


AAC and the Role of Literacy


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Learner Outcomes


At the end of today's session, you will be able to:

- Discuss literacy principles that impact literacy acquisition in AAC users;
- Describe the main components of literacy and implications for AAC users; and
- Explain three evidence-based therapeutic interventions that target language and literacy development for AAC users.




ASHA says...

- "SLPs play a critical and direct role in the development of literacy for children and adolescents with communication disorders" (ASHA, 2001, p. 1)



Connections between spoken and written language


- Spoken language is the foundation of reading and writing
- Spoken and written language are reciprocal, and each builds on the other
- Children with spoken language problems have difficulty learning how to read and write; and vice versa
- Instruction in spoken language can facilitate growth in written language; and vice versa



Important components of language


- Morphology
- Phonology
- Syntax
- Semantics
- Pragmatics

**Deficits in any of these areas may affect children's ability to communicate, think, and learn



SLPs roles and responsibilities

- May include:
 - Prevention by fostering language acquisition and emergent literacy
 - Identification of children who are at risk
 - Assessment
 - Intervention and documentation of outcomes
 - Assistance to general education teachers, parents, students
 - Advocacy
 - Expansion of the knowledge base



What is Literacy?

- Integral part of the development of language.
- Requires an ability to integrate listening, reading, speaking, writing, and viewing in meaningful contexts.
- Ability to articulate is not a prerequisite for reading and ability to hold a pencil not a prerequisite for writing



What does the research say?

- Children with reading difficulties also tend to have oral language deficits (Catts et al., 2001) and vice versa (Justice et al., 2003)
- Children with difficulties in kindergarten tended to have academic difficulties in high school (Flax et al., 2003)
- Children who struggle in high school are less likely to pursue higher education (Roseberry-McKibbin, 2000)
- They may have difficulties establishing and maintaining social relationships, participating in community, and living independently

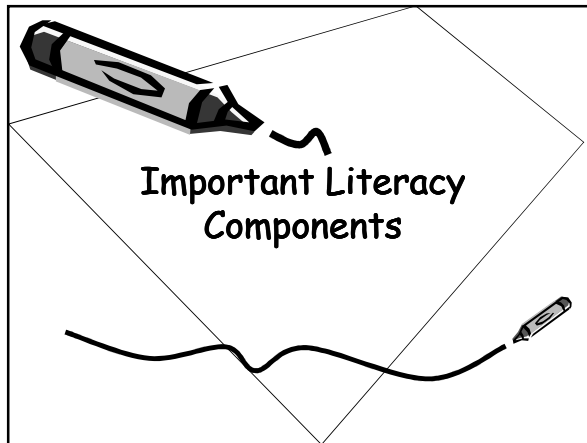


Risk factors for language and literacy difficulties

- A mother whose education was less than high school
- Living in a single-parent household
- Living in a family receiving welfare benefits, an index of family poverty
- Parents whose primary language was other than English
- Children with speech and language impairments
- Children with a family history of speech and language difficulties



Important Literacy Components



Transaction

- What is your definition of "transaction"?
- Merriam Webster:
 - An exchange or transfer of goods, services, or funds
 - A communicative action or activity involving two parties or things that reciprocally affect or influence each other
- Describe a real-life example



How does transaction apply to literacy?

- "Every reading act is an **event**, or a transaction involving a particular **reader** and a particular **pattern of signs**, a **text**, and occurring at a particular **time** in a particular **context**" (Rosenblatt, p. 1063)



The Basics of Transaction

- Text is shaped (i.e. transaction) by the speaker and the listener
- Utterances may take on different meanings
- Attitudes, state of mind, and opinions may have changed through the process



Rosenblatt says...

- Both the text and the reader are changed through the process; reading is dynamic
- Meaning occurs through the transaction between the reader and text; meaning does not reside "in" the text or "in" the reader



Linguistic Transaction

- Example: face-to-face communication
- Involves a back and forth process
- Verbal signs: vibrations in the air produced by the speaker
- Both contribute, even if one person is silent
- Assess the situation to gain a sense of the other person
- Use clues from setting and occasion; also nonverbal cues
- Listener may ask questions or make comments to help the speaker gauge information
- Spoken text may be interpreted differently by each of the conversationalists



The Reader's Stance

- The reader's selection of a selected attitude, "bringing certain aspects into the center of attention and pushing others into the fringes of consciousness" (p. 1066).
- Purpose

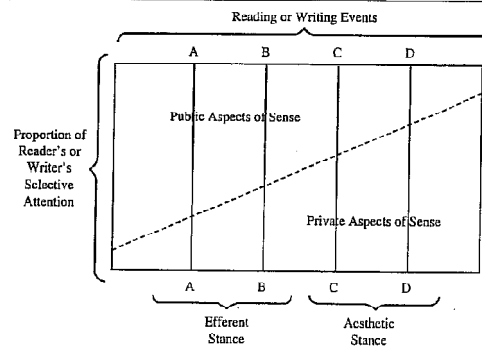


Stance

- **Efferent Stance:** information that is to be extracted from the text and remembered after the reading event; may include reading a newspaper, textbook, legal brief
 - Ex: Directions for putting together a desk
 - Ex: Man who swallowed a poisonous liquid
- **Aesthetic Stance:** attitude of giving attention to what is being lived through the event; may include senses, feelings, intuitions
 - Ex: Book club book
 - Ex: Love story



Figure 1
The Efferent-Aesthetic Continuum



Final Thought about Transaction

- Because of the transaction with text, we cannot isolate specific skills or over-emphasize either the author or the reader



What is schema?

- Take 2 minutes to write down your definition of "schema" and discuss briefly with your neighbors



Weaver's definition

- "Schema is...an organized chunk of knowledge or experience, often accompanied by feelings" (Weaver, 2001, p. 17).



Pear/pair

- Pear: a fruit
- Pair: two similar objects together



List

- Present
- Wound
- Produce
- Sewer



Sentences

- I have to present my research at the conference.
- The clock was tightly wound.
- I bought lots of produce at the grocery store last night.
- She is a sewer.



