



**Family Center on
Technology
and Disability**

FCTD Conference Series: Assistive Technology and Emergent Literacy

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Assistive Technology and Emergent Literacy

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Hosted by Dr. David Koppenhaver

EXPERT'S CORNER

Introduction

Dr. David Koppenhaver explains that for many decades, literacy was viewed as a cognitive process, learned through direct and sequenced instruction in school settings, and taught after certain "readiness skills" were acquired by children. Today, literacy is best described as a social, psychological, linguistic, and interactive process in which written and oral language are best learned from birth, in purposeful and interactive contexts, with many opportunities to observe and interact with others who read and write. Reading, writing, speaking (including augmentative communication), and listening develop concurrently and interrelatedly rather than sequentially. However, many children with significant disabilities are left behind and are not given the same opportunities for literacy instruction as their typically developing peers. This is especially true for children who are non-verbal and use augmentative and alternative communication (AAC) systems (i.e. strategies and or devices to supplement or take the place of natural speech). In general, adult expectations for individuals who use augmentative communication systems are often lower for persons who use AAC. Literacy opportunities are typically fewer and less frequent for AAC users and the child's role is often passive and non-interactive. Barriers to literacy for children with disabilities may be caused in part by reduced adult expectations and prioritization of various medical and physical needs that take time, and precedence over literacy instruction. Although access to literacy often takes time and effort, it is important that we provide opportunities to all children early on. Typically developing children have over 1000 hours of access to reading and writing before they start school. In this discussion we'll explore ways to extend that access to children with disabilities.

Expert's Perspective

Emergent literacy is a term used to describe all of the reading and writing that children do before they become conventionally literate. It includes everything from playing school, to scribbling on the

walls, to reading aloud familiar books by retelling the pictures. It is a particularly important concept for children with disabilities because it assumes no prerequisites except being a living, breathing human being.

Emergent literacy is characterized by the following six generalizations:

- The process of learning to read and write is a continuum that begins at birth, and perhaps before.
- Reading, writing, speaking (augmented communicating), and listening abilities develop concurrently and interrelatedly rather than sequentially.
- The content and functions of print are as integral to literacy learning as the forms.
- Children learn written language through (cognitively) active engagement with their world.
- Emergent literacy behaviors are fleeting and variable, and dependent upon text, task, and environment.
- Technologies, media, and materials can dramatically impact children's ability to demonstrate emergent literacy.

It is on this last point, especially, that we will focus some attention in the coming month in our online conversations. With a variety of instructional and assistive technologies, we can support ALL children's learning, active engagement, language explorations, and ability to demonstrate what they're learning.

Emergent literacy, however, represents an important starting place for all children with disabilities, but it is not the end goal.

Our goals as parents, educators, and a democratic society should be universal literacy. That is, we want everyone to be able to read independently with understanding and to write independently in order to communicate ideas. In order to accomplish universal literacy, once we have provided a rich array of emergent literacy experiences, we need to provide a balance of more structured learning opportunities in four areas: (a) letters, words, and sounds; (b) reading text with understanding; (c) writing; and (d) self-directed literacy experiences.

Each of these four areas can be supported by a wide variety of technologies, media, materials, and strategies. In the coming month, we can focus on any or all of these areas. We might talk about implementing emergent literacy at home or in early intervention programs. We might talk about technologies to support the learning and performance of older struggling readers. Anything related to literacy, disabilities, and technology is fair game.

The choice is yours. What questions or thoughts do you have about helping your child read and write better? What wonderful successes can you share with all of us? What are you trying to figure out right now? I look forward to our interactions and learning with you over the next month.

Expert's Bio

David Koppenhaver, Ph.D. Associate Professor, Education Department, Gustavus Adolphus College. David holds a Ph.D. in curriculum and instruction from the University of North Carolina at Chapel Hill (UNC). He is the former director of the Center for Literacy and Disability Studies and has worked for the past 21 years with preschool- and school-aged children who have a wide variety of literacy learning difficulties. He currently teaches undergraduate classes in reading methods, inclusive education, and instructional technology. He has written and lectured widely on literacy instruction for children with significant disabilities and was the recipient of the 1998 International Society for Augmentative and Alternative Communication/Don Johnston, Inc. Distinguished

Lecturer Award. A Fulbright Scholar to Australia in Fall, 2002, he is currently collaborating with the Schonell Special Education Research Center in a three-year study of writing instruction for middle school students with developmental disabilities and co-authoring a pair of methods texts on beginning literacy instruction and lifelong literacy supports for individuals with developmental disabilities.

CONFERENCE

Transcript: AT and Emergent Literacy

- **Director's Welcome by Jackie Hess**

I'd like to welcome everyone to the Family Center's fifth national online discussion. Our topic this month, *The Role of Assistive Technology in Emergent Literacy*, is an important one. Our expert, Dr. David Koppenhaver, has helped change the way the education world looks at the process by which children and adults acquire literacy skills. He has helped move the field from a more simplistic, "off-on" approach to literacy, to a more realistic, "continuum" approach. Parents of children with disabilities recognize and confirm the idea of development along a continuum. It's an experience with which we're very familiar. I urge you to take an active role in this discussion. Dr. Koppenhaver is well versed in assistive technology and the ways in which AT goods and services support emergent literacy. Please feel free to pose questions and to share your own experiences. Again, welcome.

- **Re: Director's Welcome by Dave Koppenhaver**

Jackie,

I have a question on behalf of all of us that join this discussion this month. Can you resource list URL's be made into active links, so that we can more easily explore them? Thanks.

Dave

- **Re: Director's Welcome by Jackie Hess**

The Word document you submitted had to be translated into html. We've done that and the links are now hot. Thanks for providing them.

- **Re: Director's Welcome by Marty**

I don't think the links are working properly. You might want to take another look.

- **Welcome by Dave Koppenhaver**

Let me add my welcome to Jackie's. I was very pleased to be invited to chat with you online this month. My closest colleague, Karen Erickson, and I share a strong personal belief that all children can learn to read and write. Together this month, I hope we can share information, resources, successes, challenges, and, in the process, support more children in successfully learning to read and write. Let me finish with two questions for you: Do you believe that your child can learn to read and write? What works best for you in supporting that belief? I'll check in a few times each day, so we should have lots of same-day interaction.

- **Re: Welcome by Amy Finch**

Hi David, Although I don't have any children of my own, I am a speech-language pathologist who is very interested in literacy issues for all children with disabilities, but especially those with severe disabilities. My work is primarily with children who use augmentative-alternative communication systems and other types of assistive

technology. I have to admit that my work has been heavily influenced by your work along with Karen Erickson's. Thank you for all that you have done to facilitate literacy intervention for these children.

Some things that I am trying to do with all of my students:

1. Make literacy a part of every session with the student and parents by making accessible books and having accessible tools for writing.
2. Make the literacy activities within individual settings, at home and at school accessible for the child through the use of adapted books, electronic books, simple and complex communication systems (e.g., BIGmack for repeated lines; communication boards to accompany reading activities).
3. Read to children and work on a variety of comprehension strategies and provide a means of working on these strategies.
4. Work on increasing knowledge of words through a variety of means.
5. Work on awareness of sounds and manipulation of sounds.

These are just a few of the activities we are trying to do daily with the children that we see.

- **Re: Welcome by Dave Koppenhaver**

Hi Amy, Nice to chat with you on-line. Can you talk to all of us about some of the strategies you use to help AAC users become more aware of sounds, and how you make it possible for them to manipulate sounds? Thanks.

- **Re: Welcome by Discussion Board Guest**

What a wonderful opportunity for a parent; to be able to access such an important leader in the field. I am grateful and I look forward to increasing my knowledge of the topic.

My son is 14 and has Rubinstein-Taybi Syndrome.

He is cognitively impaired, hearing impaired and has not developed verbal speech. He has used AAC for more than 10 years, a DynaMyte for nearly 6 of them. He spells and uses word prediction as a direct selector.

* We expected Josh to learn to read.

* I always added text under the symbol on his communication pages/boards. (much to the dismay of the school staff - that was then, for the past 3 years Josh and I homeschool)

* We read and write everyday. Everyday. It's fun and an integral part of our day. We read from 3 sources each day. We write either a grocery list, a daily schedule, menus, and email, program a new knock knock joke, something, everyday.

* We (myself, my husband and our older daughter) are good reading and writing models. Josh sees us read and write, too.

* And this may seem a bit out of the usual suggestions, I tell everyone to close-caption their televisions. We have accessed close-captioning for years now. Josh likes to watch tv and his DVD collection. He spends time every day in front of the TV. The close-captioning is another way to expose Josh to written words and I believe it has contributed to his strong literacy skills.

Again, I recognize the tremendous resource this discussion is for families. I plan on spreading the word! Thanks for the opportunity.

Pam Harris

- **Re: Welcome by Dave Koppenhaver**

Pam, Thanks for the great suggestions. Three cheers for how you support

your son's literacy in real ways. You engage him in personally meaningful activities, model processes, and interact with him about those interesting texts.

Closed-captioning actually has a research base supporting your beliefs. It especially helps folks with hearing impairments, folks learning English as a 2nd language, and adolescents and adults who read more like beginners. All of the tv's made in the last few years have a switch, making it easy to turn on and off. You can also buy captioning devices, but it is probably cheaper nowadays to just get a new tv.

Three cheers for you and Josh! Dave

- **Re: Welcome by p Cassidy**

Yes, I believe everyone can learn to read. However, for most of my students so many "things" interfere. I am very lucky to have a high School Student who is available for one period per day for literacy instruction. However, trying to fit everything in is very difficult. This student is a scanner. Just doing 1 Making Words lesson takes us a good portion of the hour. I have another student who is a scan user and is visually impaired. She cannot see text. She uses two switch step scanning and can access the alphabet. For her to independently write a 4 word sentence in her journal is physically exhausting and time consuming. I would like to figure out Balanced Approach daily/weekly???

- **Re: Welcome by Dave Koppenhaver**

You raise some great points!

Given the time and scheduling constraints of most high schools, it makes some sense to try to balance across time rather than daily. Another approach is to consider the various classes and out-of-school experiences that might support balance and then to use your class time to provide the additional balance. For example, maybe Mom and Dad can provide self-directed reading and writing experiences, guided reading may happen in social studies and science, and so you would then focus on writing and working with words. When activities take a long time because of access, you can also consider alternative forms of response depending on the instructional goals. For example, Making words is a spelling activity. Rather than scan, could the student (eye)point to a letter board? Could your slow journal writer, dictate by (eye)pointing? If the point is getting ideas down (as most people use journals), the faster we can do that, the more ideas we have to work with later in revision or writing for publication/grade. While we work toward independence, we also want to do what we can to facilitate reasonable accommodation given instructional goal.

- **More than one AT medium by Isabel**

I have non-verbal child with access to a computer at home, (windows platform. We'd like to know how do we take her reading and comprehension etc to a higher level and allow it to be effective and meaningful for her (and us) What suggestions of a reading program would be appropriate for us to explore via computer. Currently we are incorporating Write-Outloud and are unsure what else we should attach to further her reading abilities. Would the same process be applicable to an augmentative device also?

Any suggestions or direction to take would be appreciated! Thank you!

- **Re: More than one AT medium by Kari**

I am interested in knowing how old your daughter is and what communication device she is using... Here are some initial thoughts-

If you are addressing reading comprehension there are a few computer programs

that may work (again, depending on your daughter's age).

Intellitools publishes a software package called Balanced Literacy- it is a 1st grade reading and writing curriculum but I have found it to be appropriate for many ages and abilities.

Riverdeep publishes a series of programs called "Stories & More" that also target reading comprehension.

Don Johnston has a Start-to-Finish series of books that come with the narrated CD Rom, an audio tape, and the actual paperback book. There are about 70 titles in all and there are "quizzes" at the end of each chapter to test comprehension.

You could incorporate a communication device by adding vocabulary that would be appropriate to story time or the literacy activities on the computer (turn the page, read it again, etc.) Another strategy may be to teach your daughter to pair appropriate words or phrases to build sentences. For example: instead of programming canned messages such as "I want to read the book" you could program one message for "I want" and have several choices including "to read a book" "to hear it again" etc. This may give your daughter an opportunity to build sentences that may more accurately reflect her thoughts.

Again, the appropriateness of these programs and strategies really depends on your daughter's age and ability. If I am way off base, I would be happy to look into more appropriate options. By no means is this a comprehensive list but hopefully it will give you a start!

