populations that benefit from the use of Kurzweil 3000.

Kurzweil 3000 Version 12 for Windows features expanded writing support, including an enhanced writing toolbar that integrates with most process writing models and smoothly transitions learners from pre-writing through their final draft. It includes many other additional new features and enhancements, including:

- Text translation on-the-fly with Google Translate
- Ability to read MathML through a partnership with Design Science, Inc.
- Expanded eContent support through Internet Explorer

- Additional digital file support for PDF, Daisy 2, Daisy 3 and NIMAS

- A Picture Dictionary containing 1,300+ images supporting English and Spanish

- Human Pronunciations for over 64,000 words from American Heritage Dictionary

- Comprehensive set of brainstorm and outline writing templates

"We know that students in every state and in many countries in the world rely on our software every day to learn and express themselves. We take that responsibility seriously, and believe that this version is both more powerful and easier to use for all students, especially those who are struggling. By providing additional ways of engaging students and representing content, and by providing teachers and students with pedagogically sound digital learning tools, we are making a difference, one student and one classroom at a time," said Alex Saltonstall, General Manager of Cambium Learning Technologies.

Kurzweil 3000 Version 12 for Windows will be available in Stand Alone, Network, Web License and USB editions. To learn more about Kurzweil 3000 Version 12 for Windows go to www.kurzweiled.com/generalrelease. ■

Agapé Riding Center

Agapé Riding Center opens in Henderson, Minneosta giving individuals the opportunity to participate in equine assisted learning.

The new 501(c)(3) non-profit organization's mission statement is to develop capable and resilient individuals by incorporating horses into therapeutic and learning programs.

David Spellman, founder, has been horseback riding for 30 years. For years, he has taken guests for trail rides in the Minnesota River Valley. These areas are a great opportunity for wilderness explorations, appropriate for all riders.

Spellman has seen the results of his methods improve the lives of foster children. He said they were the inspiration for Agapé and knows it can help others.

Agapé works with foster families, people with disabilities and at-risk youth to connect people with nature. Agapé's services can serve as daycare activities and equine assisted psychotherapy and learning. It welcomes horse lovers to experience the trail rides for both beginners and experts.

Agapé means "love" in ancient Greek. It often refers to general attraction and denoted feelings of being content or holding one in high regard.

"When I think about Agape, one of the Greek words for love, I believe it is a missing part of our society. Agapé Riding Center's focus is to help people and providers gain a sense of independence through interaction with horses and Agapé's sensory trail," said David Spellman.

Spellman expanded his equine studies at the University of MN Extension Service. He has also been a Certified Nursing Assistant and received training from the State of Minnesota in Mental Health for Human Service Technician.

For more information, visit our Web site: www.agaperiding-center.com, e-mail: <david@agaperidingcenter.com>, or call: 612-581-8924. ■

28th Annual CONFERENCE

Closing The Gap

OCTOBER 21-23, 2010

Preconference Workshops

October 19-20, 2010

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 28th Annual Conference runs Tuesday, October 19th through Saturday, October 23rd and is held in Minneapolis, Minnesota.

Preconference workshops are scheduled for Tuesday and Wednesday, October 19th and 20th, and the Conference officially begins with a preview of the exhibits on Wednesday evening, followed by three days of presentations, hands-on labs and exhibitions.

Varied levels of participation are available, with registration options listed on page 45.

Inside the next few pages, you will find detailed listings of the 24 all-day preconference workshops, exhibitors contracted to date and academic credit/CEU, air travel, hotel and registration information. The titles and descriptions of the over 200 one- and two-hour presentations, including hands-on labs and iPod 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.

LEARN MORE AT WWW.CLOSINGTHEGAP.COM

24 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 PRESENTATIONS

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 presentations will be available on or about August 1, 2010. Details will also be posted at our Web site.



**A TRADITION OF
EXCELLENCE**
28 years of being the
leader in AT resources
and training.



**WHY YOU SHOULD
ATTEND**
Assistive technology
resources and training at
its very best.



**ACADEMIC CREDIT
AND CEUS**
Attend all five days and
earn up to three aca-
demic credits and 3.4
CEUs.



**EXCEPTIONAL
CONTENT**
Closing The Gap is
recognized by many as
the best educational
AT conference in North
America.



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
- Occupational Therapists
- Physical Therapists
- AT Consultants
- 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

Monday, October 18

5:00 pm - 8:00 pm Registration Desk Open

Tuesday, October 19

7:00 am - 8:00 pm Registration Desk Open

8:00 am - 4:30 pm Preconference Workshops

Wednesday, October 20

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

Thursday, October 21

7:00 am - 5:30 pm Registration Desk Open

8:00 am - 4:30 pm Presentations

*10:00 am - 5:30 pm Commercial Exhibits

Friday, October 22

7:30 am - 5:30 pm Registration Desk Open

8:00 am - 4:30 pm Presentations

*10:00 am - 5:30 pm Commercial Exhibits

Saturday, October 23

7:30 am - 2:00 pm Registration Desk Open

8:00 am - 1:30 pm Presentations

9:00 am - 2:00 pm Commercial Exhibits

**The exhibit floor will close for an exhibitor break from 12:30 pm - 1:30 pm.*

AAC INSTITUTE CEUS / CERTIFICATES OF ATTENDANCE

AAC Institute has been authorized to provide CEUs by IACET (International Association for Continuing Education and Training). CEUs will be offered for all conference learning 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 workshops are offered for up to 1.4 CEUs. The conference is offered for up to 2.0 CEUs. For additional information visit www.aac institute.org/CEUs.

CEU details and documentation will be available at the Closing The Gap registration desk located on the second floor of the Sheraton.

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: \$123

Requirements:

- 12 contact hours
- An outside assignment

(12 contact hours require conference participation or two preconference workshops.)

TWO FULL SEMESTER CREDITS Cost: \$246

Requirements:

- 24 contact hours
- An outside assignment

(24 contact hours require conference participation AND at least one preconference workshop.)

THREE FULL SEMESTER CREDITS Cost: \$369

Requirements:

- 36 contact hours
- An outside assignment

(36 contact hours require conference participation Thursday - Saturday AND two preconference workshops.)



Accessing the Artist Within Art Contest And Adapted Art Show

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

SUBMISSIONS ACCEPTED:

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

Submissions are currently being accepted by the Anne Carlsen Center and will be posted as they are received. A minimum of ten pieces of art will be selected to be shown at the 28th Annual Closing The Gap Conference, October 21-23, 2010.

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

For more information

www.accessingtheartistwithin.org

1 - 8 0 0 - 5 6 8 - 5 1 7 5

PRECONFERENCE WORKSHOPS

Tuesday and Wednesday, October 19-20, 2010

Tuesday and Wednesday, October 19 - 20

8: 00 am - 4:30 pm

PC-1 Multi-Modal Communication Strategies for Children Who Have Complex Communication Needs - PODD Communication Books (Two-Day Introductory 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 may 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 \$15 fee for the PODD course manual in addition to the \$480 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.