Fun game

- Experience is influenced by schema—the person's knowledge, experience, and feelings



Four cueing systems

1. **Syntactic**—structure
2. **Semantic**—meaning
3. **Graphophonemic**—orthography, phonology, phonics
4. **Pragmatics**—facial expression, tone, gesture, eye contact



Examples

- The plants ate the ripe grapes.
- He took the basket and went to the well for some water.
- Was/saw
- No/on
- House/home
- Feels/feeds
- Well/we'll



Grammatical Signals

- Function words—provide cohesion in the texts
 - Pronouns, copulas
- Content words—tend to not be common in language, as a whole, but are more common in a specific text because of the subject matter
 - Nouns
- Prefixes
- Suffixes



Exercise: Gloopy and Blit

GLOOPY IS A BORP.
BLIT IS A LOF.

GLOOPY KLUMS LIKE BLIT.
GLOOPY AND BLIT ARE FLOMS.

RIL HAD POVED BLIT TO A JONFY.
BUT LO HAD NOT POVED GLOOPY.

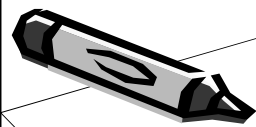
"THE JONFY IS FOR LOFS," BLIT BOFD TO GLOOPY. "ROM ARE A BORP."

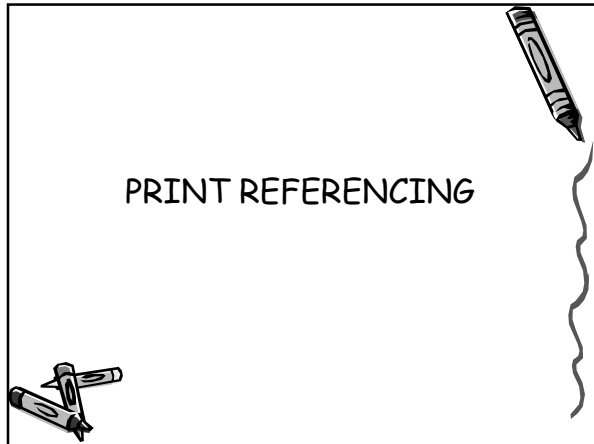
GLOOPY WAS NOT KLORPY.
THEN BLIP WAS NOT KLORPY.



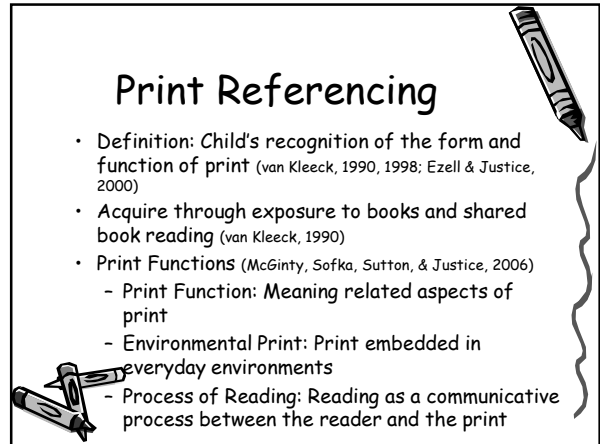
Topics related to Language and Literacy

- Print referencing
- Phonological awareness
- Syntax/Grammar
- Morphology
- Vocabulary
- Comprehension



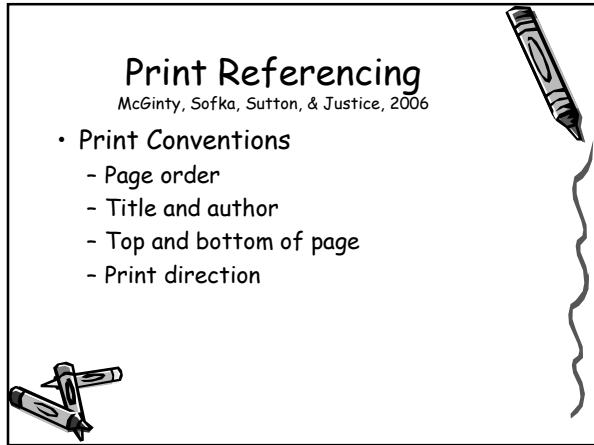


PRINT REFERENCING



Print Referencing

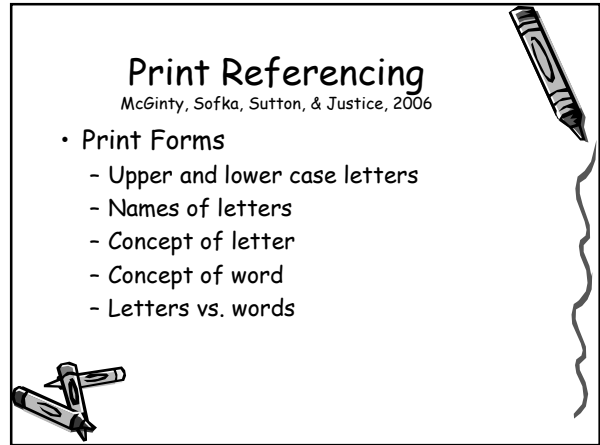
- Definition: Child's recognition of the form and function of print (van Kleeck, 1990, 1998; Ezell & Justice, 2000)
- Acquire through exposure to books and shared book reading (van Kleeck, 1990)
- Print Functions (McGinty, Sofka, Sutton, & Justice, 2006)
 - Print Function: Meaning related aspects of print
 - Environmental Print: Print embedded in everyday environments
 - Process of Reading: Reading as a communicative process between the reader and the print



Print Referencing

McGinty, Sofka, Sutton, & Justice, 2006

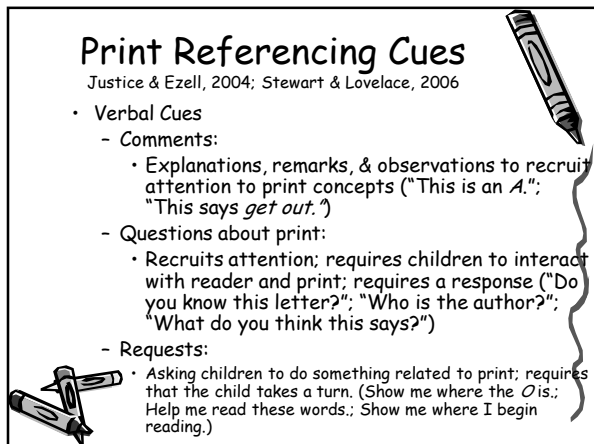
- Print Conventions
 - Page order
 - Title and author
 - Top and bottom of page
 - Print direction