- **Re: More than one AT medium by Discussion Board Guest**

I agree that the Balanced Literacy program from Intellitools is WONDERFUL!! It can be used for all ages as a starting place. I am a Speech-Language Pathologist working in an elementary school in Corpus Christi, TX. I have used materials from Bingo games to simple rhyming stories with all of my nonverbal, limited verbal students to increase vocabulary and basic literacy skills. I have used adapted books that are offered by Mayer-Johnson, Inc. with GREAT success. There is no age too early to expose children to books and thus improve book awareness, print awareness, and sequencing.

I hope this helps. -JO

- **Re: More than one AT medium by Discussion Board Guest**

Thank you Kari for your suggestions and ideas to get going in a fruitful direction with our home programming. My daughter is 13 and currently her means of communication is sign language (Signed English) and limited verbal. We are also exploring obtaining services of a SLP to work with us & her to promote verbal skills as she will give us a phrase and or single words paired with the signs. Her school will be setting up a Tech talk (it has 32 tiles?)activating something like 5 tiles to begin with in trials in 1 to 2 academic areas. We're looking for additional means to further her communication skills in a more natural environment. What school will be trialing will not be coming into the home/community and we're concerned that she could misunderstand the intent and motivation to utilize device if limited to certain locals or occasions.

We clearly thought your suggestions/strategies for the vocabulary and altering format from 'canned responses' were in the direction of where we would like to go. We will give it a go and collect data to see how well we

implement and present to her. As for the reading ideas, I'll re-visit Riverdeep and Don Johnston sites. I'm also interested in your suggestion of the Balanced Literacy (which currently I know nothing about!)

One more question to you, how well would the Distar Reading program work with adaptation to the computer? I'm open to other suggestions of what and how I could incorporate and propel her abilities in a progressive and forward manner. Thank you for your time, it's appreciated!

- **Re: More than one AT medium by Dave Koppenhaver**
Distar is a highly systematic and repetitive means of teaching word level skills, not addressing comprehension. I'd discourage it's use. If you want a more interesting software for kids to do something similar, take a look at Don Johnston's Simon SIO. Again, this is a phonics/word program, not a comprehension tool.
- **Re: More than one AT medium by Dave Koppenhaver**
I'll answer with questions for now. How old is your child? How well does she read/write currently? How do you know? How well is Write-Outloud working? What communication device is she currently using and where are you heading next with communication? This info will help us all think more about some good answers to your questions.
 - **Re: More than one AT medium by Discussion Board Guest**
She's 13yr. As we are developing a home program (supplement to school)for starter (being we still don't truly know) she's demonstrated an ability to read 3rd grade level dolch site words and phrases, using discrete trials and variety of 'retail' level readers to use for creating questions to determine comprehension. As for the Write-Outloud, she'll use it to (copy) her responses, which via task analysis it still requires prompts to get her going, (which are multiple choice)from that we work on building sentences from those chosen answers. So our home team opinion is that WO is working slow but fairly well as we continue to incorporate it. She is definitely enthused to control computer to speak her own words to us, which we encourage. As for current use of a given device, it's not actually activated in use at this time, perhaps in another week or so a few trials within educational setting for one to two academic areas will it be introduced for her to utilize etc.. As to where we are heading with communication; we'd like to further address use of laptop with Write Outloud and figure out what else to incorporate to further her skills to make it more effective as we will be looking towards development of meaningful communications to enhance social skills/friendship development. She is a visual learner and has used pix writer and boardmaker, but now she demonstrates to us her desire to use the written/typed word to communicate and we're attempting to explore what effective ways and means we can accomplish this for and with her in the home and community.
 - **Re: More than one AT medium by Dave Koppenhaver**
Are you a school psychologist, or have you picked up the jargon through experience :-)? Given some success with WriteOut:Loud, 3rd gr sight vocab, and interest in writing, explore Co:Writer. It works well with WriteOut:Loud. It is a spelling prediction program. We've used it with a wide variety of students who either need spelling prediction or keystroke savings. You might also look at Simon SIO as a way to support your daughter's developing spelling abilities. Both of these products, like WriteOut:Loud, are sold by Don Johnston. You can do lots of good by writing with her--writing your grocery list where she

can see the words/hear you thinking aloud, emailing and talking aloud, writing a letter to relatives, making to-do lists, co-authoring the home-school journal communications...

- **Re: More than one AT medium by Kari**

Hello- I agree with Dr. Koppenhaver's suggestion to look into Simon SIO and Co:Writer. Both are great programs. Word prediction similar to Co:Writer can be incorporated within a word-based communication device. Your daughter could use word prediction to compose messages while having a portable voice output device. My concern with implementing a communication system on a desktop computer is that it is not portable enough to have communication in all environments. If you haven't already, you may want to connect with an Alliance for Technology Access Center in your state (www.ataccess.org).

- **Re: More than one AT medium by Dave Koppenhaver**

Another concern with using desktop computer as communication device comes up in our summer course on Literacy in AAC. That is, the AAC user can only communicate or engage in a computer-based activity, not do both simultaneously (as s/he might, e.g., with a Dynavox or other high end device connected to a computer). This is important in literacy, where we want learners to be able to read, write, speak/communicate as interactively and recursively as possible.

- **Working with families by Kari**

Thank you Dave for sharing your time and expertise with us. We at PACER are pleased to have one of our local Minnesotans as the national expert!

The topic of literacy as it applies to children with disabilities is one of great interest to both parents and professionals. I know that you have worked closely with many parents and families. Often parents call with questions about how to approach literacy with their children- what age to start, how to teach, are there prerequisites, etc. What do you tell parents and how do you address a family who is just beginning to explore the process? Do you immediately implement assistive technology solutions or are there other approaches that you will use?

Thank you again for your time and we all look forward to a lively, interactive discussion!

- **Re: Working with families by Dave Koppenhaver**

There are no prerequisites. It's never too early to start. I read to my kids from birth- mostly because it was fun to hold them, and I love children's book myself. Super baby books tell you to read to your kid in utero, and some research suggests that fetus can distinguish human voice from other environmental sounds/noise for last 3 months of development.

Take a look at some of the products, technologies, and resources that Pati King-DeBaun has for promoting early language, literacy, and communication in children 0-3.

AAC strategies (use of sign language, picture symbols) wouldn't hurt any child, and has been used successful to promote expressive communication in children who

aren't yet talking (and maybe won't).

Try to facilitate drawing as kids approach their first birthday--if hand-held drawing/painting tools aren't possible, finger/hand painting is fine, using VideoPainter, markers attached to lego cars, pens pushed through tennis balls, tools velcroed to handsplints... The issue is not product quality--if I never see another early intervention/special education art experience where the teachers do all the work hand-over-hand with pre-made materials, I'll die a happy man. The issue is exploring the tools, the colors, the textures, and the experience of making your mark on the world--all of which lead into writing somewhere between 3rd and 6th birthday when kids have lots of these experiences.

That's already a long answer and there's lots more. Start now. Reading is easiest. Point to pictures with young children. Point to letters and words occasionally when children are 3-5 years old.

- **Literary & Developmental Disability by Marty**

I'm thrilled to discover this online chat in "real time." Usually, I stumble into these worthwhile postings after the fact. I am the Director of an Assistive Technology Project in the Los Angeles area serving the needs of individuals with developmental disabilities and their families. Part of our services includes a partnership with the LAUSD Division of Adult & Career Education. The partnership offers adult computer classes for beginners. It has been a wonderful and successful program bringing these skills to adult learners with a range of disabilities across a spectrum of ability and need.

However, one access barrier for an experience that presupposes literacy is literacy, itself. Many of our adult students have the interest, motivation and capability but have not had the opportunity.

One observation: In my research, I am inevitably directed to "learning disabilities" which is a separate universe altogether that does not necessarily address many of the more unique issues at play with developmental disabilities. I am coming to the conclusion that there really isn't a lot of work specifically in the area of literacy and developmental disability. Have others had this experience?

What I come across is the more generic materials like disability awareness and people-first language but not actual curriculum or strategies that adapt traditional literacy models, trainings and assistive technologies.

I am interested in hearing from others on this subject.

- **Re: Literary & Developmental Disability by Dave Koppenhaver**

Literacy is not prerequisite to literacy, but language is. You can support adults who read like beginners (or who cannot read conventionally) with multimedia (e.g., powerpoint or hyperstudio or intellitalk II books), with recorded text (e.g., taped books, scanning text into talking word processors). You can also create personal books around topics of interest. We've had good success taking favorite music, using the lyrics as the text, and adding photos. Most rock, folk, pop, country music has simple language and lots of repetition. With older struggling readers, a great entry into literacy is writing. You can support early writing by using picture keyboards (e.g., intellikeys with PCS symbols) or software like Writing with Symbols or Picture It.

As to literacy and developmental disabilities, you can look for work by some of these folks: Beth Foley, Gus Giordano, Teresa Iacono, Karen Erickson, Doreen Blischak,

David Koppenhaver, Ralf Schlosser. There are others, but those will get you into the literature and then you can find the other work that those folks reference.

- **Re: Literary & Developmental Disability by Deb West**
I would like clarification about what "literacy" means for the person with a severe/profound cognitive disability who is at a cause/effect stage of learning.

- **Re: Literary & Developmental Disability by Dave Koppenhaver**
I don't define literacy differently based on diagnosis or ability/disability. Literacy is reading and writing independently for personal purposes with sufficient attention to convention that a stranger can understand what you've written. Or your knowledge of convention (spelling, grammar, syntax, text structure...) is sufficient that you can understand a text someone else has written. What might be different is how that text is read or written independently for such a person. For example, to support this person's comprehension we might need to use a multimedia text rather a static presentation of words. To support this person's writing, we might need to use a picture-based keyboard. What we do to support independence today might not be the solution we seek to work toward over time.

- **Re: Literary & Developmental Disability by Joan**

Let me respond to this with anecdotal information. People love to read about themselves. Using a digital camera and powerpoint, I made a book for my nephew when he was 4- all about him. He loved it, and read it every day-knowing the stories which I had written on each page eventually by heart and being able to "read" to others. Most people with developmental disabilities cannot find books which are age appropriate or interesting. Using the same or similar technology, make books about places, people, family, activities, pets, work, church, social stories, TV shows- whatever is exciting, motivating, reinforcing- you get the picture!

If you want to make the book be electronic, record in powerpoint the person's voice telling you about the picture on each page, and write the same text on the page. Record a job coach's voice for a book about work, or a minister's voice for a social story about behavior in the church. Making reading interesting is really important, and all of us love to read about our own lives.

- **Re: Literary & Developmental Disability by Dave Koppenhaver**
Amen. You could do this in PowerPoint (Microsoft), Buildability (Don Johnston), Intellipics or IntelliStudio (Intellitools), Hyperstudio, AppleWorks...

- **Re: Literary & Developmental Disability-life stories by Discussion Board Guest**
Hi, Nick Hogan, a Language Therapist, chiming in here. This life-experience story approach is just so powerful for so many reasons that we must do more with it. the focus on known content confirms knowledge and builds fluency in reading. The focus on desired knowledge increases motivation, which in turn adds to attention and memory. The opportunities to build vocabulary, to use grammar structures and text structures makes this type of activity a gold mine.

A last note on the "low-tech" end- I often do this with little ones with just a paper and pen, by dividing a page into 4 or 9 squares and making a cartoon with line drawings and words. the immediacy is also very powerful, as kids see stories take shape right before their eyes.

- o **Re: Literary & Developmental Disability** by **Tania Aveling**

Hi Marty,

I know where you're coming from! I work with primary aged kids with intellectual disabilities and ASD, and even finding age-appropriate resources and curricula for the upper-primary (ages 10 to 12) aged kids is a challenge! I've also worked with adults in literacy programs and basically, there's very little. Some teachers I've worked with say that if a child hasn't learned to read by the time he/she is twelve, it's all over. I don't know about that. Some of the adults with intellectual disabilities at my church have started their own "reading and writing group", led by a woman who went to a special school and never learned to read there - she was taught by a group of students whom she lived with when she was in her late twenties.

I have found a great book - "Teaching Reading to Children with Down Syndrome" - that contains some ideas that are appropriate for motivated adults. Other than that, with older kids (even from Year 3 onward) I often resort to making my own books, based on their experiences. Better than falling back on resources for younger kids, I think.