Tuesday, October 19 8: 00 am - 4:30 pm

PC-2 Getting Writing on the Radar for Students with the Most Significant Disabilities, Including Deaf-Blindness

From the very start, writing is an unquestioned component of literacy development for children without disabilities. However, for children with significant disabilities, including deaf-blindness, writing is often impossible due to their vision, speech and motor problems. This workshop will focus on getting writing on their radar! Individual and group emergent writing activities connected to state standards will be demonstrated, along with teaching strategies, sample goals, informal assessment methods and ways for students to write and scribble using "alternative pencils." Videos and very beginning writing samples will be shown of real students with significant disabilities in preschool to high school classrooms.

Gretchen Hanser, Ph.D., is the Associate Director of School-Aged Services, Center for Literacy and Disability Studies, University of North Carolina, Chapel Hill, NC and Toy Dills Booth, M.Ed., NBCT, is a Special Educator, The North Shelby School, Shelby, NC.

Tuesday, October 19 8:00 am - 4:30 pm

PC-3 Reaching Every Learner with Free Technology

How can I implement UDL without breaking the bank? This confident-beginner- to intermediate-level workshop will explore some of the best FREE ap-

plications for overcoming barriers and for facilitating independent learning. These free tools provide learners with multiple means of expression, engagement and representation. Programs that install on your computer, online applications and resource Web sites will be examined. Multiple text-to-speech options, software to support vision, ways of using voice recording as an alternative to writing or keyboarding and other free AT will be presented. Multimedia tools that engage learners and offer alternative ways of showing what has been learned will be explored. Participants will be shown the potential of classroom blogs and programs, such as Scratch or Google Sketchup, to engage and motivate learners. Participants MUST bring their own laptop computer (PC or Mac), with wireless network card and Firefox browser installed, to the workshop. Some software will be preloaded on DVDs for installation during and after the workshop.

Paul Hamilton, M.Ed., is an Assistive Technology Consultant, SET-BC (Special Education Technology), Courtenay, BC, Canada.

Tuesday, October 19 8:00 am - 4:30 pm

PC-4 Facing the Challenges of Access with Students Who've Had Less Than Successful Experiences

Access is truly a part of an activity, not an act that must be "solved" first, to proceed. Control of access, and its mastery, come with activity engagement. Activity engagement occurs when individual interests and learning specific information are married. This intermediate- to advanced-level workshop will focus on students who present real challenges - those students who are non-speaking, non-ambulatory, who have difficulty demonstrating postural control and who appear to exhibit inconsistent behaviors of intention. However, it will also focus on our preconceived, inadequate assessment techniques, and it will support our need to refocus on the activity itself, its task analysis and our learning environment.

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.

Tuesday, October 19 8:00 am - 4:30 pm

PC-5 Evaluation of Effectiveness: The Role of Data in AT Assessment and Implementation

This workshop will address the following points of interest regarding data and discuss evaluating the effectiveness of assistive technology tools and strategies for both low and high incidence students during the assessment and implementation processes. What should assessment data include? How do assessment and implementation data relate? What kind of data will best support implementation? What kind of data should be collected to support equipment recommendations and funding requests? What is the goal for the technology (or strategy)? What is the "minimum performance criterion" for the task at hand? What would it take to convince you that the intervention was successful? Who will collect, analyze, summarize and share the data? Through formal presentation and small group participation, participants will learn and discuss a variety of strategies through which to address the above concerns.

Jane Korsten, M.A., is a Speech Language Pathologist, AT Resource Specialist and Co-Author of EMC, Every Move Counts, Inc., Lee's Summit, MO and Terry Foss, M.Ed., is an AT Resource Facilitator, Shawnee

Attend all five days and earn up to three graduate-level academic credits and up to 3.4 CEUs!

Mission Public Schools and Co-Author of EMC, Every Move Counts, Inc., Lee's Summit, MO.

Tuesday, October 19 8:00 am - 4:30 pm

PC-6 Assistive Technology Supports for Struggling Students: Hands-On!

Participants in this workshop will have a hands-on experience using a full range of off-the-shelf tools, enabling students to function more independently and successfully. From hand-held devices, such as the iPhone, iPad and iPod touch, talking pens, and the applications that make them tick, to photo key chains, visual assistants, Web conferencing for therapy, Web sites that support learning and more, workshop participants will learn by doing. Throughout this fast-paced show-and-play session, participants will learn by using the most current and emerging technology tools, enabling a wide range of students, including the participant him or herself, to become more efficient at a variety of tasks! From the hardware and software that drive them, to the innovative ideas that open a world of possibilities for use, today's tools for access and success are waiting for you! (Hands-on activities will be conducted on both PC and Macintosh computers - one computer for every two participants.)

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 19 8:00 am - 4:30 pm

PC-7 Expressive Communication Needs Across the Autism Spectrum - From AAC to Social Communication: Tech Tools for Assessment and Intervention

This workshop will provide participants with an in-depth review of the functional expressive communication needs for all students with Autism Spectrum Disorder (ASD). The entire range of expressive communication abilities exhibited by students with ASD will be addressed, from students who are pre/non-verbal, to students with echolalia, to students who are extremely verbal yet lack the social communication skills to be successful communicators. Core communicative functions (essential life skills for communication!) will

SAVINGS

NEW FOR 2010:

- **RETURN DISCOUNT** for ANY past conference registrant (This discount is in addition to any and all other applicable discounts - deadline June 30th.)
- Group Discount - 5 or more
- Group Discount - 8 or more

ADDITIONAL SAVINGS:

- Preconference Workshop Bundle
A \$60 savings!
- Early Registration Discount -
on or before June 30th
- Parent / Student Rate
- Presenter / Exhibitor Rate

be reviewed, as well as where to start and where to go with AAC systems for students with ASD who are not effective verbal communicators. Assessment tools and curriculum-based programs to address the social communication difficulties exhibited by verbal students with ASD due to social thinking skill deficits will be explored in depth. Numerous examples of technology to teach various expressive communication skills to students with ASD will be shared, through a combination of video clips, actual materials and personal stories.