Print Referencing

McGinty, Sofka, Sutton, & Justice, 2006

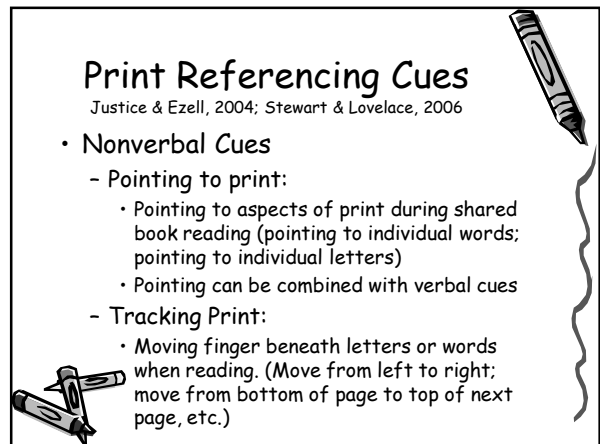
- Print Forms
 - Upper and lower case letters
 - Names of letters
 - Concept of letter
 - Concept of word
 - Letters vs. words



Print Referencing Cues

Justice & Ezell, 2004; Stewart & Lovelace, 2006

- Verbal Cues
 - Comments:
 - Explanations, remarks, & observations to recruit attention to print concepts ("This is an A."; "This says *get out*.")
 - Questions about print:
 - Recruits attention; requires children to interact with reader and print; requires a response ("Do you know this letter?"; "Who is the author?"; "What do you think this says?")
 - Requests:
 - Asking children to do something related to print; requires that the child takes a turn. (Show me where the *O* is.; Help me read these words.; Show me where I begin reading.)



Print Referencing Cues

Justice & Ezell, 2004; Stewart & Lovelace, 2006

- Nonverbal Cues
 - Pointing to print:
 - Pointing to aspects of print during shared book reading (pointing to individual words; pointing to individual letters)
 - Pointing can be combined with verbal cues
 - Tracking Print:
 - Moving finger beneath letters or words when reading. (Move from left to right; move from bottom of page to top of next page, etc.)

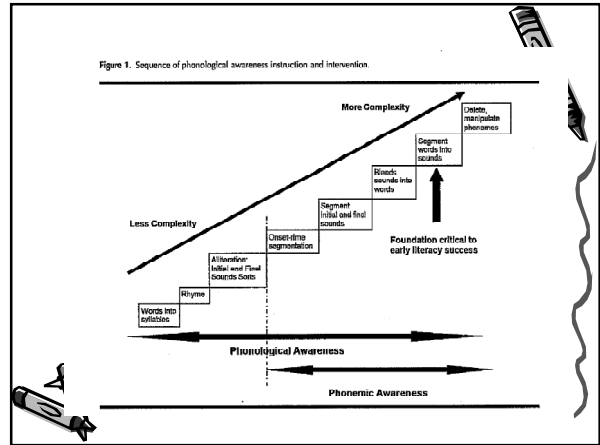
PHONOLOGICAL AWARENESS

Phonological Awareness

- Phonological awareness is the conscious attention to the sound structure of language
- It is a broad skill that includes:
 - Ability to detect and produce rhyme
 - Ability to segment speech into words, syllables, and phoneme
 - Ability to detect and manipulate phonemes (Gillon, 2004)

Levels of Phonological Awareness Adams, 1990

- Detection of rhyme and alliteration—most primitive level.
- Oddity tasks—require a child to determine which word has a different sound (initial, middle, or final) than the others in a group of words usually develop next.
- Third, splitting syllables and blending words orally develop.
- Fourth, ability to perform phonemic segmentation (tapping the phonemes in words).
- Finally, the ability to carry out phonemic manipulation tasks develops.
- Adams argues that the first four skills usually appear before a child starts kindergarten, while the last skill usually does not emerge until first grade.



Intervention Schuele & Boudreau, 2008

- Timing
- Order
- Duration and Intensity

Table 5. Instructional sequence for phonological awareness intervention (Schuele & Dayton, 2000)

Step in sequence	Instructional sequence within each step
Segment words into syllables	<ul style="list-style-type: none"> ■ Segment sentences of monosyllabic words (e.g., <i>Rob likes his bike</i>) ■ Segment two-syllable compound words (e.g., <i>cupcake, landing</i>) ■ Segment polysyllabic words (e.g., <i>pillow, carpet</i>)
Rhyme	<ul style="list-style-type: none"> ■ Segment multisyllabic words (e.g., <i>hushhush, downy</i>) ■ Judge rhyme (e.g., <i>Do cat and hat rhyme? Do cat and shoe rhyme?</i>) ■ Odd-onset rhymes (e.g., <i>Which does not rhyme? cat, ball, hat?</i>) ■ Match rhymes (e.g., <i>Find the one that rhymes with hat: bell, cat, top</i>) ■ Crossed rhymes (e.g., <i>Tell me a word that rhymes with cat.</i>)
Initial and final sounds (monosyllabic words)	<ul style="list-style-type: none"> ■ Match rhymes (e.g., <i>Find the one that rhymes with hat: bell, cat, top</i>) ■ Odd-onset initial sounds (e.g., <i>Which one does not have the same sound at the beginning? cat, ball, cup, king</i>) ■ Match initial sounds (e.g., <i>Which one begins with the same sound as hat?</i>) ■ Initial sound sorts (e.g., <i>Which ones start like fish and which ones start like sun?</i>) ■ Judge final sounds ■ Odd-onset final sounds ■ Match final sounds ■ Final sounds sorts
Onset-rime segmentation; Segment initial and final sounds	<ul style="list-style-type: none"> ■ Segment initial containing sounds (e.g., <i>What's the first sound in fish?</i>) ■ Segment initial stop sounds (e.g., <i>What's the first sound in bus?</i>) ■ Segment final containing sounds (e.g., <i>What's the last sound in bus?</i>) ■ Segment final stop sounds (e.g., <i>What's the last sound in car?</i>)
Blend sounds into words and segment words into sounds	<ul style="list-style-type: none"> ■ Target blending and segmenting as reciprocal tasks. In this sequence: <ul style="list-style-type: none"> ■ CV and VC words with continuants (e.g., <i>me, us</i>) ■ CV and VC words with stops (e.g., <i>pen, top</i>) ■ CVC words with continuant (e.g., <i>moon, fish</i>) ■ CVC words with stops (and continuant) (e.g., <i>cat, fish</i>) ■ CCVC words, begin with blends with dissimilar articulatory placement (e.g., <i>milk, flip</i>) ■ CVCC words, targeting nasal blends last (e.g., <i>fan, jump</i>) ■ Words with continuant and stops in varying word shapes