- **Literacy for LD Students** by **Kathleen McClaskey**

I am an AT consultant, trainer and evaluator for students with learning disabilities. I have rarely seen a discussion around the effective use of technology for students with learning disabilities. I have been in the educational technology profession for almost 20 years and envisioned that technology would be the great equalizer in K-12 education. I believe we are on the path to that vision. I have developed a teaching and learning model around improving literacy for LD students with the effective use of technology. I am aware of much of the research on this but was wondering if anyone knows of a current technology and LD model in public schools that has shown to improve literacy for LD students. Also, I would like to hear from others who share the vision that effective use of technology with LD students can improve literacy outcomes.

- o **Re: Literacy for LD Students** by **Dave Koppenhaver**

Not sure what you mean by a current technology and LD model. Can you elaborate? I'm assuming from your other statements that you've read people like Charles MacArthur, Steve Graham, and Karen Harris, and their work doesn't fit what you're looking for?

- **Reading Milestones** by **Margaret Poore**

I am an SLP who designed a literacy program for a 6th grader reading at 1st grade level a number of years ago. She has SSPI, no verbal speech, and was a single switch user.

For a reading curriculum, I used a program called Reading Milestones, developed by Steven Quigley and Pat McNally. Designed for students with hearing impairments, for students with language and learning difficulties, and ESL.

It is a sight approach, which was what my student needed. We worked on phonics (Simon SIO) but she never was able to decode phonetically beyond a pretty basic level. In Reading Milestones every single word is specifically introduced as are all language forms.

There were two drawbacks to the program. One was that it was juvenile and far below my student's interest level. We discussed this at the onset and her motivation to learn to read

was enough that she didn't let that stop her.

The other drawback was that it is a hard copy program; not switch accessible without modification. But we worked around that using low tech strategies.

Her favorite part of the program was Working with Words. As you mentioned earlier in the discussion, we had her use eye gaze on a large classroom whiteboard rather than having her spell out the words using her switch and scanning.

Reading Milestones is still available; I did a web search and found it at Slosson.

My student graduated from high school last year, reading at a fifth grade level. She continues to work on her reading skills and is taking a couple of college courses.

Thanks to David and Karen and others who helped me to develop this student's program!

- o **Re: Reading Milestones by Dave Koppenhaver**

Margaret,

I've not seen this program, so I can't really comment on the specifics. There are a couple of observations I can make based on your comments that might help others engaged in such problem-solving: (1) If it works, do it. You found success, and should keep those strategies and materials. (2) Your best tomorrow should be better than your best today. You advanced your student from 1st to 5th gr level, a level sufficient for independent reading and writing in a wide variety of materials. The challenge to you, and others using this program, is to try and figure out how to move similar students to 6th gr or higher next time. What was missing? (3) Instructional conversations make or break any program. The age-interest issue is critical to keeping motivation of older poor readers. You got around this by being up front with your student and encouraging her.

Thanks for sharing with us.

- **When is it too late to learn? by Dave Koppenhaver**

Tania raised a good point in one of the threads. She questioned whether "it's all over" if a child hasn't learned to read by age 12, and pointed out some adults with disabilities in her church had formed their own literacy group. Literacy learning is a product of experience and instruction. If a person is provided these ingredients in interesting, age-appropriate ways, then learning can occur at any age. When students plateau, it is not a demonstration of the limits of their learning ability, it is a demonstration of the limits of our current instructional approach and the need to change if we want to continue to support progress.

- o **Re: When is it too late to learn?- some research by Discussion Board Guest**

Hi Dave, Nick Hogan here- this is great. I was reading to prepare for a talk about co-morbidity of Behavioral-Emotional Disorders and Language Delays when I ran across some animal studies that may shed a little light on the "Is it too late?" question.

In the April issue of "Science" magazine, a study looked at normal development of auditory skills in rats. When they were exposed to white noise during that "normal development" period, the skills did not develop. However, the brain seems to have retained it's readiness to learn what was needed, and the brain's plasticity- even in adult rats- was like the more receptive rat pups brains. The potential is there until it is tapped.

This supports what we have seen with older children and young adults- when given the needed stimuli and appropriate experiences, their brains respond. This was

central to the work done with Melissa, a teen-ager with whom we worked on specific, early-developing language, movement, and literacy experiences to support the development of underlying skills which she might have missed due to her developmental issues. (See "Waves of Words", published by ISAAC, for details of that story). We must have faith in the developmental process, in the plasticity of the brain, and in the integrity of our vision of literacy for all.

- **Re: When is it too late to learn?- some research by Dave Koppenhaver**
Hey, Nick,
Trust you to come out of left field :-). But I take your point. If rats' brains are amenable to learning at later points in life, surely human beings would be, too. Karen and I have seen some of the same results that you and Lois always share: older kids, adolescents, adults--given personally meaningful, accessible texts and rich interaction consistently show us their interest in and capability of learning.
Thanks for joining in.

- **Re: When is it too late to learn?- some research by A Wershing**
Nick and David,
The role of technology and access to appropriate technology also weighs in in this discussion. For Chris, whose story also is in Waves of Words, the combination of appropriate technology with the methods that David, Karen and Pat Cunningham have developed made all the difference in allowing him to move forward at a very late stage in his life. The technology just wasn't there earlier in his educational career, and low tech strategies coupled with lack of confidence that he was able to master literacy concepts just didn't work to allow him to learn or to show his mastery. Until he had ready access to technology and instructional strategies that were proven, he just wasn't able to show what he was capable of doing. And now, with the amount of technology tools to assist with literacy instruction continuing to grow, let's hope that learners will be able to show their true potential.
Alice Wershing

- **Re: When is it too late to learn?- some research by Dave Koppenhaver**
Hey, Alice,
Perhaps the most powerful technology, if we can assist one another in sifting the nuggets from the dirt, is the internet. I talk/write with parents constantly who are gravely disappointed in the education their children aren't getting. With the internet, we have the potential to put good materials and instructional strategies and supports in the hands of these parents. I talk with nearly as many SLP's and special educators and other professionals who are doing their darndest to help some child or classroom but unable to find the materials, resources, support they need at different points in the process. Again, the internet makes it possible to provide these resources whether a local system is supportive or not, to any individual who wants them. Dick Allington once said that real school reform happens one teacher and one classroom at a time. The internet will make a significant difference in the next 3-5 years.

- **Re: When is it too late to learn?- some research by A Wershing**
Absolutely right about the Internet! It really was the "hook" for getting my student even interested in text. When his favorite teacher in his local school system moved out of state and started sending him email through our office, it really was the thing that got him interested in

reading and writing. And he found that just having a bank of words in Discover didn't work, he needed to work towards the next level of text-based communicating in order to say what he wanted to say. Instant messaging on-line also helped him to see the power of written communication and new people would give him feedback when his syntax didn't quite make sense. Now, he is beginning to use on an online dictionary and some e-text to work on vocabulary, in addition to some other AT.

Alice

- **Re: When is it too late to learn?- some research by Dave Koppenhaver**

The beauties of instant messaging for literacy are many from a learning standpoint: (1) real audience (which motivates attention to quality and convention and clarity); (2) shared topical relevance (you and the other messengers talk together about what you care about--even if your parents or teachers or other folks don't); (3) motivating (any time we can support kids/learners in reading and writing when they don't have to, we've won something important). Thanks, Alice.

- **Re: When is it too late to learn?- some research by Discussion Board Guest**

I am a special ed teacher, LD. Recently, in a class I was taking, I was stunned to hear the professor state that typically our profession believes that students, if they have not learned to read well by the 7th Grade, must learn "functional" reading. Essentially we give up. This philosophy was confirmed by another teacher, except that she said that some believe that 5th Grade is the time to switch to functional reading.

I have had amazing results in teaching older students --7th Grade and up-- using multisensory teaching techniques, Orton-Gillingham based, and by using meaningful and fun text. They've gained 2-3 years decoding/comprehension skills in a year. I've seen students who had given up cry tears of joy as they master multiple syllable words for the first time. I listen to the students, his/her/their likes and dislikes, and I tailor the instruction accordingly. It is direct, sequential, cumulative, logical, linguistic, child-centered, and meaningful. Orton is specifically meant for students with dyslexia, but has been used successfully with students with DD.

I've been building a PowerPoint program to support this instruction. It is never too late to learn reading; just ask my students! -Lora

- **Re: When is it too late to learn?- some research by Dave Koppenhaver**

Lora,

Three cheers for you for teaching. Your professor is correct in observing that many in the teaching profession believe that 7th gr is the time to shift to functional reading if a child isn't making good progress. This should NOT be interpreted as best practice but rather as typical practice. It is not supported by research but rather by school system inertia, full bucket syndrome ("my bucket is full, there is nothing more I can learn"), and blinders ("my mind is made up, don't confuse me with the facts"). We've experienced the same success as you, with a wide variety of teaching techniques in addition to Orton-Gillingham. The fundamental issue with older poor readers, labeled or not, is determining relative strengths and weaknesses, and then designing an instructional program that supports the former while

developing the latter and does so in interesting and age-appropriate ways.

- **Re: When is it too late to learn?- some research by Discussion Board Guest**

Dave, can you detail--or point me towards the right direction--other specific reading techniques or methods that you feel are highly successful?

I feel like I cannot learn enough about this topic! -Lora

- **Re: When is it too late to learn?- some research by Dave Koppenhaver**

You go, girl! Rather than specific methods, I'll give you a couple of authors to check out. These are all folks who write from a balanced perspective and have expectations that all children can learn to read and write. They will get you started and link you to other good stuff: (1) Steve Graham and/or Karen Harris--writing and LD kids--applicable to lots of other populations, too; (2) Patricia Cunningham, James Cunningham, Richard Allington--regular education, classroom literacy instruction--great stuff that works--easily adapted for all kinds of kids. All these folks have multiple articles (you can find in the ERIC database) and books (you can find in amazon.com or academic libraries, sometimes in education sections of Barnes and Noble). Happy learning.

- **Re: When is it too late to learn?- some research by Discussion Board Guest**

Thanks!-lora

- **Re: When is it too late to learn? by Discussion Board Guest**

Hello. My name is Teresa. I have a 17 year old son with verbal apraxia. He recently started using a Dynamo for communication. He has not learned how to read. He can identify a few words and has used the PECS system for several years. Do you have any suggestions of teaching him how to read. The school has used Edmark with little success.

- **Re: When is it too late to learn? by Dave Koppenhaver**

Some possible starting places and resources: (1) Create personal books either paper + pictures or multimedia versions using PowerPoint, AppleWorks, HyperStudio, IntelliStudio, IntelliPics, Buildability or the like. Keep the pictures personally relevant. Keep the text short--couple of words, labeling the picture or activity. Read these with your son. Encourage him to read them also. (2) Create personal books around concepts or ideas you're trying to teach him. Same principles. (3) Create personal books around his favorite music. Use lyrics as the text. Encourage repeated reading. Here are some resources to explore: (1) a paperback by Patricia Cunningham entitled "A Teacher's Guide to the Four-Block." Very easy to read and full of good strategies for beginning readers. (2) Take a look at the description of our summer course, <http://www.gac.edu/~dkoppenh/summer.html>. Consider attending or sending one of his teachers. Lots of parents have come in previous years--we speak plain English. I can entice you with a remaining scholarship we have. Email directly. (3) Tell me where you live and I may be able to recommend someone locally to assist.

Last, get ride of Edmark. Not because it is bad, but because it hasn't been working for your son. Anything that doesn't work, needs to go, especially when a student is a teenager--we need to get him moving quickly. Lots more to answer your question. Feel free to ask additional questions.

- **Re: When is it too late to learn?** by **Discussion Board Guest**
Thanks for the information I will start researching. I live in Boise, Idaho.
-

- **reading with a visually impaired child**, by **linda**
Hi David,

This a great forum to connect with you again. I have heard you speak many times(In Conn, at Closing the Gap).

I am a mom with a child (age 13)who has no functional vision and is a single switch user with auditory scanning. A great friend of mine(reading recovery teacher who worked closely with the AT specialist) spent a summer assessing her, and with much sadness, she said Lauren can not read text.

However, I know we have so many other ways to go. I am hoping to have my friend become a consultant to assist with developing and supervising a writing and reading program. She, however, does not know how to do that but is willing to learn. Will you help me direct her to the best resource to use and help prioritize the activities we should start with.