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

Tuesday, October 19 8:00 am - 4:30 pm

PC-8 "Help!, I'm an AT Specialist and I Can't Get Up!" Creating Manageable School-Based AT Services

Feeling the pressure of delivering AT services in your district? Well, we are a handful of folks serving a large district of over 63,000 students in approximately 95 schools and we're here to help. We know that many AT professionals working actively in the schools are left with little or no time to assess their programs, develop targets for change and produce a focused plan to address these targets. This workshop will provide an active program analysis and planning opportunity for attendees to develop a plan to improve their services and meet the needs of students, staff and families. Specific elements addressed in the planning process will include differentiated referral systems (e.g. high and low incidence), consultative services, systems of follow up, training and technical assistance, equipment management, documentation, participation in district planning and initiatives, methods of self-evaluation and reporting, and strategies to build site capacity for AT decision making. Networking, brainstorming, practice and discussion will be an integral part of the workshop and ample resources will be disseminated to allow participants to leave with ideas for immediate change.

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

Tuesday, October 19 8:00 am - 4:30 pm

PC-9 Teaching Reading When Students are at Emergent Level: For Students with Autism and Other Severe Disabilities of All Ages

This fast-paced workshop looks at the important development of emergent literacy skills for children with autism and other severe disabilities. Extensive video clips highlight the importance of relationship development, adapted supported reading and sound and letter play/work. Woven throughout is the foundational underpinnings of augmentative communication and technology. Participants will leave with an understanding of how to use supported readings and how to establish communication and interaction around reading with students with more severe disabilities. An understanding of the Building Blocks Model will be established and adapted in light of working with children who are non-verbal. The morning will cover the building blocks of supported reading, concept and vocabulary development and print concepts. The afternoon will cover the building blocks of phonemic awareness, writing and letter names and sounds. This workshop is perfect for special education teachers who are working with young or older students who are at an emergent level developmentally or cognitively. Hands-on computer activities will help integrate technology into the emergent reading strategies. (Hands-on activities will be conducted on both PC and Macintosh computers - one computer for every two participants.)

There is a \$30 materials fee in addition to the cost of the workshop.

Susan Norwell, M.A., is an Educational Specialist in private practice/Focused Learning Solutions and Instructor, Northeastern Illinois University, Buffalo Grove, IL.

Tuesday, October 19 8:00 am - 4:30 pm

PC-10 Supporting Students Using AAC Through a Core Vocabulary-Based Curriculum

Normally developing children enter school having "learned to talk" so they can "talk to learn." However, children with speech and language disorders, including those who rely on augmentative and alternative communication systems, need intervention that helps them "learn to talk" so they can "talk to learn." This intermediate workshop provides curriculum strategies for students with emerging language who use AAC systems that help them learn to talk so they can talk to learn. The emphasis is on developing critical language and literacy skills through curriculum strategies that 1) target language development (The Pixon Project Kit), 2) support play-based learning (Stories and Strategies), and 3) enhance literacy development (Bridge to Literacy). Lecture, demonstration, videotape examples and small group activities will be used to meet workshop learning objectives. The workshop is geared toward promoting the use of core vocabulary and language output that should be observed in 3- to 5-year-old children by the end of their pre-kindergarten experience.

Gail M. Van Tatenhove, M.S., CCC-SLP, is an AAC-focused Speech Language Pathologist in private practice and the President, AACell, Inc., Orlando, FL.

Tuesday, October 19 8:00 am - 4:30 pm

PC-11 Helping Teachers Integrate AIM in Classroom Instruction

After an IEP team determines that a student needs accessible instructional materials (AIM) and chooses the tools that a student with disabilities will use to gain access to core instructional materials, the work has only begun. Implementation planning, inclusion strategies and evaluation of the effectiveness of the use of AIM are essential if it is to become useful for student learning. What should teachers do to ensure that individuals who use AIM are able to participate as fully as possible in classroom activities and learning opportunities? What can research about classroom management and organization contribute to AIM implementation for individual children? How can principles of Universal Design and Differentiated Instruction help teachers plan for students' use of AIM in daily, classroom instruction? In this workshop, we'll share ideas and stories, and work together in teams with a focus on improving conditions for AIM-based learning.

Gayl Bowser, M.S. Ed., is an Independent Consultant, Roseburg, OR and Joy Smiley Zabala, Ed.D., ATP, is the Director of Technical Assistance, CAST and the National Center on AIM, Wakefield, MA.

Tuesday, October 19 8:00 am - 4:30 pm

PC-12 Keeping Current with Lite Tech AAC Systems and Innovations While Avoiding Technology Overload

You have acquired basic knowledge about lite tech AAC systems, but keeping track of the many new technologies and innovations has become a chore. Staying abreast of the latest technologies and acquiring new skills is not an option, it's a must! Gathering and sorting through information on over 300 commercially available lite tech products, understanding features and options for each and making decisions can be

overwhelming. Throughout the day, participants will have hands-on opportunities to examine a multiplicity of lite tech communication devices and employ systematic procedures for reviewing devices to gain insight into features and functions. Assessment procedures, tools to aid in identification and selection of the best system for meeting the needs of those developing communication skills or for complementing the use of a current communication system will be reviewed. Strategies for enhancing the use of personal communication systems will be addressed, with participants receiving "print and share brochures" to reprint/share in their work setting. Participants will receive a CD with copies of aforementioned resources ("print and share" for use of sequencers; single, double and multiple message devices; tools for analyzing/selecting devices; and assessment procedures). CD includes current chart, The Resource for Lite Tech Low Cost AAC, reviewing approximately 300 devices (those costing less than \$1,500) with photos, features, possible client characteristics and vendor information for each system. CD will contain glossary of lite tech terminology and a PDF of a PowerPoint presentation on lite tech for training others.

Elizabeth (Libby) S. Rush, M.A., CCC-SLP, CPM, is an AAC Consultant in private practice, Durham, NC.

Wednesday, October 20 8:00 am - 4:30 pm

PC-13 Literacy Frameworks that Guide Technology-Supported Assessment and Intervention

Literacy curricula and technologies come in a variety of boxes and binders. All work for some students. None work for all students. To help all students succeed, professionals and parents need to understand the cognitive processes that contribute to literacy learning success. In this intermediate workshop, we will explain two basic models of reading and writing. Then we will help participants learn how to use the models to assess student needs, identify appropriate teaching and learning strategies, and select (mostly free and Internet-based) technologies to support identified student needs. Participants will learn how to be more intentional in planning and delivering technology-supported literacy interventions to students with disabilities. Note: Although this is a demonstration workshop, participants are encouraged to bring their own laptop computer with wireless access to try many of the activities as they are presented.

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

Wednesday, October 20 8:00 am - 4:30 pm

PC-14 iPod touch, iPhone and iPad as Assistive Technology: From AAC to Planning Tool

Originally developed for the consumer market, the iPod touch, iPhone and iPad have proven to provide a wealth of possibilities for assistive technology with their brilliant graphics, audio and multi-touch interface. Participants in this workshop will learn about and will have an opportunity to try many applications that could make a difference for their students and/or clients, preschool through adult. While the hands-on activities will be on the iPod touch, the iPhone and iPad will also be discussed. The presenters will begin with Proloquo2Go, a complete AAC solution, and will follow with applications for sign language, planning, story telling, reading/writing and much more. Participants will learn how these solutions can make a difference for people with various disabilities, such as traumatic

brain injuries, autism, fluency disorders, mild cerebral palsy and others. At the end of the day, participants will know what hardware and applications to recommend, and will have learned to use some of the most promising AT applications available today. (Hands-on activities will be conducted on iPod touches - one iPod for every one participant.)