Application to SLPs

- Use of print referencing (verbal and nonverbal) while reading books
- Target phonological awareness in contextualized environment while reading books
- Phonological Intervention (Schuele & Boudreau, 2008)
 - Teach, don't test
 - Plan intervention
 - Scaffold

Table 2. Benchmarks for phonological awareness achievement.

Age/Grade	Skill or ability
Preschool	Some rhyming ability (e.g., match rhymes) Some beginning sound ability (e.g., beginning sound sorts)
Early kindergarten	Segment words into syllables Judge and match rhyming words Generate rhyming words
Middle kindergarten	Match words with same beginning sounds Match words with same final sounds
Late kindergarten	Segment initial sounds and final sounds Segment and blend two and three sound words that are consonant-vowel (e.g., go), vowel-consonant (e.g., up), consonant-vowel-consonant (e.g., cat, moon)
Early first grade	Segment and blend sounds in words with consonant blends (e.g., skate, jump)

Research

- Improvements found in child's knowledge of print concepts with explicit print referencing (Ezell & Justice, 2000; Lovelace & Stewart, 2007)
- Contextualized instruction led to gains in phonological awareness compared to a non-treatment control group (Ukrainetz, et al., 2000)
- Contextualized phonological awareness intervention led to significant gains in phonological awareness skills of children with language learning problems (Raisor, 2002, 2006)

Morphology

Morphology

- Word structure; study of morphemes
- Begins in preschool and continues through late school-age years
- Derivations and inflections are important
- Integrated with other language process learning

VOCABULARY

Enhancing vocabulary

- Literacy experiences and book sharing is a perfect way for enhancing vocabulary development.

Words throughout the story

- Children use words
 - To answer adult's questions
 - To fill in phrases.
 - In sentences to retell and role play stories.
- Adults will
 - Model words.
 - Use the words as they talk about the stories.
 - Provide definitions of the words.
 - Talk about how the word relates to the story.

Learning new words

- There are multiple exposures to vocabulary and opportunities to see how words are used and how they relate to other words.
 - Books that are read to children incorporate both words that children are familiar with and words that are unusual and unique.
- Exposure to unique words is important to language and literacy development (Hart & Risley, 1995)*

Book characteristics and vocabulary learning

- If a word is used multiple times in a book then a child is more likely to learn that word.
- The degree to which the word is illustrated in the book has an impact on word learning and how well the child can infer the meaning of the word.
- A child is more likely to learn the word if it is an important word to the plot of the story.

Schickedanz (2001)

Vocabulary Enhancement

- Select 8-10 words or phrases ahead of time.
 - Choose vocabulary words that are more critical for understanding the story.
- Identify and point to words.
 - This will highlight each word with a nonverbal cue.

Smith, Sickman, & Prendeville, 2004
Adapted from: McGee & Richgels (2003) and Zevenbergen & Whitehurst (2003)

Vocabulary Enhancement (cont.)

- Define the word
 - As you read the selected vocabulary words in the text of the book, stop and turn to the children to give just a short definition or explanation of the vocabulary word. (ex: barter)
- Provide a similar word
 - Say the word that is in the book and then provide a word that is similar that the child might know. (ex: trade)

Vocabulary Enhancement (cont.)

- Ask or make a text-to-life question or comment.
 - As you read the book, ask questions and make comments using the target vocabulary words or phrases. (ex: The Ox-Cart Man "I remember one time when I bartered and traded my brother a sucker for his new game.")

SYNTAX/GRAMMAR

Grammar and Syntax

- Word level (plurals, pronouns, past tense, future tense, prepositions etc)
 - Support these structures while reading with manipulatives (i.e. blocks, pine cones, wooden sticks, stones, marbles, buttons, beads, etc).
 - Asking wh-questions while reading (i.e. What is the girl holding-response: apples-plural)
 - Retelling the story to support the target structures (story cloths, boardmaker printed pictures, painting, manipulatives)
 - Look at stories before hand that have the grammatical structure throughout the story (i.e. "Messy Meal"-targets prepositions)
 - Do a craft or recipe at the end of the story to target markers (i.e. get a dog craft or dog bone recipe) "Book Cooks" and Dlkids.com (great websites for these types of targets).

Written Activities "Rainbow Sentences"

- Sentences "Rainbow Sentences"
- This is a technique used to increase length and complexity of sentences (oral/written) developed by Mary Ennis M.A. CCC-SLP a school SLP
- It uses wh-question words and is called rainbow sentences because different colors are used to teach the sentence pattern
- Who, What, Where, When, Why

Written Activities

“Rainbow Sentences” cont.

- Choose who, what, where and when words out of a story.
 - Use the chart to insert words and then child needs to fill in the rest recalling details from the story or making up their own.
 - Once the chart is complete, it can be re-written into a full sentence.
- “Alexander and the Terrible, Horrible, No Good, Very Bad Day”-Judith Viorst

Who	What	Where	When	Why (because, e, so, to)
	Got gum out of his hair		At night	
Anthony	Found a car kit		In the morning	
Alex	Yelled at Paul	at school		Because Paul did not want to be his best friend

Rainbow Sentences

- Combine the words from each row in the chart to make a complete sentence.
- Alexander got gum in his hair in his bedroom at night because he left it in his mouth.