Karen, Caroline, and Gretchen have seen her. We are back to Make a Word which she is doing with much better success. The Step by Step for communication is a high motivator. Speaking Dynamically for beginning writing such as letters and poems has been working better. 13 seems to be the age where she is willing to TRY again.

While I understand where we are going as does the people in her close knit team, I need to educate and support others. Help, I can't afford to bring them all to Closing the Gap this year.

Thanks, Linda

- **Re: reading with a visually impaired child**, by **Dave Koppenhaver**

Hi, Linda,

What I read between the lines is that your daughter is a beginning level reader. Some starting places: (1) go to the website of the Center for Literacy and Disability Studies listed in the resources page for this discussion. Read about ALL-LINK. Then email Karen Erickson, a link is at the Center's website, and see if you can get permission to try out the on-line materials--I don't know where they are in Beta testing at this point and whether or not there might be a fee. Those materials are designed for young teens who read like beginners. If you can get your Rdg Recovery teacher to do those things with your daughter, then she may see that what we do with kids your daughter's age is not radically different in method (only in text content--age-appropriateness) from what she already knows and does with younger kids. (2) You've seen a lot of experts. How much have you implemented and with what degree of success and for how long? (3) I hope your friend meant that your daughter cannot see text as opposed to cannot read text. I think you have two main options--sorry I don't remember your daughter if I've met her-- (a) auditory input with your daughter in charge (e.g., digital texts imported into talking word processors controlled by adapted keyboard input of some kind) or (b) tactile input (e.g., braille). I assume single switch means your daughter does not have great hand use. The question is, can you and PT/OT/someone find a position in which to stabilize a hand that would allow her to use braille input to begin to read text that she apparently can't see? This is not a complete answer to your question. Let's talk some more.

- **Re: reading with a visually impaired child, by p Cassidy**
When you mention auditory input with her "in charge" what do you mean by that? And can we talk a little more about the braille.

- **Re: reading with a visually impaired child, by Dave Koppenhaver**
Listening to a traditional book on tape would not be "in charge." Listening to a book, one page programmed into a corresponding key/symbol in speaking dynamically would be "in charge." Anything that allows your daughter to control when the text talks--so that she accesses it when she's ready to hear it. Putting a whole story into a talking word processor set at whole text level (that is text is read aloud from beginning to end) would not be "in charge." Putting one page, one paragraph, one sentence into each slide of a PowerPoint show, HyperStudio stack that your daughter accesses when she's ready would be "in charge." Keeping the amount of text per symbol/key short initially and gradually increasing as she shows attention, engagement, understanding would be the general practice. Braille--I'm no expert. The literacy issue, however, is that to read, your daughter must have text input--visual, tactile, or auditory, or some combination. It seems to me that we rule out braille for physically impaired kids with visual impairments/processing difficulties too often without exploring whether stabilizing, positioning, etc. can make braille accessible to hands/fingers that have a difficult time working voluntarily, but that do work better than eyes for some kids. Auditory input is a good alternative, but more difficult for "rereading," and for "reading" sophisticated text. For elementary and preschool level texts, it works fine--but it does not develop decoding skills necessary for reading words in print that you may never have encountered in print previously.
Great questions. How are we doing?

- **Re: reading with a visually impaired child, by p Cassidy**
As for "in charge" should we give her a "page forward", "page back" and "a read this page" command? Or what should the auditory prompts be for her to know what she is in charge of?
 - **Re: reading with a visually impaired child, by Dave Koppenhaver**
Don't have a magic list, but I'd want to provide technology controls of the kinds of things that nondisabled children would be able to do with a book. "Read this page" as a button that could be accessed as often as she wanted for rereading. Questions for peers/parents/teachers: "What's that word? What's this mean? Why did that happen?" Requests for peers/parents/teachers: "Could I read a different book?" "That was great. Can I read it again." "I need help." Page forward and backward + return to p. 1 would be useful. Does this help? The exact messages/command functions would relate to your daughter's physical and cognitive capabilities (always thinking of a system for today and a system for the future).

- **Re: reading with a visually impaired child, by p Cassidy**
This helps. We can give her some of these commands. She struggles with access. This year we have introduced a blink switch and if it's

positioned correctly she can do it. We are re-introducing scanning. With this reading we're pretty sure she can't see it though. But can we also get back to the Braille? What is it we need to make sure she sees/feels? Each letter or particular concepts about reading?

- **Re: reading with a visually impaired child, by Dave Koppenhaver**

Help, visual impairment whizzes. I'll give my literacy answer, but I am not an expert in braille or VI. From a literacy perspective, we want your daughter to connect what letters look like (in this case, feel like) and what they sound like. We want her to do this initially at the word level (personal braille alphabet books would be one method--don't feel obligated to use the whole alphabet, do feel creative, do create all sorts of them, do try single letter books with multiple concepts--e.g., a B book on bugs, baseball, brats (the rotten kids or the grilled food), bongos...). With a sight (touch) vocabulary of 40-50 words that are recognized as wholes, but also lead to some letter/sound learning, phonics can be introduced. I'd love to hear what other folks think on this.

- **Literacy goals in the IEP by Dave Koppenhaver**

Who has written/read/seen and can share some good literacy IEP goals? I've seen lots of bad ones (e.g., David will learn to sit quietly during story reading time. David will learn 100 sight words. David will recognize his name with 80% accuracy on 4 out of 5 days--my personal favorite. Let's interpret. On Monday David interprets Davd, Tues = avid, Wed = Daid, Thur = Dvid. Each time he indicates that this letter configuration is his name. On Friday he doesn't recognize his name. Goal met. Literacy relevance, measure of real literacy, meaningfulness--None, zip, nada, nil, zero.). So who has some good ones to share for us? Particularly incorporating technology?

- o **Re: Literacy goals in the IEP by linda**

I ready to see some good ones, just got back from my daughters IEP meeting. We are reconvening in 2 weeks to go over communication and writing goals. I will be happy to share them when they are done.

I struggle with the idea of what is a goal for writing and communication and what is the motor part of it for access.

We want switch hits, make a word, word wall, generating text though choices in a closed set, free expression, etc.....

- **Re: Literacy goals in the IEP by Dave Koppenhaver**

My colleague, Karen Erickson, has had good success integrating these concerns into a single goal. E.g., "Jolene will access a voice output communication aid or an eye-gaze display to share information about a topic being discussed in class, report on a project, or otherwise participate in naturally occurring classroom activities (e.g., during a social studies lesson, language arts lesson, music) 5 times per day with only verbal prompts (and naturally occurring cues) on 4 of 5 occasions. If you needed a motor piece to a goal, you might describe a hierarchy from most assistance to greatest independence.

- o **Re: Literacy goals in the IEP by linda**

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I struggle with the idea of what is a goal for writing and communication and what is the motor part of it for access.

We want switch hits, make a word, word wall, generating text though choices in a closed set, free expression, etc.....

- o **Re: Literacy goals in the IEP by linda**

I had a chance to look at your initial response re my daughter. Just to clarify, she uses Step by Step for social scripts, make a word, writing activities include a formatted letter where she chooses what she wants to say, choice making for a set topic for academics plus... So besides writing we need to develop goals for communication. High (social, reading etc) and low tech (academics).

Considering you response the books on tape do not count, we need to do something else.

Here's one Using a auditory scanning array, _____ will independently interact with a book on the computer. (Scan arrays will provide pg. forward, back, read this page)

Thoughts

- **good measurable goals by Discussion Board Guest**

Hi,

My name is Leslie, and good looking, measurable annual goals are tricky. My question on the "independently interact with books on the computer" is what will that look like? If she clicks back and forth is the goal met? Is there a need to tie in comprehension, or some discussion of what she's interacted with?

- **Re: good measurable goals by pcassidy**

As Linda said we are trying to figure out how to give her access. She can activate her blink switch we are starting to introduce scanning. However she cannot see connected text. Her listening comprehension is very good. I think (I am just forgetting right now) at least a 5th grade level text. So I would like to give her Independent access to reading material. So maybe we should add a piece to the objective that she will find material in the story to answer comprehension questions? And what level text do we give her? The motor task will be difficult for her. Do I give her a lower level when we are practicing the motor task of scanning?

- **Re: good measurable goals by Dave Koppenhaver**

If she is listening, then anything at or below 5th grade level (if you're right on that estimate) shouldn't create additional cognitive load on top of physical. If all you is to have her physically scan in order to access reading material, it's irrelevant, as long as she's interested. If, you want interaction or response to reading, the text level matters.

- **Re: good measurable goals by Dave Koppenhaver**

Whether you tie interaction or comprehension or both to the "accessing books independently on the computer" would depend on

why student is accessing the books--pleasure reading? class assignment? peer experience?

- **Re: Literacy goals in the IEP by Dave Koppenhaver**

Sorry, I'm slow on the uptake and I am unable to find the message you're referring to. Not sure what you're asking. Can you be specific for my slow-firing synapses? Thanks.

- **Re: Literacy goals in the IEP by Discussion Board Guest**

Help us with this it's something we continue to struggle with:

Using his ETN alphabet scan array, Mike will independently spell 5-8 words from his word wall list in a free writing sample.

versus Mike will be able to accurately identify 5-8 words from his word wall list, 3 out of 4 trials.

Given a choice of 3-4 words in a scan array, Mike will construct a grammatically correct sentence in 4 out of 5 trials.

Given a choice of 3-5 sentences in a scan array, Mike will construct a paragraph containing at least 3 sentence in 4 out of 5 trials.

- **Re: Literacy goals in the IEP by Dave Koppenhaver**

This is great! Specific examples. I'll give it a shot, and I'd love to see what others think--this is as much art than science, folks. Now, remember, I'm just looking at the goal without knowledge of the kid, so take this with a healthy dose of skepticism.

Using his ETN alphabet scan array, Mike will correctly spell or self-correct all word wall words in his free-writing. (You might give him levels of credit for this based on spelling it right first time, catching it himself and self-correcting, self-correcting after the teacher points it out, additional verbal or physical prompts when those fail)

I would recommend eliminating the last three goals. The second is a visual matching task that you will already have the knowledge of his ability to respond by paying attention to how he completes word wall activities in class.

The third is a verbal problem-solving task, not a measure of his ability to construct a grammatically correct sentence. If you want to measure that ability, then look at the grammatical correctness of sentences he constructs in text-level writing in class.

The last is also a verbal problem-solving task, not a measure of his ability to construct a paragraph. If you want to measure that ability, have him pick a topic of interest and write about it. Examine his paragraphs for quality (coherence, topical relevance, awareness of audience...).

The main point is that if we are providing Mike with good reading and writing experiences, and collecting his papers, we already have the answers to 2-4 without creating contrived, artificial tasks.

- **Re: Literacy goals in the IEP by Discussion Board Guest**

We asked:

"Given a choice of 3-4 words in a scan array, Mike will construct a grammatically correct sentence in 4 out of 5 trials."

You replied:

"The third is a verbal problem-solving task, not a measure of his ability to construct a grammatically correct sentence. If you want to measure that ability, then look at the grammatical correctness of sentences he constructs in text-level writing in class."

Question: in "text -level" writing do you mean, letter by letter?

You replied to someone else:

"How about "Sue will use a word bank to construct 2 or more simple sentences in daily journaling"?"

How is Mike's goal and Sue's goal different?

- **Re: Literacy goals in the IEP by Dave Koppenhaver**

Good question. You provide 3-4 words and ask the child to put them in the correct order. That's verbal problem-solving. That's not how people communicate. We have an idea and then we sequence it. We don't take someone else's ideas and sequence them. That's a test.

My assumption with Sue is that she also has access to the alphabet, but even if she doesn't, the idea is to give her access to as wide a vocabulary as she can manage (cognitively, linguistically, physically), and to allow her to communicate her own ideas--not sequence a few words.

Does that make sense? Your goal requires only sequencing, not constructing. The second goal, requires sequencing and constructing since there are many more choices and no one right answer.

- **Re: Literacy goals in the IEP by Discussion Board Guest**

So how do we do this for kids who struggle with access? For my scan users when I give them the alphabet they are often exhausted by the degree of time and concentration it takes to write down a word and construct a simple sentence. It is an even greater challenge to construct a paragraph or a whole paper, but they have ideas for a whole paragraph.

