Top Tools from the Trenches

Deaf-Blind Literacy and Communication Model Classroom Project (2007)

The deaf-blind model demonstration classrooms have been working very hard to foster meaningful literacy and communication instruction to students with the most significant disabilities, including deaf-blindness. The teachers and teaching assistants in these classrooms use a range of tools in order to be successful. If you're just getting started and aren't sure about what would be helpful, here are some important tools/resources that these teachers are using. The key is that it doesn't have to be fancy or expensive! The other key is that the focus should be on the actual teaching - the tools are an important support so that students can be cognitively and physically engaged in the teacher's instruction.

Large Easel, Lots of Chart Paper and Large Markers

Teachers use these throughout the day for a number of writing and reading activities. Many of the teachers like to use scented markers, especially for students with visual impairments.

Good Books for Group Reading

Pick books where there are LOTS of opportunities for:

1) discussion where students can use their communication systems,
2) teaching new vocabulary, and
3) relating book concepts to students' experiences.

In the model classrooms, teachers have found that students prefer non-fiction books. Check the Center for Literacy & Disability Studies website for a suggested book list that are also appropriate for older students: Picture Books for Older Readers, by Karen Erickson www.med.unc.edu/ahs/clds.

Simple AAC Devices

You don't need to have fancy augmentative communication devices to get started. There are a number of companies that make these, such as Ablenet, Adaptivation and Enabling Devices. Teachers use:

- single message devices (Examples: Big Mack, Chipper)
- sequencing devices (Examples: Step by Step, Sequencer)
- devices with 2-8 messages (Examples: iTalk, Say It, Cheap Talk 4, Cheap Talk 8, Tech Talk, and the Voice Pal 8).

There are no prerequisites that students need to master in order to use a simple communication device—the only way they are going to learn how to use it is by using it for meaningful activities.

The success of these devices most often has to do with what is programmed on them and the activity they are used for. Devices are typically used to make simple requests/needs, however, with some creativity can be used to foster interactions throughout the day! Besides using for repeated lines, single message devices can be used for open-ended comments that can get others to talk and explain concepts during reading and writing activities. Sample messages include: I have a question, you're kidding me, that's interesting, explain it, talk about that, that reminds me of something, I know about that, I don't understand.

Single messages devices can also be programmed with yes-no types of messages. Moving beyond simply "yes" and "no" by using different types of positive and negative statements can be motivating and socially appropriate. Giving students access to a generic positive comment and a negative comment can give them many more opportunities to communicate throughout the day. Sample "no" comments: no way!, I don't think so!, not! Sample "yes" comments: I like that, awesome, that's what I want, that one, yup, yesiree.

Single message devices can also be used for "partner assisted scanning." Partners list through student's choices and the student indicates what they want with a single message devices programmed with a positive comment or "that's what I want." For more information about Partner Assisted Scanning, go to Top 10 Tips for Partner Assisted Scanning from the Center for Literacy & Disability Studies www.med.unc.edu/ahs/clds. Multiple handouts about partner assisted scanning can also be downloaded from Linda Burkhart's website: www.lindaburkhart.com.

Light Tech Communication Flip Systems

Communication flip charts are paper-based systems that consist of multiple pages of messages. The pages might be organized by categories (i.e. actions, feelings, questions, describing words, people, colors, shapes, places,), activity based (i.e. lunch, reading time, weather) or pragmatic intent. Using a paper-based system is a great way to expose students to a larger vocabulary when there are few AAC devices available. See Karen Casey SLP for flip systems developed for early communicators. See Caroline Musselwhite and Gretchen Hanser for flip systems developed for writing. See Linda Burkhart & Gayle Porter for PODD systems organized by pragmatic intent www.lindaburkhart.com. Any of these can be modified to meet individual students' needs.

Alternative Pencils

In order to develop literacy skills, all students MUST have a way to write using the full alphabet- no matter what level of understanding they have about print. The most popular and easy to use pencil is the Print Alphabet Flip Chart. This is an alternative pencil for students who cannot write with their hands and are learning to use switches. It doesn't require a computer and is easy to make. The guide and printable materials for this alternative pencil and over 30 other alternative pencils can be found on the Writing With Alternative Pencils CD ($35) from the Center for

Literacy & Disability Studies at the University of North Carolina. You can also go to the case study of Jake to see a video of the Print Alphabet Flip Chart in use. Go to: www.med.unc.edu/ahs/clds.

Research Based Curricular Resources

- Meville to Weville: An Early Language & Literacy Program, (appropriate for emergent readers & writers) www.ablenetinc.com. Has over 100 lessons that have been designed specifically for students with significant disabilities.
- Extending Meville to Weville to the Literacy Starter Kit Lessons www.ablenetinc.com
- Children with Disabilities: Reading and Writing the Four-Blocks Way, by Erickson & Koppenhaver. 2007. From Carson-Dellosa Publishing.

Digital Camera

A great tool for making classroom based, personal books (i.e. my classroom book, people at my school book, places at school book, cafeteria food book, field trip book).