COMPREHENSION

Reading comprehension


- The ultimate goal of reading
- Collection of knowledge that may take years to master
- Complicated mental activity that we engage in daily
 - Includes reasoning, synthesizing, problem-solving, and interpretation


Augmentative and Alternative Communication

“Literacy skills for AAC users with severe communication impairments allow for more than conventional reading and writing by providing access to a means of self-expression in order to communicate thoughts and opinions and to foster personal independence” (DeCoste, 1997, p. 298)

- 
- 
- If an individual is literate, he or she can communicate any message to anyone (Sturm & Clendon, 2004)


AAC users tend to have difficulty acquiring language



- 
- Difficulty with effectively communicating message
 - Limitations with active participation in classroom and social exchanges

Difficulties across language domains:



- 
- Phonology
 - Morphology
 - Syntax
 - Semantics
 - Pragmatics
 - Discourse


Implications to Literacy Development



- 
- Reading
 - Writing


Phonology



- 
- Decreased articulatory codes
 - At risk for delays in phonological awareness, phonemic awareness, spelling
 - Provide access to tools that facilitate learning of these skills

Morphology



- 
- Lack of morphological markers in system
 - May use content word that carries most meaning
 - Omission of morpheme because of time constraints

Syntax

- Production of simpler and shorter utterances
 - Omissions and difficulties with word order

Semantics/Vocabulary Development

- Based on experience and prior knowledge
- Learn when it is tied to experience and activates prior knowledge
- Remember about 5% of the new words that they read or hear for the first time

Pragmatics

- Typically, AAC users are respondents and have restricted speech acts
- May have difficulty understanding transaction, audience

Discourse

- AAC users tend to have stronger conversational skills
- Important for comprehension and production to have understanding of different text structures

AAC users may have difficulty:

- Conveying meaning
- Composing complex sentences
- Creating continuity between sentences

AAC and Literacy: Statistics

- 70-90% read and write below same age peers (Koppenhaver & Pierce)
- Majority are reading below 3rd grade level (Cunningham et al.)
- Most do not acquire functional literacy skills (Light et al.)
- 50% of AAC users with CP and typical cognition demonstrated literacy deficits (DeCoste, 1997)
- Fewer communication partners overall and greater number of interactants who are family members and paid workers rather than friends or acquaintances (Blackstone, Williams & Wilkins)



Reasons for Literacy Difficulties

- Limited opportunities and experiences (Hetzroni, 2004)
 - Using speech, interacting during conversation, asking questions, inquiring about missing information or words, clarifying information
 - Access to print, interaction with books, guidance; world knowledge; vocabulary development
- Reduced expectations
- Limited assessment & intervention tools
- Formal instruction (Sturm & Clendon)

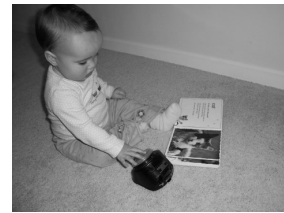


External barriers that inhibit learning

- Distinct asymmetry between primary channels of input and output (Smith & Grove, 1986)
- Different language codes
- Limited exposure to expressive language via AAC system
- Lack of contact with competent nonspeaking communicators (Light et al., 1985)
- Differences in linguistic versus nonlinguistic modes of communication



"Language and literacy development begins in **infancy**...and social communication competence is fostered at home and in specific contexts,...and a strong foundation is established" (Sturm & Clendon, 2004, p. 83)



Emergent Literacy: 6 Principles

1. Learning to read and write is a developmental process
2. Reading and writing develop concurrently and interrelatedly
3. Literacy skills develop in real life settings while accomplishing real life goals.



6 Principles: Continued

4. Active involvement in the processes of reading and writing is necessary
5. Adult interactions occurring around the process of reading and writing influence literacy learning
6. Reading and writing are skills and must be practiced



Emergent Literacy: Statistics

- Preschoolers with SSPI had fewer opportunities to express themselves and less access to reading and writing materials
- Parents of preschoolers without disabilities read to their children daily; parents of children with SSPI reported reading only 2-3 times per week
- Two thirds of parents of preschoolers without disabilities asked their children to label pictures compared to only $\frac{1}{2}$ of parents of children with disabilities



Shared Book Reading

- Provides a context for meaningful interactions with books
- Teaches children about various aspects of language and literacy development
- Promotes active participation



Survey by Light & Kelford-Smith (1993)

- Parents of children with and without disabilities
- Similar reading and writing environments
- Children with disabilities:
 - Had less opportunity for participation while reading
 - Were asked fewer questions and initiated less
- Parents of children with disabilities ranked literacy lower than mobility and toileting



Light, Binder, & Kelford- Smith (1994)

- Studied interactions of 5 mother-child dyads
 - All children were AAC users
- Mothers dominated interactions
- Limited, if any, access to AAC system while reading together



School-aged Children who use AAC...

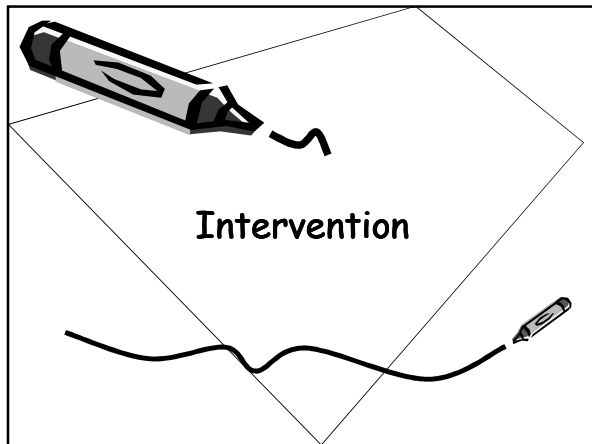
- Because of limited or uneven language skills, they enter school academically behind their peers
- At risk for not becoming competent communicators; limited participation in classroom and with peers during social situations



School and the AAC user

- Literacy instruction may occur outside of the general ed. classroom
 - May be personalized, limited, splintered, and lacking in continuity
 - May be driven by perception that they are not capable of learning to read and write (Erickson & Koppenhaver, 1995)





Emergent Literacy


- Families can:
 - Change their expectations
 - Watch for signs of emergent literacy
 - Provide opportunities and experiences
 - Adapt materials to meet their child's level

Shared Book Reading

- Actively read together
- Re-read books, especially favorites
- Talk about literacy
- Connect books to experiences
- Provide literacy-rich environments