- **Re: Literacy goals in the IEP by Kari**

I can only imagine the frustration that people with limited access face! I suggest taking a look at some of Gregory Leshner's research using various scanning arrays and alphabet layouts for literate AAC users with limited access. His stuff is pretty laborious to read but it is interesting and may give you some insight. Conveniently, Dr. Leshner has applied his research to his company- Enkidu Research, an AAC device manufacturer (www.enkidu.net). You can download trial versions of the software from the website- I think the keyboards and word prediction is some of the best I've seen- he uses a huge corpus of words so the prediction is very accurate (no, I am not affiliated with the company). I don't know if this will help your students, but it may be worth trying or at least knowing about.

I hope this helps!

Kari

- **Re: Literacy goals in the IEP by Dave Koppenhaver**
It's worth knowing about Enkidu, but I wouldn't recommend Greg's papers to parents or practitioners. Two sources of wider information on assistive technologies (including augmentative communication) are www.closingthegap.org and www.atia.org (look at the members list for manufacturer's contact info, websites, etc.). Thanks for the tip.

- **Re: Literacy goals in the IEP by Discussion Board Guest**
Scanning does take a lot of time, one thing that might help is "chunking" the alphabet. On my daughter's Dynavox and with SDP on the computer, she has a scan array of A-I, J-R, and S-Z as 3 separate groups. Then, it does a linear scan within the group, once she selects the one she wants. It didn't really take her very long to learn the groups. If she knows the initial sound for the word she wants to write, she goes straight to the group the letter she needs is in. Plus, word prediction speeds things up, too.

Theresa Reborn

- **Re: Literacy goals in the IEP by Discussion Board Guest**

Here are some in my daughter's IEP:

Sue will increase her sight word repertoire by 20 additional words.

Sue will be able to describe the meaning of these words.

Sue will participate in Making Words activities to finish spelling a 3-4 letter word containing 1 vowel by determining the 1st or last letter with 75% accuracy.

Sue will categorize word families according to beginning and ending sounds with 75% accuracy.

Sue will use a word bank to construct simple sentences (SVO)

Sue will listen to and read along with short stories and answer comprehension questions with 80% accuracy.

- **Re: Literacy goals in the IEP by Dave Koppenhaver**

Hooray. More specifics.

Sight vocab is too vague--in what time period, which words, which ones does she already know, how fast did she learn them? Typical 1st graders of average and even below average ability learn 130-150 sight words in the course of a school year if they are in a classroom using word wall activities.

Sight vocabulary work should not be confused with meaning vocabulary. She shouldn't have to describe the meaning of these words. If we use them in a variety of activities we'll know that she understands them without ever having to test directly.

I like the Making Words goal, if (1) your daughter currently spells phonetically logically at the initial and final position, e.g., KT for cat, JF for giraffe, FR for fire; (2) she attempts to spell the whole word, and then self-corrects if she's not correct.

Word family goal is mathematically logical but irrelevant to literacy. Once kids learn a word family (e.g., at, mat, fat, sat, pat), they tend to get them all or nearly all right. And they tend to leap from getting very few to getting them all without an in-between.

How about "Sue will use a word bank to construct 2 or more simple sentences in daily journaling"?

How about, "Sue will read short stories at her personal reading level and respond with 80% success to follow-up tasks"? (By the way, if she doesn't, the problem is the teacher's and the teaching or an inaccurate assessment, not Sue's.)

- **Waves of Words by Dave Koppenhaver**

Nick Hogan mentioned a book called "Waves of Words" in one of his posts. This is an international collection of case studies/stories of children and adults who use augmentative communication and their success in learning to read and write. There is a link to ordering information on my home page, <http://www.gac.edu/~dkoppenh>. If you live in the United States, you will get faster and more reliable response if you order from Sarah Blackstone rather than the publisher, ISAAC.

- **Assessing and helping child with Rett's by Teresa**

Hello Dr. Koppenhaver,

I have a 14 yr old daughter with Rett syndrome and would like some advice on how to have the school district assess my daughter's level of reading and to provide learning opportunities in that area to enrich her life. I know she can read but school has offered no help or ideas to work with my daughter and school isn't going very well. Thank you

- **Re: Assessing and helping child with Rett's by Dave Koppenhaver**

Teresa,

The way we start this process with girls your daughter's age is by administering an adapted form of and IRI (Individual Reading Inventory). Two that are easily purchased via Amazon or other online booksellers are (1) Jerry Johns (he's the author, use his name to search), or (2) the QRI-III (Qualitative Reading Inventory--III). Our adaptations for children with severe communication impairments (e.g., many girls with Rett) are to provide multiple choices for the word identification and comprehension questions. Karen Erickson has a grant that I am assisting on to put this assessment on-line within the next three years, so keep watching the website of the Center for Literacy and Disability Studies for updates. If you can tell me where you live, I might be able to suggest someone in your area who could assist you with this assessment.

- **Re: Assessing and helping child with Rett's by Teresa**

Thank you Dr. Koppenhaver so much for your reply. This is definitely something I want to check into. We live in Minnetonka, MN. (which is a western suburb of Minneapolis)

- **Re: Assessing and helping child with Rett's by Dave Koppenhaver**

Teresa, You're in my backyard. One of the offers I've made to PEPSE is to make a return visit to teach you how to conduct a basic reading

assessment with kids who have disabilities, including Rett. Talk to Susan Murakami. And make sure you explore your local resources, like PACER and Luther Granquist.

- **Literacy in AAC Summer Course Notes by Dave Koppenhaver**

Karen Erickson and I are teaching a one-week Literacy in AAC course for parents and professionals this summer in Gainesville, Houston, and St. Peter. To my knowledge, both the Gainesville and the Houston courses are full. We still have openings in St. Peter, MN for July 22-27. We also have a stipend, thanks to AbleNet, to support 1-2 participants who may need financial assistance in order to attend. Course info can be found at <http://www.gac.edu/~dkoppenh/summer.html>. Contact me directly, rather than in this list, if you have questions about the stipend.

- **Re: Literacy in AAC Summer Course Notes by Discussion Board Guest**

Hi Dave, Margo Rifkin here... I am enjoying the discussion board and had to let all the parents out there know that your course was absolutely wonderful!! I took the course 2 years ago when our son was entering grade 2. We were so frustrated because we wanted our son to be educated in an inclusive environment and found that the teachers really had no idea how to approach our son's education. The only solution that the faculty had was specialized reading programs that would require Eric to be removed from the reg. classroom. Today Thanks to David and Karen's course and the wonderful staff at Eric's new school (who are willing to implement the theories that David and Karen teach) he is in a reg grade 3 classroom and is making great progress with his literacy.

The most valuable thing that I took home with me was the ability to understand what was needed for our son to be literate and to be able to implement strategies in the school or at home. Thanks again David and Karen!!!!!!!

- **Re: Literacy in AAC Summer Course Notes by Dave Koppenhaver**

Hey, Margo,

You forgot to add kudos for yourself. Parent persistence is a major factor in the success of nearly every kid we've seen who "made it." Eric chose the right mom.

- **Literacy and the deaf by Harley Hamilton**

It is well documented that deaf adults read (on average) at about the 4th grade level. Yet, the main means of providing information and entertainment to this group (and to deaf children) is via captions which must be read. We are working on a project called "MySignLink" that will allow users to click on a word on the internet or type in a word and see the American Sign Language translation for it. A prototype is at www.computermice.50megs.com/MySignLink.htm

Are there laws that provide for the sign-captioning of video in order to make it accessible for deaf viewers, particularly children? We are also looking to open that area to provide deaf viewers with the option of sign-captions instead of only text-caption. Any help that can be provided in that area would be greatly appreciated.

- **Re: Literacy and the deaf by Dave Koppenhaver**

Harley,

Sorry to be slow in responding. You've asked a question way out of my area of work at present. I like the idea of your project, but unfortunately could not get the page

you provided to work. I have quicktime, but your word links didn't work for me. I have seen other on-line ASL video dictionaries, so I assume it's something like that but linked to specific text.

Don't know answer Re: sign-captioning. The two places I would go to search for the answer would be the Trace Center (Univer of Wisconsin), www.tracecenter.org, and CAST, www.cast.org.

Good luck.

- o **Re: Literacy and the deaf** by **Mary Jo Cooley Hidecker**

Hi,

The Quick Time links worked for me. It's an interesting idea which I hadn't hear of before. So my suggestions for people who might be able to answer your questions are those from the deaf and text captioning community.

National Association of the Deaf <http://www.nad.org>

American Society for Deaf Children <http://www.deafchildren.org>

a Yahoo captioning group <http://groups.yahoo.com/group/captioning/>

Gallaudet University has a research group on captioning with several links <http://tap.gallaudet.edu/caption.htm>

One of their links is to the FCC where you might be able to find answers regarding laws.

Teachers of young deaf students might also be useful. I don't know of a specific organization for that specific group, but a general deaf ed site is <http://www.deafed.net>

Good luck on this project!

- **Vocabulary development** by **A Wershing**

David and others,

What strategies have you found useful for young adults in taking new words from text and incorporating them into actual use? We're using Kurzweil 3000 to give access to text regularly and the dictionary to explore new words. My question is what do we do with the list of new words and the definitions? We're currently logging them into a Discover array, just as a place holder for now, so that I can see what is being done at home. I'd rather not do vocabulary work in isolation, just looking up definitions and not doing anything else. I want those words to end up in working memory and vocabulary use. Do we do sentence writing, try to incorporate them into a writing piece? Make sure they are in the CoWriter Writer file so that they will predict? Looking forward to the discussion, as always.
Alice

- o **Re: Vocabulary development** by **Dave Koppenhaver**

I don't make lists of words with my students. I use topical or thematic word walls tied to a set of reading and writing experiences across a 4-6 week period. The absolute best direct instruction in vocabulary nets about 300-400 new words in kids' vocabulary across an entire school year. Yet, most kids learn several 1,000 a year. What you want to do is seek a package of related reading, writing, and discussion tasks that will enable your student(s) to see and use the words repeatedly for real

reasons many times a day across 5 days of the week and a couple weeks of school (or instruction) as they learn about something larger (e.g., you could learn words like snowmobiles, skis, sleds, skates, etc. as you study Minnesota winter sports). Is this enough for you to run with?

- **Re: Vocabulary development by A Wershing**

Thanks David. I can work with the Personal Assistant to this particular client, and see how we can best select something we both have copies of so that I can guide the process, since I only see him weekly. Then we can jointly decide on what to work on in terms of vocabulary rather than just having him identify words he doesn't know from text that he only has at home. When you talk about a package of tasks, can you elaborate on that, and what it might look like? I have a general idea, but since this is an adult who is not in an education setting, some additional thoughts would be helpful. Alice

- **Re: Vocabulary development by Dave Koppenhaver**

Hey, Alice,

Package might include (1) a collection of websites and books and magazine and newspaper articles to read around a specific topic of need/interest (e.g., forms of energy); (2) related writing tasks (e.g., KWL charts, content journal, report...); (3) related integrated tasks (e.g., inquiry, independent research...). With each and all, pick out the key (and topically related vocabulary of need/interest) and preteach it as background knowledge step. Teaching might include use of pictures, movies, experiences... Keep this vocab on a thematic word wall--refer to it with each teaching experience and encourage student to do likewise with all of his reading/writing. Vocabulary is learned more by use and need and interest than by focusing on it as an instructional goal. Dave

- o **Re: Vocabulary development by Discussion Board Guest**

Dear All: I'm not sure if this comment really addresses your question; however, with regard to the question of vocabulary development, I would like to add my 2 cents. I have found a totally motivating vocab-building approach for older students: teaching Latin & Greek morphemes. My students, no matter what grade level they are reading at, LOVE learning about combining forms, roots, and affixes. I have read research that states that teaching morphemes actually teaches thousands of words. I try to use concrete morphemes initially --Greek-- which are centered around subjects they are currently studying, and then as the students begin to come up with their own questions about words, I allow their questions to guide our lessons. My students beg for more information...it's quite inspiring.

lora

- **Re: Vocabulary development by Dave Koppenhaver**

Lora,

This is a very solid teaching idea. You cannot decode big words (polysyllabic to those of us who've learned Greek prefixes) letter-by-letter, but you can by looking at chunks like prefixes, roots, suffixes. I'm assuming you're only doing those Latin and Greek morphemes that have a substantial number of English derivations. There's another list called the Nifty Thrifty 50 that Pat Cunningham and Dorothy Hall put together. It combines the most frequently occurring prefixes, suffixes, and roots in a list of 50 words. We teach this list to kids and then teach them to compare and contrast new words they aren't sure how to read/spell with words they know that have similar patterns. You

can find this list in a book entitled "Classrooms that Work" or online. Just type Nifty Thrifty 50 into a search engine like Google.