David Niemeijer, Ph.D., is the CEO, AssistiveWare, Amsterdam, Netherlands; Mark Coppin, B.S., is an Apple Distinguished Educator and the Director of Assistive Technology, Anne Carlsen Center for Children, Jamestown, ND; Eric Sailors, M.A., CCC-SLP, is a Speech Language Pathologist and Assistive Technology Specialist, La Mesa-Spring Valley School District, La Mesa, CA; and Jennifer Marden, M.S., M.A., is a Speech Language Pathologist, Technically Speaking, Roslindale, MA.

Wednesday, October 20 8:00 am - 4:30 pm

PC-15 Powered Mobility Assessment and Training with Children: How to, With What, Where, When and Why (especially for those children never previously considered candidates for powered mobility)

The times have changed; however, the assessment and training of powered mobility with children has not. This intermediate workshop will focus on seating, access and mobility, the equipment needed, its program and its use. Who the candidate is, how the chair performs, where the parts are mounted and the adapted seating are still "small" replicas of adult configuration. We will share the strategies and equipment that will create systems for children to support increased independent mobility. We will focus on first teaching mobility, and then on driving. We will share successful strategies of seating/positioning/access and equipment that have allowed children to develop functional independence.

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.

Wednesday, October 20 8:00 am - 4:30 pm

PC-16 Asperger Syndrome and School: What Does It Take, REALLY?

Though many of us are familiar with interventions for students with Asperger Syndrome, why can supporting student success seem challenging? As consultants working in the schools, we know that though this population may comprise a small part of the student body, trying to effectively program for them can consume a lot of time and energy. In this workshop, we will expand the discussion from single, child-centered interventions, such as schedules or social stories, to big picture issues in classrooms and at school and district levels that impact the success of this population. In order to promote successful participation in school, professionals must learn about the factors that set these students apart, examine the educational barriers that can impede their learning, and identify strategies to remove these barriers. School districts must also adopt a philosophy that supports the social, academic and emotional needs of students with Asperger Syndrome. To address these issues, we created the Self-Evaluation and Planning Tool: Educational Programming for Students with Asperger Syndrome, which consists of standards we identified as essential for student success. Participants will learn how these standards can be used to target specific areas of change in their classrooms or districts. Additionally, a Social Resource classroom model that the presenters helped to design, based on

the standards, will be highlighted so that workshop participants can leave with replicable ideas to infuse in their own settings right away. Technology used in these classrooms will also be discussed.

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

Wednesday, October 20 8:00 am - 4:30 pm

PC-17 Literacy Instruction for Individuals with Complex Communication Needs

The development of literacy skills has a profound positive impact on all aspects of life for individuals who require AAC. This workshop will discuss evidence-based practices for teaching basic reading skills to individuals who use AAC and demonstrate how to support the use of these skills in meaningful reading activities. The instructional activities are based on the recommendations of the National Reading Panel; they were developed and evaluated as part of a literacy intervention research project funded by the National Institute on Disability and Rehabilitation Research, as part of the AAC-RERC. The instruction targets phonological awareness skills, letter sound correspondences, single word decoding skills, application of decoding skills in book reading, recognition of sight words, reading and understanding connected text, and writing skills. The workshop will include video examples of the use of the instructional practices with children and young adults with cerebral palsy, autism, Down syndrome and other disabilities. (Co-author Dr. Janice Light will not be presenting; however, she will appear/present in many of the videos shown.)

David McNaughton, Ph.D., is a Professor of Education, Dept. of Education Psychology, School of Psychology and Special Education, Penn State University, University Park, PA.

Wednesday, October 20 8:00 am - 4:30 pm

PC-18 Using 21st Century Tools for Teaching and Accessible Learning

From streaming video to Web 2.0 tools, solutions abound for in-class teaching and teaching beyond the classroom walls, as well as tools for access and support. Learn, hands-on, how you can stream a lesson live to more than one location, use Web conferencing tools to address diverse learners in multiple locations at the same time, support AAC providers and users or provide technical support. Learn what free or inexpensive Web-based solutions allow you to assign work, review work in progress and provide comments and supportive materials that students can access from any Internet connection. Learn how to make use of free portable applications and online Web 2.0 applications, install Web browser add-ons, find solutions for access to the computer, access to text, supports for writing, note-taking, online file storage and more. (Hands-on activities will be conducted on both PC and Macintosh computers - one computer for every two participants.)

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.

Wednesday, October 20 8:00 am - 4:30 pm

PC-19 Designing, Implementing and Evaluating Universal Design for Learning Interventions

As schools seek to implement Response to Intervention (RTI) models, it is useful to provide teachers with advanced training in Differentiated Instruction (DI) and Universal Design for Learning (UDL). The purpose of this intermediate workshop is to provide

participants with experience in planning and implementing instruction for diverse learners and provide a forum for professionals who have been exploring the application of UDL and desire to implement advanced strategies in their classroom or scale-up UDL implementation. Participants will evaluate claims of UDL to refine their vision of what UDL is and is not. Access to new UDL tools will be provided for exploration and evaluation. Finally, the presenter will provide tools for gaining access to the research base concerning UDL and UD assessment. As a result of this workshop, participants will leave with new tools, resources and insights about the potential and the realities of UDL. Note: Given the practical nature of this hands-on workshop, participants MUST bring their own laptop computer (Windows XP/Vista/Windows 7 or Macintosh OS X) that includes a wireless network card, a Web browser and Microsoft Word, to the workshop.

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

Wednesday, October 20 8:00 am - 4:30 pm

PC-20 Adding MORE to Your Bag of Tricks ... and Treats!

Teaching children with autism includes many modifications and accommodations to insure that the students are successful. These should take place from the second the bell rings in the morning until the moment you finally get to sit down and take a deep breath at the end of the day after the children leave. There are constantly new and creative ways to do this, therefore I am continuously updating and adding to my "bag of tricks." These will include physical setup, visual strategies, social skills strategies, academic modifications and much more. Visuals can help with memory, comprehension, achievement, processing, independence and behavior. From the use of graphic organizers, picture symbols, highlighting, color-coding and more, academics can be more visual and provide clarity and support comprehension. Many of our students also have social deficits. Making social information visual will improve a child's ability to socially interact. Social stories, visual bridges, scripting and video taping/modeling are some techniques to teach social skills. During this fun and fast-paced beginner- to intermediate-level workshop, participants will make some of the visuals needed to create more successful environments. A list of free Web sites to support student achievement, many new ideas, real life stories and a CD filled with pre-made visuals that can be used immediately to get the ball rolling will also be shared. There is a \$35 materials fee in addition to the cost of the workshop.