Beukelman & Miranda (1998)

Shared Book Reading



Literacy Learning in the Classroom

- Multifaceted
- Range of authentic tasks
- Active engagement with other students
- Balanced approach
- Repeated learning opportunities
- Facilitate independence

Literacy Opportunities

Typical children get 17 new things to read each day

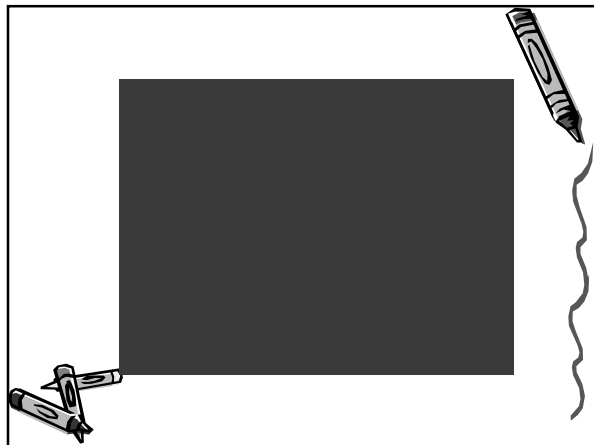
(K. Erickson, 2008)

Phonological Awareness

- Access to information in AAC device
- Includes:
 - Sound blending
 - Phoneme segmentation
 - Rhyming

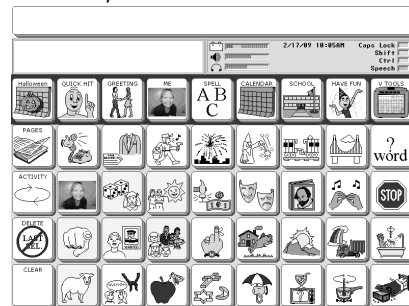
Morphology & Syntax

- Ensure that developmentally appropriate information is in AAC system
- Use recasts
- Expose to adult forms



Vantage Plus

Prentke Romich Company
Unity 45 Full User



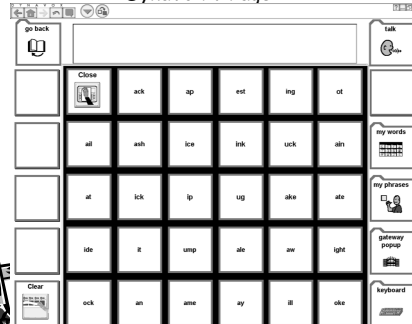
Vocabulary

- Facilitate new word acquisition by connecting to background knowledge
- Activities should be engaging and interactive

Soto & Zangari (2009)

Common Rimes

DynaVox V Page



Strategies to Facilitate Vocabulary Development

- Read cooperatively and actively
- Model expansions, extensions
- Use semantic webs and maps
- Place books on lower shelves
- Ensure good positioning
- Encourage page-turning
- Try CD-ROM books
- Use communication displays



Intervention Strategies

- **Aided Language Stimulation**
A language stimulation approach in which the facilitator points out picture symbols on the child's communication display in conjunction with all ongoing language stimulation. Through the modeling process, the concept of using the pictorial symbols interactively is demonstrated for the individual.
- **Light Cueing**



Vocabulary Expansion? Also try:

- Introducing vocabulary in meaningful experiences.
- Brainstorming
- Questioning
- Predicting
- Discussing
- Reading
- Using graphic organizers



Students who write become better readers...and writers, and thinkers.

Comprehension

- Ultimate goal of reading process
- Emphasize from the beginning
- Includes all essential linguistic concepts



Strategies

- Comprehension monitoring
- Summarization
- Graphic organizers
- Question generation
- Cooperative learning



Soto & Zangari (2009)

Writing


- Make sure items are easily accessible
- Place markers and crayons in holders
- Try computer programs:
 - KidPix software
 - Writing with Symbols 2000 by Mayer-Johnson
- Use keyboard and blank screen for equal early scribbling





Writing with Symbols 2000


Mayer-Johnson, Inc.


Get Ready For Bed



 1. Wash



 my



 face.



 2. Brush


 my


 teeth.


 3. Put on


 my


 pajamas.









Motivation

- Use writing for a variety of purposes
- Lists
- Email
- List serves
- Games

Literacy Activities using AAC






















Communication Builder

Enabling Devices, Inc.

I want to read a book 	Yuck! 	That's funny! 	What is that? 
I want you to read it 	turn the page 	Let me see! 	The End 



