- **Hi from Australia by Discussion Board Guest**

Hi to Dave & others

My name is Lorraine de Kok, from Australia, just found FCTD & logged on. YES! We do believe children with a disability can learn, read & write. Our question is how would you know if you don't 'have a go'.

Our son has cerebral palsy, spastic-quad. He has what is termed the 'state of the art equipment here in Australia, in our own home. He uses a big mac, macaw, discover switch and co-writer co-jointly. The School mainly uses the macaw & we use the discover & co-writer. I am concerned that our son does not truly initiate communication with the macaw. The overlays & themes are made by the speechy & used mostly in literacy class at school. We set the discover & co-writer up, then with a jelly bean switch our son can communicate what he wants to say. We are the only family who has this equipment in our region; our skills are self-taught, we have no one to turn to for advice or direction, strategies etc. We have tried to get a discover switch in schools, but the setting up & training was too time consuming. The macaw has won the popularity stakes as it can be used effectively with a larger number of other disabilities & it is portable.

I feel so isolated as we are the only parents using this equipment. Additionally, I have heard of new equipment being researched in America, but cannot gain any further information. I am extremely eager to learn about where augmentative communication devices are heading into the future?

Hopefully, I have found a group that can accommodate our needs.

C U L 8TER Lorraine de

- **Re: Hi from Australia by Dave Koppenhaver**

Hi, Lorraine, I hadn't heard anyone talk about speeches since I got back from a 6-month stay in Brisbane at the end of January. Nice to hear Australian again, if only in print :-). Phew, lots of issues here, but I'm not exactly sure what the question is. Here are a few thoughts. Feel free to continue the dialogue. First, by "don't have a go" I'm thinking you mean that you haven't found the right equipment to support your son's literacy? The groups you want to hook up with are AGOSCI (<http://www.agosci2003.org/>) in Australia (they're your national augmentative communication group)--where do you live, particularly, what big city are you near? I can try to be more specific with that info. The international group is ISAAC (International Society for Augmentative and Alternative Communication) --they have a website (<http://www.isaac-online.org/>). Check my website and those listed in resources for this discussion for others. You may be less isolated than you think.

- **Re: Hi from Australia by Discussion Board Guest**

Hi Dave

I am a member of AGOSCI, who informed me of this group, I feel they are not giving me up to date info. I have not heard of ISAAC, shall log onto them. We live 4 hours drive away from Melbourne, in a rural area, very parochial. We have been trial blazers from the start & won't accept professionals defeatist attitude. As, I have said if you don't have a go, how will you know whether or not something can be achieved.

I guess my question is what is the latest AAC equipment for children like our son in America? Have you heard of a thinking mouse or mind transferring devices?

Hope my question is clearer, sorry about the Aussie terminology, I forgot the

language difference. Or did you have pangs for a return visit? HA HA
CUL8TER mate Lorraine de

- **Re: Hi from Australia by Dave Koppenhaver**

Lorraine,

I sympathize with your frustration. Professionals who have a defeatist attitude aren't "professionals." And there are lots of exceptional professionals.

Here are some resources to explore in and around Melbourne: DEAL Centre in Brunswick, VIC (Rosemary Crossley, 61-3-95096324, and Jane Farrell work there. Both are exceptional and professional. Jane participated in our summer course on literacy in AAC a few years ago.)

Fiona Given is a graduate student and a person who uses lots of high tech in order to communicate. She wrote her own case study in our book, "Waves of Words." You can email her at fionagiven@hotmail.com. She's "made it" and might be able to provide advice on how to do that in Australia.

Teresa Iacono is located at one of the universities in Melbourne and does great work in literacy and augmentative communication.

Online tech resources and organizations that can help you do it yourself: <http://www.closingthegap.com> (tech focus for families and individuals with disabilities) and the resources of the TRACE Center at University of Wisconsin, especially their resources links: <http://www.tracecenter.org/resources/at-resources.shtml>.

And, yes, I do have pangs for a return visit.

- **Substitute hands by Tania Aveling**

Hi

I'm working with a little guy with autism, in year 1, and really smart. He is really struggling with handwriting. Additionally, when I give him a blank piece of paper and tell him, "You can write now," he draws pictures. Or, he scribbles, but 'reads' his scribble to me. I see these responses as placing him at an earlier developmental stage than most of his classmates.

I've settled on a dual approach. Each time I write with him, I give him a piece of paper to "write" on. I accept whatever he draws or scribbles as writing. Then, I tell him, "It's my turn to write. But you need to tell me what to write." If he gives me a sentence - eg, "This is Granddad's red vacuum cleaner," I say, "Okay, 'this.' How do I write 'this'?" He has a really good go at telling me how to spell each word - ie, for vacuum, maybe he'll say, "VKM". He can hear the sounds; he just can't make the letters.

When we work with a buddy, I use the same approach with the buddy, except that he or she writes unassisted.

Does that sound useful? I worried at first that I should model correct spelling in our sessions. But he dictates his sight words correctly in his writing, so I guess I'm just assuming that once he knows how to spell words, he'll tell me how to spell them! We also write on a computer keyboard, but he tends to lose track of what he's writing when he can't find each letter quickly enough, and sometimes he also stims by just pressing each key repeatedly. I use Clicker 4 with him at times, but in our limited writing time, and working often with another child simultaneously, I just figured this "low tech" approach would work best.

- o **Re: Substitute hands by Discussion Board Guest**

Hi:

How old is a person in "year 1?" I like what you're saying--honoring whatever he writes and reads back. This is developmentally appropriate--I believe all kids go through this step--and it's important to find a way to physically support this exploratory writing. Of course, as Dr. Koppenhaver says, you do want to move to writing that others can also interpret.

Depending on age etc, I've had good success with Handwriting without Tears program from Jan Olson, OT. An online source is www.hwtears.com.

Have you tried a keyboard in ABC order with him?

Have fun, Leslie

- o **Re: Substitute hands by Dave Koppenhaver**

Tania,

I'm with Leslie. I like how you're honoring his contribution. I'd keep Handwriting without Tears in my hip pocket for now. Year 1 is 6-year-old's give or take? What your student is doing is at the lower end of a normal continuum for that age group; my intervention decision-making for such kids is to try to figure out how to intensify the experiences (more time, more supports, more feedback, more independence...some combination of these as appropriate). What you're doing is great. Leslie suggested a keyboard in ABC order--any keyboard would be probably be fine given his age and understanding of print. If you can add a talking word processor into the mix (set to letter and word-level feedback), he might have a chance to explore print without your assistance. Did I tell you about the Developmental Spelling Test in Australia, and have you tried it with him using a keyboard?

He sounds like he is really moving along through phonetic cue understanding, but just isn't physically producing letters yet. That is a much, much, much easier problem to resolve than the reverse.

- **Re: Substitute hands by Gretchen**

As an alternative way for him to generate text, what about using an inexpensive labeler from an office supply store? While they don't offer important auditory feedback, they can be useful if you can't get to a computer. They have a QWERTY keyboard and a small window to see your text. You press "Print" and the text comes out immediately in a strip. I have a basic Brothers labeler and it cost around \$19 from Staples or Office Max. What kids like about it is that it gives them immediate text when they can't get to a computer. Text is much clearer than the old Canon Communicators. Be prepared, when you take it into a classroom, all the kids usually want to write with it!

- **sight words by Discussion Board Guest**

How do you feel about having sight words for a goal. For a student who is 15 years old and is at a pre-emergent level. She can recognize her name, she can recognize environmental signs in context, after much practice. She can identify letters, if you dictate letters she can write them. She is not connecting sound with the symbol. She recognizes 1 dolch word "a", which I think is just letter recognition.

She has been involved in Lindamood Bell and a lot of phonological awareness activities.

- o **Re: sight words by Dave Koppenhaver**

Couple of things: There is no such thing as "pre-emergent" unless a child hasn't been

born yet. "Emergent literacy" refers to the gradual process of increasing knowledge, understanding, and application of increasingly conventional literacy. So, the student who is 15 is emergent, not pre-emergent.

If she can identify letters, her name, read environmental print, she is doing many of the things that 3-4 year-old typically developing children in print-rich environments do. If she's 15 and has this level of understanding and skill, she's really struggling. Lindamood Bell is relatively abstract way of learning phonics, and sight words are equally abstract. What are you doing to contextualize these experiences? Take a look at the short piece on emergent and early literacy linked to this discussion. Which of those principles are you implementing and in what ways?

- **Re: sight words by Discussion Board Guest**

I am taking the student on "scavenger hunts" throughout the school to locate the signs we are looking for and talking about what it says, what it means, and an appropriate response to the sign when encountered.

I agree that teaching sight words without context is quite abstract and brings no meaning for the student to grab on to. She does seem to be able to retain the recognition and understanding of the meaning of the environmental signs we've been working on in the way I've been doing it this year.

I have looked for the piece on emergent and early literacy and am unable to find it...any hints?

- **Re: sight words by Dave Koppenhaver**

I found it at:

<http://www.fctd.info/webboard/displayPerspective.cfm?id=244>. It's the "expert perspective" link next to my handsome photo :-).

Scavenger hunts are one way to add meaning to word learning.

Another is to make personal books. Many of the contributors have talked about this in the discussion. Combine photos of things the student likes with brief, personalized, text. Try to incorporate patterns in the text, so the student gets repetition with variety.

Music lyrics put into book form are another possibility.

- **early literacy by Angela**

Research from Sue Buckley at Downs Ed Trust in UK talks about sight reading as the single most significant intervention for pre school age children with DS. Our children are visual learners and a sight word vocabulary will greatly enhance memory and speech. There is no recognition of this in our EI curriculum. It is not necessarily in the curriculum for children without DS so a very hard sell. My son Daniel was assessed by Sue Buckley and we have seen some good progress using home made books. The more personalized and real the images the better. Is there any software that could simplify this task. He also loves computers and with a new smaller but identical mouse is able to use the computer well. What else would you suggest for him. I also wonder if you see literacy grant opportunities for this age that I might explore in collaboration with our dept education.

- **Re: early literacy by Dave Koppenhaver**

Sue and I disagree on this one. Sight word reading is important, but so is being able to decode new words in print. So is seeing yourself as capable. So is understanding that you can write what you think and read what you write. And a host of other skills. There is a controversy over whether children with Down syndrome can learn phonics--I believe they can. I believe they need to be taught with real words because

the learning is so abstract. Take a look at the Making Words materials by Pat Cunningham and Dorothy Hall.

Personalized books are powerful for many kids. I'm glad that you're seeing progress. Explore Simon SIO (Don Johnston) as a way to assist him in learning and practicing the relationships between letters and sounds. Any multimedia software might assist you in making personal books (e.g., PowerPoint, HyperStudio, IntelliStudio, AppleWorks, Buildability,...).

There are always literacy grant opportunities (at least in the USA). The argument right now would be that your child, and kids like him, require specific focus to address the Pres's No Child Left Behind. I don't know about Great Britain (I'm assuming you live there since you see Sue B.).

Let's talk some more.

- **Re: early literacy by Discussion Board Guest**

I am also the parent of a child with DS, he will be turning 14 soon and is an early conventional reader. Sight words are certainly his strength, but he tends to quickly guess at words rather than use decoding skills. I think one reason that decoding is difficult is that his articulation is quite poor, so words don't sound like they are supposed to when he tries to "sound them out." Also, he is pays more attention to visual information than auditory (which he tends to ignore). He's headed to high school in the fall and we're in the process of writing his IEP and determining a course of action to improve his reading skills. Finding books at his reading level that he thinks are interesting is a challenge.

- **Re: early literacy by Dave Koppenhaver**

One strategy that I used with young adults (20-25 years old) with DS recently is Making Words (worked well with 4 of 6 students). You can find details and materials in a book cleverly titled "Making Words" by Patricia Cunningham and Dorothy Hall. Basically you/teacher guide student through spelling of real words by manipulating a letter set. Helps student learn within-word patterns and phonics by using real words. Includes transfer steps to assist students in applying the strategies they're learning more widely. Until a student reads at about 3rd to 4th grade level, finding interesting and age-appropriate stuff for older struggling readers is problematic. If you have more specific questions, I'll be happy to see what I can find out.