Mo Buti, M.A., is the Chicago Public Schools' Coordinator of Autism and Cognitive Disabilities, Chicago, IL.

Wednesday, October 20 8:00 am - 4:30 pm

PC-21 Teaching Non-Verbal Children to Read: The Link Between Reading and Communication

This exciting workshop will focus on teaching non-verbal children with severe disabilities to read and write, utilizing a Balanced Approach to reading, while stressing the efficacy of literacy as an instructional tool for language development. Hands-on experiences with computer technology that supports reading instruction will be explicitly integrated into the learning. Often, technology is seen as an "add-on" to the instructional sequence; but in this workshop, it will be integrated so participants can better grasp the need for an integrated use of technology in instruction. The needs of the student who is non-verbal or "less than verbal" will be highlighted. Participants will learn to understand that these needs dictate how to "tweak"

a Balanced Literacy Approach to work for a particular child. Extensive videos illustrate key points and techniques in the instruction of decoding, guided reading and comprehension. Writing and self-selected reading will be explored as various technologies are utilized for the child who is unable to hold a pencil or even a book independently. The integration of augmentative communication and technology as a platform for giving children with disabilities a research-based approach to reading, similar to the more typical peers, is the focus. (Hands-on activities will be conducted on both PC and Macintosh computers - one computer for every two participants.) There is a \$30 materials fee in addition to the cost of the workshop.

Susan Norwell, M.A., is an Educational Specialist in private practice/Focused Learning Solutions and Instructor, Northeastern Illinois University, Buffalo Grove, IL.

Wednesday, October 20 8:00 am - 4:30 pm

PC-22 COMMUNICATION CIRCLES: With a Little Help From My Friends

Janice Light (1989) defines communicative competence as "... the ability to communicate functionally in the natural environment and to adequately meet daily communication needs." For students who use augmentative and alternative communication (AAC) and are in inclusive settings, this goal is very appropriate ... and challenging! WHERE do we find the time to support students in learning the linguistic, operational, social and strategic skills they need to engage in successful interactive communication? We suggest starting "communication circles" or circles of peers who support AAC users in learning and practicing skills. Additional goals include peer interaction, generalization of AAC-related skills learned in speech and occupational therapy, and integration of AAC and curriculum objectives. Communication circles support target students weekly, carrying out activities designed jointly by professionals and team members. Circle members also provide support by

keeping data and anecdotal notes. This workshop will include lecture, demonstration, brainstorming and case studies. There is a \$15 materials fee in addition to the cost of the workshop.

Caroline Musselwhite, Ed.D., CCC-SLP, is an Assistive Technology Consultant and Author, AAC Intervention, Litchfield Park, AZ; Jerolyn Allen, M.Ed., OTR/L, ATACP, is an Occupational Therapist and Assistive Technology Coordinator, Litchfield Elementary School District, Litchfield Park, AZ; Jane Odum, M.Ed., is an Education Segment Manager, Prentke Romich Company, Surprise, AZ; Jan Pilling, M.S., is a Speech Language Pathologist and Assistive Technology Coordinator, Brandon Public Schools, Brandon, MB, Canada; and Deanna Wagner, M.S., CCC-CLP, is an Assistive Technology Specialist, Madison Elementary School District, Phoenix, AZ.

Wednesday, October 20 8:00 am - 4:30 pm

PC-23 Flipping Over Adobe Acrobat

Getting work digitized for students is a constant concern for teachers. They need it done as fast as possible, but they also need a program that is inexpensive and works on a variety of computers and other technologies. Adobe Acrobat Professional version 9 is a program that best offers special educators and their students these tools. This intermediate- to advanced-level, hands-on workshop is designed to be a tutorial on the use of this program. It is designed to provide participants with examples of when and where to use the program in a variety of creative, timesaving ways that are not covered in the manuals. Participants will learn how to create a variety of PDF files and transfer them to other devices, use and unlock publisher-created PDF files, create comments and audio notes, use built-in accessibility features, create on-screen worksheets, make diagrams, label maps with pictures, bind multiple files, create presentations, create hypertext, use links and more. (Hands-on activities will be conducted on Closing The Gap-provided Mac computers - one computer for every two participants;

or, participants are welcome to bring their own laptop computer (Mac or PC) with Adobe Acrobat Professional version 9 pre-installed.)

Judith P. Sweeney, M.A. Special Education, is an AT Consultant and the President, Onion Mountain Technology, Inc., Canton, CT.

Wednesday, October 20 8:00 am - 4:30 pm

PC-24 Teaching AAC

This hands-on workshop is a must for anyone who supports, evaluates or works with students using AAC. Emphasis will be placed on improving the quality of instruction available to all students who use alternative and augmentative communication (AAC), from inclusive situations to special education programs with a range of student ability levels. Practical strategies, teaching tips and instructional strategies will be highlighted. A variety of systems will be available for hands-on use throughout the day, including DynaVox devices and Prentke Romich devices, as well as some light tech systems. Practical strategies for monitoring student progress, writing learning objectives and data collection ideas will be shared. In addition, light tech methods to support AAC during "the waiting period" and/or to determine potential use of more sophisticated systems will be addressed. Videotaped examples of students will be used to illustrate concepts and strategies. Each participant will receive a CD that includes Making Language Visible in the Classroom (commercially available) and other resources pertaining to AAC instructional strategies. 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 and Karen Biggerstaff, M.S., is a Speech Language Pathologist/Consultant, San Antonio, TX.

STATE-OF-THE-ART COMMERCIAL EXHIBITS

Wednesday evening through Saturday, October 20-23, 2010

Below are the contracted companies to date.

AAC Institute

www.aacinstitute.org

AAC Institute is a resource for AAC families and professionals. Products, services and resources support evidence-based practice and promote the highest communication performance possible.

AAC TechConnect, Inc.

www.aacTechConnect.com

A company that simplifies augmentative communication (AAC) evaluations by providing national workshops, online clinical/evaluation toolkits, and is a one-stop Web resource center for AAC info.

AbleNet

www.ablenetinc.com

AbleNet offers a complete line of assistive technology products, including communication aids, switches, environmental control, computer access and mounting devices. We also offer research-based special education curricula.

Adaptation, Inc.

www.adaptation.com

Adaptation produces innovative and affordable switches, environmental controls, alternative augmentative communication devices and other assistive technology for individuals with a wide range of special needs.

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 communication/ computer access.