Tech/Speak

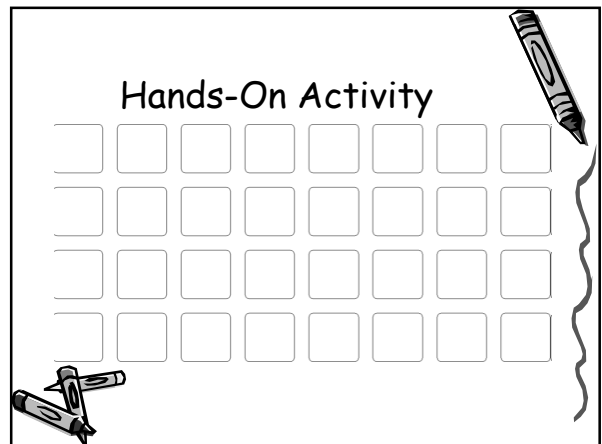
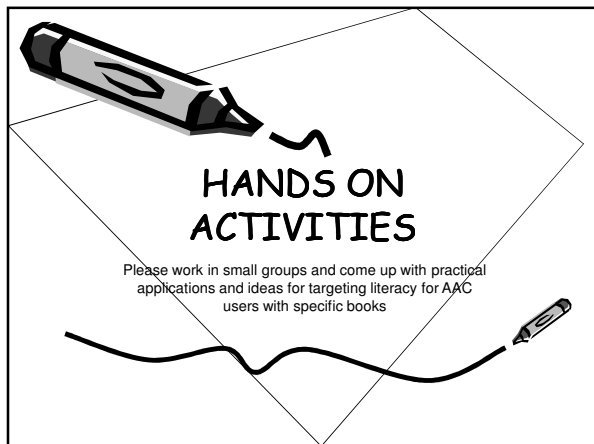
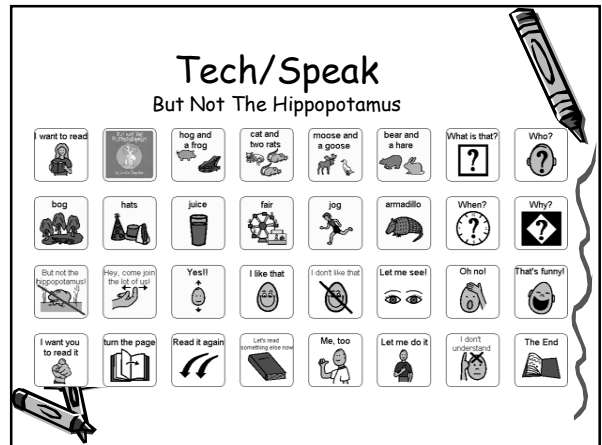
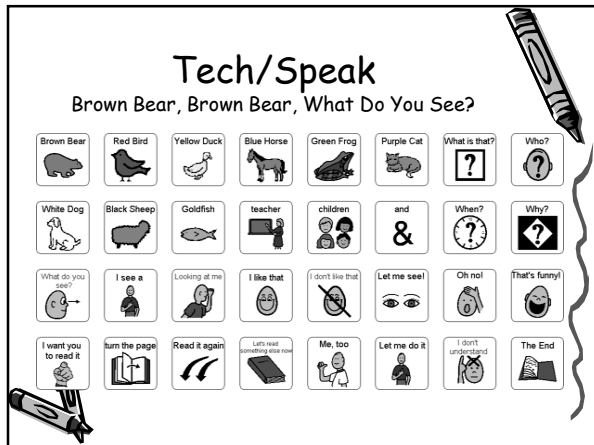
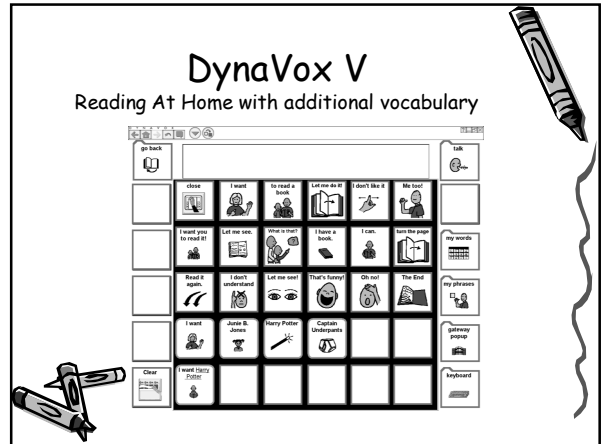
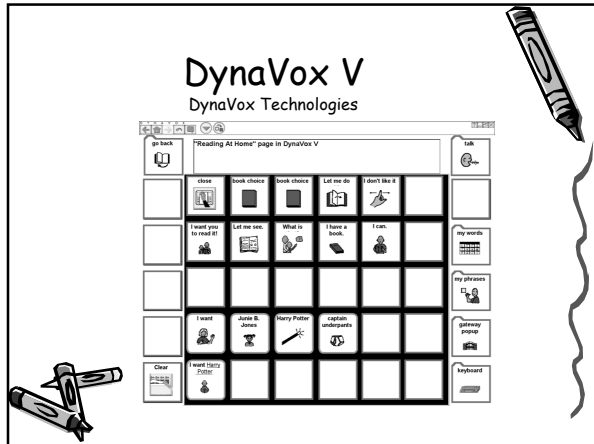
AMDi - Advanced Multimedia Devices, Inc.

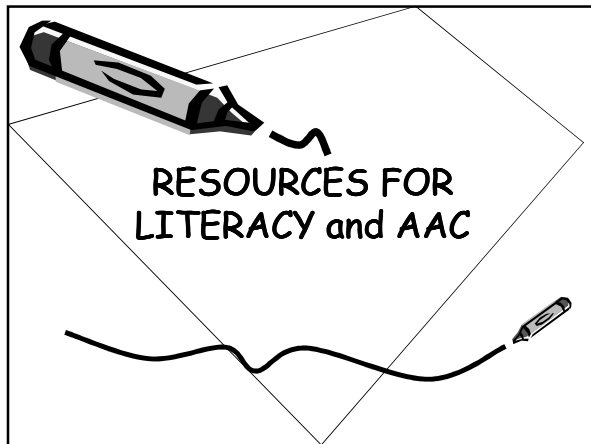
I want 						What is that? 	Who? 
						When? 	Why? 
have a book 	I can read it 	I can't read it 	I like that 	I don't like that 	Let me see! 	Oh no! 	That's funny! 
I want you to read it 	turn the page 	Read it again 	Let's read something else 	Me, too 	Let me do it 	I don't understand 	The End 

Tech/Speak

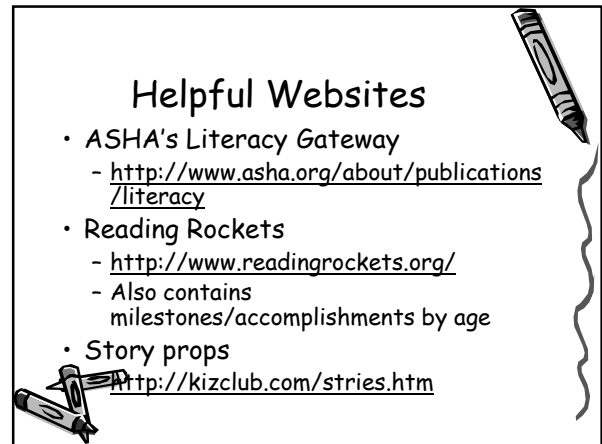
Book Choice Overlay

I want 	Dora the Explorer 	The Wiggles 	Blues Clues 	Brown Bear 	Where's Spot? 	What is that? 	Who? 
						When? 	Why? 
have a book 	I can read it 	I can't read it 	I like that 	I don't like that 	Let me see! 	Oh no! 	That's funny! 
I want you to read it 	Turn the page 	Read it again 	Let's read something else 	Me, too 	Let me do it 	I don't understand 	The End 