- **Re: early literacy by Joe**

Look at www.accessiblebookcollection.org for age appropriate but low reading level e-books.

- **Reading is Very Good, Output is a challenge by Discussion Board Guest**

Hi

I just saw this 5 year old today. He got his Pathfinder around Christmas time, He struggles with access. He uses direct access but he has let his Team know it's very hard. Learning of the Minspeak is not the issue, Speed and Accuracy is. They have played a little with joystick, I have suggested they continue looking at scanning.

His parents said he could read so I went in and did some QRI stuff with him. He was:

Word ID: 70% accuracy at Level 1

Listening Comp: 62% at Level 3, 75% at Level 2, 83% at Level 1

Reading Comp: 100% at Pre-Primer and 66% at Primer, and 16% at Level 1. He was able to read much of the story at Level 1,

That would mean Print Processing is his greatest area of weakness???? Right?
Interesting to note, Mom says he does better when he signs as he reads Also, he does better if she points to each word as well. Hmmmm Inner Voice or Eye Movements?????

I also did the Dev Spelling test Here's what he got:

Bk for back,
Mii for mail
It for lake
Si for stick
Fii for feet
Sii for sink
Di for dress
Pi for peeked
Si for side
Ti for test

He uses the word prediction part of his Pathfinder a lot. His mom said she felt he would have gotten all of those words with WP on.

They do not do any writing with him. I am suggesting they hook up the Pathfinder ASAP and that his spelling compared to his reading is very different. They are a little nervous and overwhelmed about the hooking up, plus computers are pretty old. When should a kid like him use Word Prediction and when should he not?? I don't want him frustrated and giving up, which he does at times with his Pathfinder with direct selection.

- **Re: Reading is Very Good, Output is a challenge by Dave Koppenhaver**

So, you've obviously attended one or more of our workshops and taken good notes on assessment. Here are a couple thoughts: (1) he's 5 years old, so if he can read anything, and obviously he can, he's ahead of most nondisabled children of the same age (whether that will be enough to survive kindergarten and first grade instruction in many states remains a separate issue); (2) because of his age, I wouldn't have administered the QRI-- that's a better assessment for kids in elementary formal reading instruction and beyond-- since you did, I would suggest that what you got is pretty close to a flat line across the three areas, and that what you would focus on, if you went beyond pure balance, is language and words; (3) that he reads better when signing or Mom pointing, just points to typical difficulties of beginning readers, nothing unusual; (4) DST shows you that he hears and represents initial sounds consistently and logically--great!--hook him up to a talking word processor set at letter and word level feedback to explore further; (5) agree with you that writing using Pathfinder as keyboard would be wonderful addition to his program. I like the use of word prediction for a kid as severely physically involved as him--I would use it for all but word activities, when I would want him exploring spelling patterns. Whew! That's a lot of info. Write back if you want to talk more. This kiddo is doing great! Celebrate and continue supporting him.

- **Re: Reading is Very Good, Output is a challenge by Discussion Board Guest**

So if not the QRI what should I have used?

- **Re: Reading is Very Good, Output is a challenge by Dave Koppenhaver**

Personally, I would have just taught the kid and observed informally. He's obviously got a lot on the ball, and he's only 5. What was the purpose of the literacy assessment? I use a QRI when things aren't going well (e.g., a 5th grader is reading like a beginner) and I want/need to figure out the kid's strengths and needs. This kid is a kindergartner I assume, and actually performing wonderfully well for his age. What did you need/want to fine-tune?

- **Re: Reading is Very Good, Output is a challenge by Discussion Board Guest**

Actually he is a pre-schooler transitioning into Kindergarten. I don't work with him regularly. He has his own on-going TEAM. This is the 3rd time I have seen him. The purpose was: The parents said he could read, some people doubted it, the Team wondered if there was any way to figure out some sort of a level and came back my way. I have attended numerous workshops of yours, Karen, and Stephanie and had done the QRI and had the adaptations for a kid who is non-verbal and said I could try it. (All of the kids I've done it with before were older and could not read as well as he did) I did tell them it was informal, and if he didn't score well that it didn't mean he wasn't reading etc, etc, What they also wanted info on was where to go from here. They also know inclusion can be a challenge when balancing the tasks of a classroom and they don't want to waste time doing Kindergarten work that he shouldn't have to because he already has the skill. I have to admit to see him "prove it" was a kick and a half for all of us in the room.

- **Re: Reading is Very Good, Output is a challenge by Dave Koppenhaver**

Sounds like you used it wisely. He clearly has a lot on the ball. Mom and Dad might want to take a look at a book entitled "Month by Month Reading and Writing for Kindergarten" by Patricia Cunningham and others. Very nice, plain English, easily adapted for your kiddo. Less than \$13 from Amazon.com, I just checked. Mom and Dad could do some of the things themselves, or with cooperative school, get teachers to implement with all their kids. It's good literacy, not "special ed literacy."

- **Re: Reading is Very Good, Output is a challenge by Discussion Board Guest**

Great suggestion, I have this book, and most of the 4 block stuff. Have you seen the First steps curriculum? It's out of Australia.

Anyway it would be really GREAT if you (and colleagues) could write us "Month By Month Reading and Writing for the Older Emergent Reader"

- **Re: Reading is Very Good, Output is a challenge by Dave Koppenhaver**

Don't know the First Steps. Do you have author/reference info? Thanks for adding another writing assignment to our overfull plate :-).

- **Re: Reading is Very Good, Output is a challenge by Discussion Board Guest**

Education Department of Western Australia, They have a Writing, Reading, Spelling and Oral Language Developmental Continuum, and Resource books. Available through Heinemann Press in NH. The levels of spelling is very similar to what you describe, plus they have a set of criteria for how the writer feels, acts towards writing which is interesting.

Don't mean to add stress to your full plate, but if you guys don't do it who will? Plus, I thought I heard you were doing one :)

- **Independent Literacy Question by Dave Koppenhaver**

What literacy-related activities does your child engage in independently at home or in the community (anywhere beyond school)? And what supports have you had to (figure out how to) provide for that independence to happen?

- **Re: Independent Literacy Question by Joe**

Hi David,

I'm sorry I didn't logon to the discussion group May 1 but I'm glad I finally have. As always, you provide great info and encouragement to learners of all ages, parents and professionals.

I have to think our 23-year-old daughter Ellen is a success story that you played a big part in making come true. It was a long time coming and she is still making progress. For the longest time progress was either non-existent or glacial. Ellen's big breakthrough occurred two summers ago when our school system assigned Joy Weiner, one of your students, to teach Ellen. What a great 8 weeks!

But to answer your question. Ellen enjoys reading in bed at night using her Rocket eBook. While she is unable to turn pages in a book she is able to push the button switches on her eBook to "turn the page". She particularly enjoys fiction where conflicts are related to personal relations. So we're always on the lookout for "hi/low" titles I can scan. She also enjoys sending and receiving email. Instant messaging is difficult because of its rapid-fire speed. Periodically she will use Cast eReader for assistance in reading web pages.

BTW, do you know of any text-to-speech software that will work easily with Outlook email? She does need additional support in reading some of the email she receives although I'm not sure she would use it.

Best wishes,
Joe Rickerson

- **Re: Independent Literacy Question by Dave Koppenhaver**

Hey, Joe,

Nice to hear from you. I can't tell you what a wonderful thing it is to hear about Ellen reading in bed at night. Ellen and Joy and you have lots to be proud of.

For the reading resources you seek, type into Google "high/low fiction." You'll get lots of lists that you can then seek out individual titles in libraries, bookstores, etc. One of my favorite on-line sources is the internet public library (<http://www.ipl.org>). Then what you find will be digital and you can drop it into other programs for Ellen's use.

I'll talk with colleagues about your Outlook email question.

- **Re: Independent Literacy Question by Mary Jo Cooley Hidecker**

While I'm not sure what you mean by "easily" with Outlook mail, a couple of

freeware/shareware that will read e-mail was listed by some Assistive Technology folks on the QIAT listserv

"Please Read 2003
English, Spanish, German, French, UK English
For Windows 95/98/ME/NT/2000/XP
Freeware. Works in word processing programs and in e-mail.
<http://www.readplease.com/>

Talk-To-Me For Windows
Read your E-Mail to you, Instant Messages, web pages, your letters and documents. Send Animated Messages to friends. Greet you daily with the date, time, and a personal message and set alarms to remind you of events.
<http://www.talk-to-me.net>"

I have the free version of Read Please on my computer and can copy my e-mails into it to have them read aloud. I'm not sure if the paid version has a way to do this more automatically or not but both software have free trial downloads.

(QIAT is a very active listserv that often discusses different assistive tech solutions for common scenarios in addition to their mission on improving quality indicators for assistive technology services in schools.
<http://sweb.uky.edu/~jszaba0/qiatlistserv.html> If you want to download the entire 5-page list of freeware/shareware, go to their archive list and look for the Thu, 29 May 2003 posting entitled "freeware/shareware" by Glenda Anderson)

- **Web Question by Dave Koppenhaver**

No new questions today, so here's my question for you parents: what kind of literacy information would be most helpful to you on the web? What have you looked for that you can't find? How many of you find yourself home-schooling by default, and what resources would help you there? In what form? Thanks for any and all ideas.

- **Re: Web Question by Susie Blackstien-Adler**

Hi David. I have been following the discussion, and while I am not a parent, I am headed up to northern Ontario this week. I referred one of the resource teachers for one of the students I will be seeing there to this discussion, but she said she didn't find what she was looking for. The student is in high school, but at a grade 1-2 reading level. He is an AAC user. While there have been good suggestions in the discussion about how to create reading material that is motivating to older students with early reading skills, there hasn't been a model for a lesson based on a theme, or a particular subject area. I understand that this student spends much of his time in alternate curriculum, and they wanted to tie the literacy development to this alternate (life skills) curriculum. We will meet them where they are focused next week, and help them to design some reading/writing/word study activities related to a life skill's activity. However, it might be nice to have examples of lesson plans around a specific topic that parents or professionals could use as a model. I suspect that I am asking for an example of the type of thing that will be available on the ALL-Link web site. I hope I've been able to articulate this well enough.

Susie

- **Re: Web Question by Dave Koppenhaver**
 Hi, Susie. Nice to hear you're still doing good works. I have a bias in this regard, as you may remember. I don't think lesson plans are the challenge here, but rather adaptations of good lessons. You can find, if you don't want to create, lessons plans on any topic for any age group. Type into Google, "lesson plans" + the topic and/or grade level + any other delimiters you care about. You'll find zillions (maybe more). The greater challenge, which you have the skills to address, is keeping up with the vocab demands, organizing the AAC device systematically as vocab increases, adapting materials so they are meaningful for older struggling reader, creating supports to enable meaningful related writing. Two organizations have large collections of set-ups, overlays, adapted materials that are helpful if you use the technologies they're created for: (1) www.intellitools.com (check in the user support section) and (2) www.setbc.org--look in the resources section. Two projects I know of are working at making this more of a one-stop search: (1) ALL-LINK, which you mentioned--people can find info at the website of the Center for Literacy and Disability Studies (<http://www.med.unc.edu/ahs/clds>); (2) AbleNet is working on two integrated curricula packages (one for older kids, one for younger). Contact Jackie Levine at AbleNet for update--not finished yet.
- **Re: Web Question by Deb West**
 Have you seen RAPS? (Reading Activities Project for older Students) It has 10 stories for older students and is formatted in a whole language approach. There's a story on grooming, one on bowling, one on earning money etc., so they fall into those transition, life skills areas. It can also give you a good idea of how to format books that you and the student may author. I also use a lot of early emergent non fiction for older students. There is a ton of it out there! Try Sundance 2003 PreK - 6 catalog (www.sundancepub.com) and Newbridge 2003 K-5+ catalog(www.newbridgeonline.com)

 - **Re: Web Question by Dave Koppenhaver**
 This is a good recommendation, Deb, for students who are interested in and/or need to learn some of these routines. The author, for those of you searching, is Caroline Musselwhite. The texts have plenty of repetition and predictability to support early reading.
 - **Re: Web Question by Susie Blackstien-Adler**
 Thanks for the reply. Yes, I have seen it, but did not think of it, so thanks for the reminder - I'll take another look at it and pass the information along.