Durable Switches & Switch Mounts

- Switches: There are tons of switches on the market from a lot of different companies, such as Ablenet, Adaptivation, Enabling Devices, Inclusive Technologies, RJ Cooper. It is helpful to start with some simple, all-purpose, durable switches, like Jelly Bean switches and Big Red switches. They are durable and have an auditory click and some movement to them (www.ablenetinc.com). It is helpful to get two different sizes to help kids' with varying motor skills. It is also helpful to start with simple touch switches. Switches such as the Pal Pad do not make a click and do not have any movement (www.adaptivation.com). This feature has helped decrease the switch smackers/bangers since they aren't getting any clicking/movement from the switch. Instead, the feedback is from the activity.
- Switch Mounts: If you have students who have great difficulty with reaching out and touching a switch with their hands, it may be important to position switches in a different place. Some students might use a head, arm or foot. In these cases a switch mount might be needed to hold the switch in place. Many of the companies that sell switches also sell mounts. However, simple, inexpensive mounts can be made out of PVC pipe or "Loc-Line." Loc-Line is a flexible, plastic gooseneck like material that can be purchased from www.modularhose.com. Simple Loc-Line switch mounts can be made for under $15. A handout with the directions can be downloaded from the Center for Literacy & Disability Studies. www.med.unc.edu/ahs/clds.

Assorted Tactuals

Many teachers have assembled a box of tactuals to use to tactualize books and to create tactual symbols for students with vision impairments. They use simple things such as fun foam, yarn scraps, popsicle sticks, felt, embroidery screen, puff paint, cardboard and pieces from fake

plants. A handout with suggested materials can be downloaded from the Center for Literacy & Disability Studies. www.med.unc.edu/ahs/clds

Braille Labeler

This is a very useful tool that allows teachers to make Braille on the fly. It is a handheld labeler that generates strips of Braille on adhesive back tape. Knowledge of how to write Braille is not needed to use this. This is useful when small amounts of Braille are needed. It is also used as the student's "printer" when they are writing with the Braille Flip Chart alternative pencil. Before purchasing a Braille Labeler, be sure to consult with the local Teacher of the Visually Impaired as they may have one available. Braille Labelers: ~$35 from www.independentlivingaids.com

Word Wall

A word wall is a multi-level support that is helpful for emergent readers/writers to conventional readers/writers. It is simply a large wall in the room that contains commonly used words. It is stationary, available at all times and is setup at student eye/wheelchair height. Because the word wall is up all of the time, it is easy to teach and to refer to throughout the day during lots of activities.

The goals of the word wall will be different for different students, from students who need to develop print awareness to those who are just beginning to read words. Cover the wall with black paper. Use a large marker to write words on individual extra large cards. The curricular resources in #6 describe how to teach with a word wall.

Computer & Software

Your students can use the computer for both reading and writing. You will want computer speakers and a microphone (used for recording your speech in books). Before you purchase ANY software, do make sure that your computer can run it.

- Writing: Software that speaks the letters that students write provides important feedback to students. Common examples of talking word processing software programs are: IntelliTalk II or IntelliTalk III (www.intellitools.com), Write Outloud (www.donjohnston.com).
- Free talking word processing software for PC: Read Please, www.readplease.com
- Reading: Students can use the computer to read electronic books; this is especially important for students who are unable to hold a book with their hands. A great resource for good, FREE electronic books is Tar Heel Reader (www.tarheelreader.org). This website contains hundreds of simple, age appropriate books that have been written for students with significant disabilities. Students can read the books online or they can be downloaded onto the computer. Teachers can setup students with a "favorite" books page where they can have access to more than one book. The books have all been designed so that they are accessible using 1-3 switches and using the IntelliKeys. On

the website, there are specific directions for how to set this up. You can also author your own books. A great resource for appropriate books for self-selected reading!!!!

You can also make your own electronic books. Examples of commonly used software:

- Power Point—this is part of Microsoft Office and may already be on your computer
- My Own Bookshelf-software that has been designed exclusively to make books(www.softtouch.com).
- IntelliPics Studio/Classroom Suite-software that can make books, but can also be used to make many, many other types of activities. (www.intellitools.com)

Computer Access Technology

Students who cannot physically use the computer keyboard or the mouse may need supplemental technology to help them access the computer for reading and writing activities.

Computer Switch Interface. This is needed for students who use switches. This is a simple small box that plugs into your computer. Students' switches plug directly into it. (Switches can also be used by students who do not have motor issues—it can be a way to keep them from getting into your hard drive.) There are many different types of computer switch interfaces. Some are simple plug and play interfaces, and others can be programmed using software. When getting started, the simple plug and play interfaces have been easy to use and are about $100. (Don Johnston Switch Interface Pro 5.0, www.donjohnston.com, Quizworks USB Switch Interface http://quizworks.com) **Different switch interfaces allow you to plug in a different number of switches. It is important to get an interface that allows you to plug in multiple switches. The interfaces above have 5 switch ports. This gives you a lot of flexibility for your students and the types of software that you can use the switch interface with.

IntelliKeys Keyboard: This is an enlarged, programmable keyboard that is helpful for students who can't type with a regular keyboard. The IntelliKeys uses special overlays that slip into the keyboard. Each overlay has a different configuration, such as letters in ABC order, letters in a QWERTY order, numbers, and mouse arrows. The IntelliKeys is available from www.intellitools.com. This keyboard works well with talking word processing software.

There is a variety of other software from IntelliTools. Classroom Suite is a bundle of software that contains: IntelliPics Studio, IntelliTalk III, IntelliMathics. These do come with already made activities and can be used to make your own accessible activities. An additional piece of software, Overlay Maker, allows you to make your own overlays for the IntelliKeys. If you can't afford these programs, it is fine to start with the IntelliKeys as it will work with all of the other programs that you already have. If you do buy these programs, it will be important to have time to learn how to use this software.