AMDi

www.amdi.net

AMDi manufactures quality durable low to mid range communication devices focusing on providing simple to use solutions for communication to any age group..

AssistiveWare

www.assistiveware.com

AssistiveWare is the worldwide leader in innovative assistive technology software for Mac OS X and the iPhone, with products such as Proloquo2Go, Keystrokes and GhostReader.

Atomic Learning

www.atomiclearning.com

Technology Skills Collection: Including training tutorials on over 130 applications, Atomic Learning's Technology Skills Collection is a must have resource for technology support and training initiatives.

Attainment Company

www.attainmentcompany.com

Attainment Company products are created for individuals with developmental, learning and/or communicative disabilities to foster independence and increase active participation in classrooms and communities.

Augmentative Resources

www.augresources.com

Velcro-receptive communication books, visual display/choice boards, picture schedules and literacy aids. Check out our new Easy Push Talking Pockets and Communication Charm bracelets!

Beacon-Ridge

www.beacon-ridge.com

Beacon Ridge is a general educational materials and supply resource. We have many low tech solutions for time management, organization, handwriting, computer access and communication.

Bookshare

www.bookshare.org

Bookshare is the world's largest online library of accessible digital books for people with print disabilities. Our services are free for U.S. students of any age.



DON'T MISS THE PREVIEW OF EXHIBITS

**WEDNESDAY, OCTOBER 20
5:30 PM - 8:00 PM**

Great Hall, Sheraton Bloomington Hotel
Open to preconference and/or conference
registrants only.

EXHIBIT HOURS

Wednesday, October 20
5:30 pm - 8:00 pm
(Preview of Exhibits)

Thursday, October 21
*10:00 am - 5:30 pm

Friday, October 22
*10:00 am - 5:30 pm

Saturday, October 23
9:00 am - 2:00 pm
(Open to the public at no charge)

*The exhibit floor will close for an exhibitor
break from 12:30 pm - 1:30 pm.

**Cadan Computers dba
Technology for Education**
www.tfeinc.com

New speech interpreter software and deaf/hard of hearing portable software. Stealth Switch Interface, ProxTalker and Key Board Communicator.

**Cambium Learning
Technologies**
www.cambiumlearning.com

A leading source for educational technology to help students learn to their fullest potential, serving students who use assistive technology or need additional instructional support for any other reason.

CJT Enterprises, Inc.
www.yescjt.com

Modular mounting systems allowing AT devices to be optimally positioned to accommodate an individual's unique needs. Come see our NEW products for 2010.

Closing The Gap
www.closingthegap.com

Try, first-hand, the online subscription tool that allows users to search for and compare the latest in AT products and allows users to find, read and share articles that highlight effective AT strategies.

Cognitopia Software
www.cognitopia.com

Cognitopia Software's Picture Planner easy-to-use software that uses pictures and symbols in an icon-based personal activity scheduler for individuals with little or no reading ability.

Creative Communicating
www.creativecommunicating.com

Creative Communicating is dedicated to creating fun, simple and universally accessible resources for communication, early literacy and creativity for students with disabilities.

Crick Software, Inc.
www.cricksoft.com

Our mission is to improve literacy achievement for students of all abilities by providing educators with innovative solutions that are easy to use and cost-effective.

DO-IT, University of Washington
www.uw.edu/doi/

DO-IT serves to increase the participation of individuals with disabilities in challenging academic programs and careers, through the use of computer and networking technologies.

Dolphin Computer Access, Inc.
www.yourdolphin.com

Dolphin Computer Access delivers independence to people with visual impairment and learning disabilities through complete access solutions such as Dolphin SuperNova and the ultimate alternative format tool EasyConverter.

Don Johnston, Inc.
www.donjohnston.com

Award-winning products build in physical accessibility, integrate validated research, capitalize on new discoveries in brain science, align to standards and are presented in multiple medias through engaging instructional models.

DynaVox Mayer-Johnson
www.dynavoxtech.com www.mayer-johnson.com

DynaVox Mayer-Johnson offers assistive technology solutions for individuals with complex communication and learning challenges,

including the VVmax, Xpress, EyeMax, Tango and Boardmaker Software Family.

Exceptional Parent
www.eparent.com

EP Global Communications is a 39-year-old publishing company that provides advice and support to families of children and adults with disabilities and special needs.

Flexiciser International
www.fleiciser.com

Our product is designed to facilitate the law of movement therapy. Movement Therapy Device strengthens muscles, improves circulation and reduces spasticity for the mobility-challenged.

HumanWare
www.humanware.com

HumanWare provides innovative solutions, empowering people who are blind, deaf/blind, visually impaired or learning disabled.

Judy Lynn Software, Inc.
www.judylynn.com

Captivating switch and touch window software for students functioning at 9 months and up. Stop by booth 274 for a free catalog and demo.

Laureate Learning Systems, Inc.
www.laureatelearning.com

Researched-based, award-winning software for language assessment and intervention, communication, auditory processing, and reading designed to meet the unique needs of individuals with disabilities.

Lightspeed Technologies, Inc.
www.lightspeed-tek.com

The New Sound of Achievement, check out the new all-in-one REDCAT. This quick-set system saves the teacher's voice and raises academic achievement. Free evaluations available.

Marblesoft - Simtech
www.marblesoft.com

For over 25 years, Marblesoft - Simtech has produced outstanding special needs software for infants through adults. Stop by booth 261 to try our Simtech switch training software.

ModularHose.com
www.modularhose.com

Loc-Line Modular Hose is a unique plastic hose system that is flexible but yet self-supporting and re-positionable. Great for holding switches and utensils.

Monarch Teaching Technologies
www.monarchtt.com

VizZle easy-to-use special education software. Provides individualized, visuals-based interactive instruction for diverse needs, with the lessons and supports you need to be effective!

My Coin Chart
www.matheducation.us

My Coin Chart is a new and innovative educational tool that teaches students how to count coins up to \$1. Paper Flow Chart and Software.

N2Y Inc.
www.n2yinc.com

Channel current events with News-2-You, our weekly Internet newspaper. Acquire a standards-based special education curriculum with Unique Learning System. Communicate with our dynamic symbol set, SymbolStix.

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.

Nuance Communications, Inc. (MacSpeech)
www.macspeech.com

MacSpeech creates speech recognition solutions for the Macintosh. Our MacSpeech Dictate products dramatically enhance accessibility and productivity on the Mac. Find out more at www.macspeech.com

Origin Instruments Corporation
www.orin.com

Origin Instruments delivers computer access solutions for people with motor and speech disabilities. The HeadMouse Extreme is the company's flagship product.

Parlerai, Inc.
www.parlerai.com

Create a safe and secure online network for your child to collaborate with caregivers, friends and family. Visit our booth to see a live demonstration of the features that set us apart!