Susie

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- **children with significant disabilities by Discussion Board Guest**
 Hi, I have a wonderful 9yr old child who is non verbal and in the severe/profound range. We are told until she learns cause and effect she can not be given any device that could help her learn to communicate with others. As her parents we know she understands cause and effect. She pulls the light switch on in her room. The switch toys at school she just puts her head on it so she can watch the little man climb both up and down the ladder. Of course they still do not get that she has watch this man and played the radio one to many times and could careless about pushing their button. So please give me some advice as to what steps we can take to help our child reach her full potential.

- **Re: children with significant disabilities by Dave Koppenhaver**
 Best practice in augmentative communication, just as in literacy, is no prerequisites. Our experience is that if we (1) hold high expectations, (2) engage children in activities that interest them, and (3) teach them what we want them to learn, then they succeed. Sometimes videotape evidence of home experiences will convince schools that children have the desired "prerequisites." Sometimes setting up the environment that worked at home, allows a child to succeed in this new environment. Sometimes inviting professionals into the home to observe your child succeeding works. All of these strategies presuppose "professionals," not people with titles who expect "performance on demand." Can you get one of these people to attend our summer course--we've had good luck immersing such folks in conversations with great professionals and parents and across a week reshaping views (info at <http://www.gac.edu/~dkoppenh/summer.html>)? If these folks aren't open to looking for success, but rather demand your daughter perform under their constraints, you should consider a different placement. Three cheers for you for recognizing what your daughter is showing you!
 - **Re: children with significant disabilities by Deb West**
 A very practical guide to beginning communication that would be well worth the money is called "Making Connections" by Peggy Locke and Jackie Levin. It is published by AbleNet and can be ordered on www.ablenetinc.com The premise to this book is that there are NO pre requisites to communication. I would give a copy to your child's teachers. There are step by step instructions in how to facilitate communication using prompts, cues, simple technology etc. It also includes charts for data collection.
 - **Re: children with significant disabilities by Joan**
 There was a very interesting discussion on prerequisites in AAC use a few months ago on the QIAT list serve. It was instigated by an article in a speech and language pathologists' trade journal which talked about the prerequisites- the opinion from the QIAT participants (who I generally find to be highly motivated and innovative educators) is that there is no prerequisite to the use of AAC- that honoring the acts of communication that occur naturally is essential. For example- your daughter drooping her head when she has to watch that man climbing the ladder AGAIN (instead of a new, cool toy) is clear communication that she is bored. You can find the discussions at the QIAT web site at www.qiat.org Follow the links to the archived list serve postings, and look at week 5 January 2003 under the topic of cause and effect, and week 1 of February 2003 for AAC prerequisites. The discussions may give you some talking points with your daughter's teachers.
 Joan Breslin, MN. Dept. of Ed
 - **Re: children with significant disabilities by Dave Koppenhaver**
 Thanks, Joan. QIAT is a good group for folks on this list to be aware. Some of the best assistive technology practitioners in the business.

- **Assessment time again! by Discussion Board Guest**
 Hi Dave,

Susan Murakami here. Went through a grueling three hour meeting this morning with my daughter, Sarah's (age 9, Rett Syndrome) school team. Went through comprehensive assessment results for all areas, including cognitive, physical, communication, etc.

The school psychologist used a variety of tests to determine Sarah's developmental age to be from the 6 to 36 month range. (Tests included SIB-R, Parent and staff questionnaire, observation, etc.) We were not able to tell of past abilities, only current. Anyways, she made the comment that since children ages 6-36 months typically are not readers, then we should base her IEP goals accordingly and certainly she needs the fundamentals of reading before we can even think about writing.

Now, I told her that was not necessarily true with your models of emergent literacy. So, where is the best place I can point her so she can learn about your and Karen's model of literacy learning and not hold Sarah to the old models?

Thanks so much, Susan

- o **Re: Assessment time again! by Dave Koppenhaver**

Susan,

Aargh! There is no basis for developing literacy programs based on psychological tests. Before I moved here, I viewed Minnesota as enlightened... You need literacy assessment to guide literacy program development. Emergent literacy research, widely accepted mainstream thinking, demonstrated over 40 years ago, and continues to demonstrate since, that reading does not precede writing in development (unless we present opportunities in that order to children--as we so often do in archaic programs).

Here are some places to start with the psychologist's education:

(1) Peibly, M., & Koppenhaver, D. A. (2001). Emergent and Early Literacy Interventions for Students with Severe Communication Impairments. *Seminars in Speech and Language*, 22, 221-232. (teaching strategies that reg ed, spec ed, SLP, or you might use to integrate augmentative communication and literacy intervention with Sarah).

(2) Erickson, Karen A., Koppenhaver, David A., Yoder, David E., and Nance, Joy. (1997). Integrated Communication and Literacy Instruction for a Child with Multiple Disabilities. *Focus on Autism and Other Developmental Disabilities*, 12 (3), 142-150. (a detailed discussion of how we supported literacy development in a child with multiple disabilities whose measured IQ was in the 20's)

- o **Re: Assessment time again! by Discussion Board Guest**

Thanks so much, Dave. I knew you could point me in the right direction. I will be in touch. -Susan

- o **Re: Assessment time again! by Dave Koppenhaver**

The rest of my reply:

(3) Koppenhaver, David A., Coleman, Patsy P., Kalman, Sophia L., and Yoder, David E. The Implications of Emergent Literacy Research for Children with Developmental Disabilities. *American Journal of Speech-Language Pathology: A Journal of Clinical Practice*, 1991, 1 (1), 38-44. (this is an overview of relevant research and rationale for why literacy ought to be part of every program serving children with developmental disabilities)

(4) Koppenhaver, David A., & Erickson, Karen A. (in press). Promoting Emergent Literacy in Young Children with Autism. *Topics in Language Disorders*. (this is a paper I can send you that will be published in a journal issue focusing on literacy, augmentative communication, and autism--the paper describes how we supported literacy in 3 nonspeaking children with autism with language and cognitive measures

as low or lower than Sarah)

I admire your persistence. Sarah picked the right mom.

- **Emergent/Early Literacy Clarification** by **Dave Koppenhaver**

I want to briefly address this difference again, since I find the two confused in our discussion and in other special education circles. Emergent literacy is all of the reading and writing that kids/adults do before it becomes conventional enough that a stranger can read their writing, or the student can read a text and understand the words themselves (not just the picture context, or language repetition). Early literacy is a shift in teaching intent from providing lots of rich and varied learning opportunities to continuing to do that PLUS trying to teach the child conventional spelling, letter-sound correspondences, grammar, syntax, etc. All of the skills needed to read and write independently and communicatively. Every human being is literate at an emergent level at birth. Many human beings never become conventionally literate. My colleagues and I believe that universal, conventional literacy is technologically and humanly possible. We believe the reason it hasn't happened is due to limitations in the teaching/instruction not any learners' limitation.

- **Me and My Big Mouth (Fingers?)** by **Dave Koppenhaver**

I made the statement in responding to one post of saying that I used to be impressed with Minnesota's education system before I moved here. That undoubtedly rubs any committed, talented Minnesota educator who reads it, the wrong way. I shouldn't have said it. I apologize. I was frustrated with a particular family's situation, which I have been aware of for many years, and should not have overgeneralized to the state. I am a teacher myself, and teachers have to be good learners, too. I learned too late to avoid offense in this case, but I did learn. My apologies to all MN educators who care about kids, believe in their ability to learn whatever is taught well, continue to upgrade their professional skills and knowledge, work collaboratively with families, and consequently make a huge difference.

- **Re: Me and My Big Mouth (Fingers?)** by **Joan**

Thanks, Dave- I appreciate your comments.

I am lucky in that in working with AT practitioners, I get to see some of the best and most innovative professionals here in MN. I would love to help more teachers learn new skills we both know are necessary to benefit kids. I would welcome the opportunity to work together to make this possible.

All my best-

Joan Breslin Larson

MN. Department of Education

- **Re: Me and My Big Mouth (Fingers?)** by **Discussion Board Guest**

As the parent whose child's situation elicited Dave's comments, I too apologize. This probably wasn't the correct forum in which to bring up some ongoing problems in getting my daughter's educational needs met. I should have emailed Dave privately with my questions. On our team, we too have some committed educators trying to do a difficult job with limited resources.

I have personally known Dave for about five years and find him to be very supportive to his students and other teachers who are creative and working hard to meet the educational needs of all students.

Susan Murakami

- **Duchenne's Muscular Dystrophy by Discussion Board Guest**

Hi,

I attended a meeting today for a student who is diagnosed w/ DMD, MR, and autism. The mother made a statement that she was recently told by her son's doctor that her son would never learn to read/write. Unfortunately, I don't have many present levels because the student is transitioning from preschool to kindergarten. Although he may not learn conventional ways of reading/writing couldn't he learn through alternative methods, such as pictures, computer, etc? I am actually a physical therapist who has an interest in assistive technology. Through this interest I have been reading about emergent literacy and have been following this discussion. Would anyone be able to comment on effective teaching methods used when working w/ children w/ DMD and their progress related to reading/writing.

Thank you,
Adrienne Mitford, PT

- **Re: Duchenne's Muscular Dystrophy by Joan**

Adrienne- when I was "in practice" I had several students with DMD. Generally, when they are as young as the little guy you will be meeting on, there is limited loss in fine motor, and pencil/paper are still usable. I am a huge fan for all kids using computers as adjuncts to learning, and would think that computer technology for a child with any of the challenges this child is facing is really practical. As for him not learning to read or write- I would not see any reason there should not be activities focused on literacy for this child or for any child. There are multiple strategies suggested in this discussion, and can be found in other resources (Closing the Gap for example) which suggest strategies for kids with motor impairments to complete academic tasks. Basically, my advice is don't let a medical diagnosis close thinking to possibilities. DMD is a very real disease, but the progress generally does not impact the fine motor skills on a child this age, and kids should all have opportunities to learn and live their lives like kids. Because the progress of the disease will cause a dependence on technology more so than for an able bodied child, I would introduce computers as frequently as possible, but let him do as much as he can, with intelligent support and ongoing high expectations. Teacher and parent collaboration will be important with a child with such interesting challenges.

- **Re: Duchenne's Muscular Dystrophy by Discussion Board Guest**

Thank you for your response. You confirmed a lot of my thoughts!

- **Final Four Days by Jackie Hess**

I just want to let everyone know that this month's discussion comes to an end on Friday, June 6th. In my six years of hosting online discussions, I think this has been the most active and the most tangibly useful to the greatest number of people. Dave has put in an enormous amount of time and effort for which I'm very grateful. Please take the opportunity to post your remaining questions and comments in the next couple of days. Thank you everyone for your participation!

- **Re: Final Four Days by Mary Jo Cooley Hidecker**

Thank you, Family Center on Technology and Disability, for hosting such an excellent discussion! I'm grateful to Dave and to all of the people who posted--raised lots of interesting questions and thoughts.

Recommended Resources

<http://www.gac.edu/~dkoppenh> Dave Koppenhaver's web page. Links to information on the annual summer seminar on literacy in children who use augmentative communication as well as other literacy, disability, and technology links.

<http://aacintervention.com/> Julie Maro and Caroline Musselwhite's joint website. Links to augmentative communication strategy descriptions, software reviews, Caroline's and Julie's speaking schedules, and more.

<http://www.creative-comm.com/> Pati King-DeBaun's website with links to emergent literacy, play-based therapy, early intervention, and other resources.

<http://www.med.unc.edu/ahs/clds/> The Center for Literacy and Disability Studies website. The Center's mission is to promote literacy learning and use for individuals of all ages with disabilities.

<http://www.closingthegap.org> Best single place to begin to untangle the maze of assistive technologies available to support individuals with disabilities. Tons of info, lots of links, annual conference, and quarterly newsletter.

<http://www.lburkhart.com/> Linda Burkhart's technology integration website. Incredible array of links to websites in education and special education, assistive technology, inclusion, strategies, organizations, and more.

<http://www.setbc.org> Special Education Technology British Columbia. Fabulous resource for finding teacher-made materials for many of the major softwares, strategy guidance, lots of how-to's, and other links.

www.atia.org/ Links to all of the members of the Assistive Technology Industry Association and information on their annual conference.

Two of the companies that have created a substantial number of literacy and educational resources for a wide range of kids with disabilities are Don Johnston (<http://www.donjohnston.com>) and Intellitools (<http://www.intellitools.com>).