PointScribe
www.pointscribe.com

PointScribe is a multi-sensory, interactive software for teaching students of ALL abilities to handwrite using captivating visual, auditory, and tactile stimulation.

Prentke Romich
www.prentrom.com

Easy, yet powerful communication aids by Prentke Romich Company. Come see how easy it is to speak with ECO, ECOpoint, Vantage Lite, SpringBoard Lite and Vanguard.

ProxTalker.com
www.proxtalker.com

Logan ProxTalker is the first moveable picture communication system that actually talks. Encoded picture sound tags are used to form sentences and produce voice output when pressed.

Quilted Illusions
www.quiltedillusions.net

Quilted Illusions makes a variety of products for deep-pressure therapy including weighted quilts, weighted vests and weighted teddy bears.

Read Naturally, Inc.
www.readnaturally.com

Read Naturally provides reading solutions for struggling readers, including fluency, comprehension, phonics and assessment. The flagship program has been used nationwide for over 18 years.

RJ Cooper & Assoc., Inc.
www.rjcooper.com

RJ Cooper is considered one of the 'pioneers' in Assistive Technology, developing unique software and hardware solutions for special needs. RJ is known for his workshops and personal service.

Saltillo Corporation
www.saltillo.com

Manufactures and distributes augmentative/alternative communication (AAC) devices. We specialize in portable speech output devices for ambulatory individuals. Our products include ALT-Chat and ChatPC.

Slater Software, Inc.
www.slatersoftware.com

Slater Software presents two powerful programs, Picture It and PixWriter. Both reference Literacy Support Pictures to promote literacy. Also a complete line of Teacher Resources including Simply Science and Read and Tell.

SoftTouch, Inc.
www.softtouch.com

SoftTouch specializes in software for severe and profound disabilities. SoftTouch offers a wide range of products from basic cause and effect to standards based curriculum.

Switch In Time
www.switchintime.com

Switch In Time offers engaging games and music software for individuals of all ages and abilities.

Talking With Baby
www.talkingwithbaby.com

Mom's Choice Awards winner 2010 for Education Products category. Learn ASL and teach signing to babies and toddlers while promoting literacy at the same time.

Tel • A • Vision
www.telavision.tv

A Web 2.0 online curriculum and Web site that inspires special education students of all levels, to create and share goal oriented vision videos.

Texthelp
www.texthelp.com

Texthelp provides literacy software including Read&Write GOLD, reading/writing/research support toolbar that integrates with mainstream applications; and Fluency Tutor, online solution for developing/assessing oral reading fluency.

The Conover Company
www.conovercompany.com

The Conover Company provides computer software-based assessments and curriculum for transition, social/emotional learning, and independent living skills utilizing the iPod touch.

Tobii
www.tobiiati.com

Tobii offers a range of AAC products that give individuals with communication disabilities a voice and a way to live more fulfilled and independent lives.

Utechzone Co., Ltd.
www.utechzone.com.tw

Utechzone Co., Ltd., with the Machine Vision Technology, has developed an eye-controlled system, "Spring" Functions such as games, communication, multi-media and Web-surfing are all included.

Words+, Inc.
www.words-plus.com

For over 25 years Words+ has been dedicated to unlocking the person by providing a broad range of augmentative communication devices and associated technology.

Writer Learning Systems
www.writerlearning.com

Offering low cost, focused and effective learning tools for special needs and regular education students. Come by and see what's new with the Fusion and the new Writer keyboards.

Conference - October 21-23, 2010 Includes Preview of Exhibits – Wednesday, October 20, 5:30 pm - 8:00 pm

| Registration Received | On or Before June 30 | July 1 - September 9 | September 10 - September 30 | October 1 - Onsite |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| Standard Rate Group Discount - 5 or more NEW! Group Discount - 8 or more <i>All group registrations must be received at the same time.</i> | \$395 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50 | \$435 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50 | \$475 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50 | \$505 Groups 5+ Deduct \$30 Groups 8+ Deduct \$50 |
| Parent Rate <i>(A letter describing your child's disability must accompany registration)</i> | \$275 | | | |
| Full-time Student Rate <i>(Proof of full-time student status must accompany registration)</i> | \$275 | | | |
| Presenter Rate | \$305 | | | |
| Exhibitor Rate | \$305 | | | |

| Single-Day and Exhibit Hall Only Registration | Price |
|------------------------------------------------------------------------------|--------------|
| Friday Only - October 22 | \$250 |
| Saturday Only - October 23 | \$125 |
| Exhibit Hall Only - Wednesday evening through Saturday, October 20-23 | \$150 |

| Preconference Workshops - October 19-20, 2010 | Price |
|-----------------------------------------------------------------------------------------------------------|--------------|
| Tuesday, October 19 <i>(Some preconference workshops carry an additional fee for materials.)</i> | \$270 |
| Wednesday, October 20 <i>(Some preconference workshops carry an additional fee for materials.)</i> | \$270 |
| BUNDLED PRICING! Tuesday and Wednesday Bundle (\$60 savings) | \$480 |

NEW! RETURN DISCOUNT

A \$30 "return" discount is available to **ANY** past conference registrant and must be used by June 30, 2010.

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 code **RETURN** at checkout.

CONFIRMATION

All who register by October 1, 2010 will receive confirmation by mail.

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, 2010. 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. No refunds after October 1, 2010. Unpaid balances are due in full. Replacements are welcome and must be submitted in writing.

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 (Thursday - Saturday), 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

Sheraton Bloomington Hotel and the adjacent Hotel Sofitel are the official hotels of the conference. All conference activities are held at these two hotels 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 Sheraton Bloomington Hotel.

TRAVEL

Minneapolis-St. Paul International Airport (MSP) has one airfield and two terminal buildings – the Lindbergh Terminal and the Humphrey Terminal. Thirteen 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 <http://www.msairport.com/>

For those interested in flying Delta, Closing The Gap has arranged for them to offer discounted conference rates. For the lowest possible air fares, in the United States and Canada, call Delta at 800-328-1111, Monday through Friday, 7:30 am - 7:30 pm Central Daylight Time and reference the **Closing The Gap Conference, I.D. code NM5B5**.

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 Jim Nieman at 651-602-1665. 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 conference-site hotels directly. Please refer to the "Closing The Gap Conference" when making your reservations to receive conference room discounts when and where applicable. Both hotels have 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.

Sheraton Bloomington Hotel

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

\$149 - single occupancy
\$159 - double occupancy
(Both are in South Tower.)
(Plus applicable state and local taxes.)

Hotel Sofitel (a one-block walk from the Sheraton)

5601 W. 78th St.
Bloomington, MN 55439
Phone: 952-835-1900 **Fax:** 952-835-0545
\$159 - single, double, triple or quad occupancy
(Plus applicable state and local taxes.)

Cancellation policy for both hotels: Guest rooms may be cancelled up to October 1, 2010, with no cancellation penalty and your total deposit refunded to you. Any guest room cancelled after October 1, 2010, will be subject to forfeiture of the entire deposit.

2010 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 _____ E-mail _____

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, 2010.*

| Conference - October 21-23, 2010 Includes Preview of Exhibits - Wednesday, October 20, 5:30 pm - 8:00 pm | | | | |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|--------------------------------|-----------------------|
| Registration Received | On or Before June 30 | July 1 - September 9 | September 10 - September 30 | October 1 - Onsite |
| <input type="checkbox"/> Standard Rate | \$395 | \$435 | \$475 | \$505 |
| <input type="checkbox"/> Group Discount - 5 or more | Groups 5+ Deduct \$30 | Groups 5+ Deduct \$30 | Groups 5+ Deduct \$30 | Groups 5+ Deduct \$30 |
| <input type="checkbox"/> Group Discount - 8 or more <i>All group registrations must be received at the same time.</i> | Groups 8+ Deduct \$50 | Groups 8+ Deduct \$50 | Groups 8+ Deduct \$50 | Groups 8+ Deduct \$50 |
| <input type="checkbox"/> Parent Rate (A letter describing your child's disability must accompany registration) | | | | \$275 |
| <input type="checkbox"/> Full-time Student Rate (Proof of full-time student status must accompany registration) | | | | \$275 |
| <input type="checkbox"/> Presenter Rate (Presentation title: _____) | | | | \$305 |
| <input type="checkbox"/> Exhibitor Rate (Company name and booth number: _____) | | | | \$305 |

\$ _____

| Single-Day and Exhibit Hall Only Registration | Price |
|-------------------------------------------------------------------------------------------------------|--------------|
| <input type="checkbox"/> Friday Only - October 22 | \$250 |
| <input type="checkbox"/> Saturday Only - October 23 | \$125 |
| <input type="checkbox"/> Exhibit Hall Only - Wednesday evening through Saturday, October 20-23 | \$150 |

\$ _____

CONFERENCE SCHOLARSHIP (See page 45 for complete information.)

☐ 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.

\$ \$0.00

| Preconference Workshops - October 19-20, 2010 (Includes Preview of Exhibits - Wednesday, October 20, 5:30 pm - 8:00 pm) | | Price |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------|
| <input type="checkbox"/> PC-1 Two-day PODD Workshop, Tuesday and Wednesday, October 19-20 | | \$480 |
| <input type="checkbox"/> Tuesday, October 19 | 1 st Choice PC- _____ 2 nd Choice PC- _____ | \$270 |
| <input type="checkbox"/> Wednesday, October 20 | 1 st Choice PC- _____ 2 nd Choice PC- _____ | \$270 |
| <input type="checkbox"/> BUNDLED PRICING! Tuesday and Wednesday Bundle (\$60 savings) | | \$480 |
| I will bring my own computer for: <input type="checkbox"/> PC-23 <input type="checkbox"/> I will use Closing The Gap's computer. Participants in PC-3 and PC-19 MUST bring their own computer. | | |
| <input type="checkbox"/> MATERIAL FEE(S), IF APPLICABLE (The materials fee equals the cost of the materials provided.) | | |
| PC-1 - \$15 materials fee | PC-20 - \$35 materials fee | PC-22 - \$15 materials fee |
| PC-9 - \$30 materials fee | PC-21 - \$30 materials fee | PC-24 - \$20 materials fee |

\$ _____

\$ _____

ACADEMIC CREDIT (See page 39 for complete information and requirements.)

\$ _____

☐ One Semester Credit **\$123** ☐ Two Semester Credits **\$246** ☐ Three Semester Credits **\$369**

SUBSCRIPTION - AN ADDITIONAL NON-CONFERENCE OPTION (See page 47 or Web site for more information.)

\$ _____

☐ One-year ONLINE subscription - **\$50** ☐ One-year PRINT subscription - **\$36** (In the US); **\$52** (To Canada) ☐ Combination Subscription

☐ One-year ONLINE student subscription - **\$40** ☐ Two-year PRINT subscription - **\$64** (In the US); **\$92** (To Canada) One-year PRINT and ONLINE subscription - **\$75**

(\$ _____) **RETURN DISCOUNT - \$30** (Not applicable after June 30, 2010)

\$ _____ **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.)

Mail or fax form with payment or purchase order to: Closing The Gap, P.O. Box 68, Henderson, MN 56044; Fax 507-248-3810. **Or register online at:** <www.closingthegap.com>. All who register by October 1, 2010 will receive confirmation by mail. 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. For additional information call 507-248-3294 or e-mail <info@closingthegap.com>.

Cancellations must be received in writing by Closing The Gap on or before October 1, 2010. \$75 cancellation fee for each one-day preconference workshop, each one-day conference registration, or each exhibit hall only registration; \$125 cancellation fee for each three-day conference registration. No refunds after October 1, 2010. Unpaid balances are due in full. Replacements are welcome and must be submitted in writing.

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Quantity Discounts:

| | |
|---------------------|---------|
| 1-9 | \$16.95 |
| 10-24 | \$14.50 |
| 25-49 | \$12.25 |
| 50-99 | \$10.50 |
| 100-999 | \$9.50 |
| 1,000 or more | \$8.00 |

Free shipping and handling

If check in full payment accompanies an order for 10 or more directories (shipped within the United States only) Closing The Gap will pay shipping charges. Shipping and handling charges will be added to all invoices and credit card payments. Purchase orders will be accepted.

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Single subscription:

- ☐ One-year Subscription \$50
- ☐ One-year Student Subscription \$40
(Proof of current enrollment must accompany order.
E-mail or mail statement to Closing The Gap.)
- ☐ Combination, One-year Print and Online Subscription \$75 (U.S. and Canada)

Site license:

Site License – number of users: _____
(Purchase orders accepted.)

| Number of Users | Discount | Unit Price |
|-----------------|----------|------------|
| 10-49 | 25% | \$37.50 |
| 50-99 | 50% | \$25.00 |
| 100-299 | 60% | \$20.00 |
| 300+ | 70% | \$15.00 |

Please complete the following:

Name _____

Organization _____

Mailing Address _____

City _____ State / Country _____ Zip / Postal code _____

* Phone _____ Fax _____

* E-mail _____

* Required for Online Subscription and/or credit card orders

Occupation _____

Where did you hear about Closing The Gap? _____

☐ Check is enclosed \$ _____

☐ Please charge \$ _____ to ☐ Visa ☐ MasterCard

Credit card account number _____

Expiration date _____

Cardholder signature _____

Cardholder address _____

☐ Purchase order attached # _____

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29/2

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