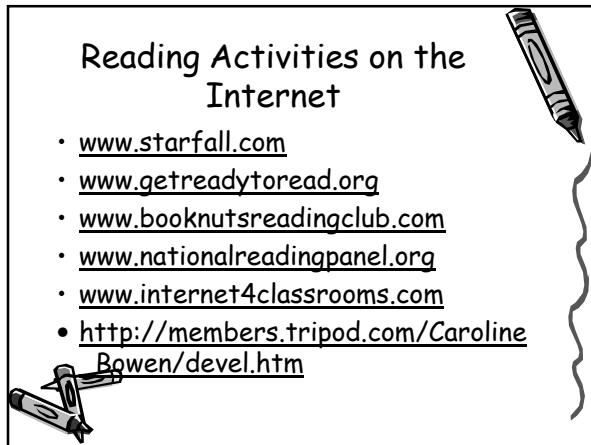


RESOURCES FOR LITERACY and AAC



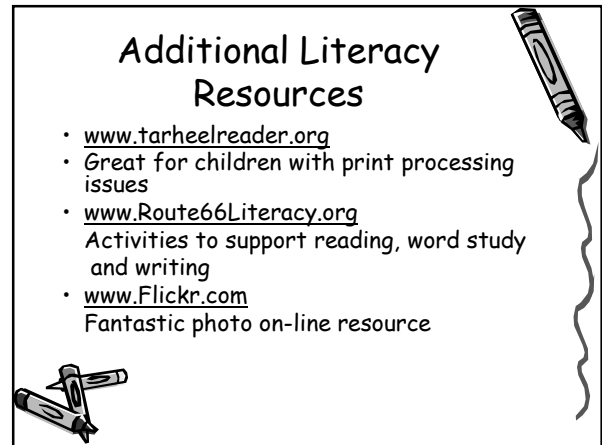
Helpful Websites

- ASHA's Literacy Gateway
 - <http://www.asha.org/about/publications/literacy>
- Reading Rockets
 - <http://www.readingrockets.org/>
 - Also contains milestones/accomplishments by age
- Story props
 - <http://kizclub.com/stories.htm>



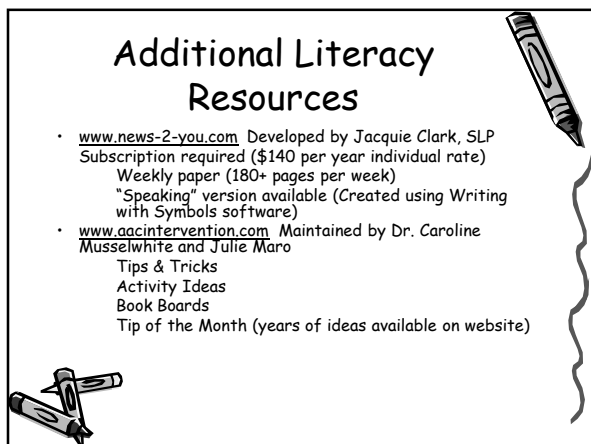
Reading Activities on the Internet

- www.starfall.com
- www.getreadytoread.org
- www.booknutsreadingclub.com
- www.nationalreadingpanel.org
- www.internet4classrooms.com
- <http://members.tripod.com/CarolineBowen/devel.htm>



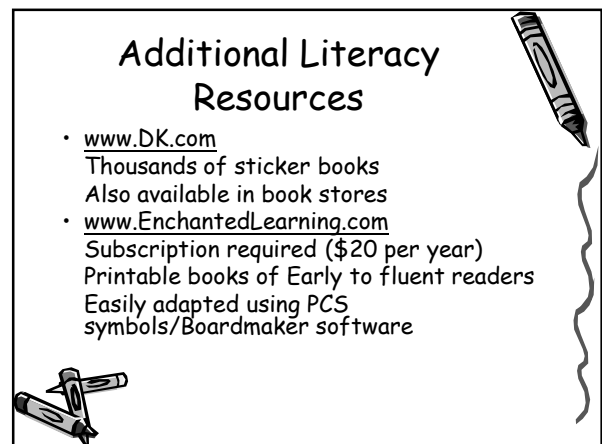
Additional Literacy Resources

- www.tarheelreader.org
Great for children with print processing issues
- www.Route66Literacy.org
Activities to support reading, word study and writing
- www.Flickr.com
Fantastic photo on-line resource



Additional Literacy Resources

- www.news-2-you.com Developed by Jacquie Clark, SLP
Subscription required (\$140 per year individual rate)
Weekly paper (180+ pages per week)
"Speaking" version available (Created using Writing with Symbols software)
- www.aacintervention.com Maintained by Dr. Caroline Musselwhite and Julie Maro
Tips & Tricks
Activity Ideas
Book Boards
Tip of the Month (years of ideas available on website)




Additional Literacy Resources

- www.DK.com
Thousands of sticker books
Also available in book stores
- www.EnchantedLearning.com
Subscription required (\$20 per year)
Printable books of Early to fluent readers
Easily adapted using PCS symbols/Boardmaker software

Additional Literacy Resources



- www.speakingofspeech.com
Free Materials Exchange
 - www.dltk-teach.com
"Book Breaks" Activities (Coordinate with popular children's books)
 - www.dotolearn.com
Games, songs, communication cards, print resources
- 

Additional Literacy Resources




- www.lil-fingers.com
Free online storybook activities including rhyming print and audio
 - www.magneticpoetry.com
Can choose beginning word level and story maker
 - <http://trainland.tripod.com>
Incredible resource for no cost images, PCS symbols, etc.
(Including IntelliKeys activity exchange)
- 

Suggested Book Lists




Chain or Circular Story



- Why Mosquitoes Buzz in People's Ears
by Verna Aardema
 - If You Give a Mouse a Cookie
by Laura Numeroff
 - If you Give a Moose a Muffin
by Laura Numeroff
- 


Cumulative Stories



- Today is Monday
by Eric Carle
 - The Old Woman and Her Pig
by Paul Galdone
 - "Buzz, Buzz, Buzz" went Bumblebee
by Colin West
- 

Familiar Sequence Books



- Come Out and Play, Little Mouse
by Robert Kraus
 - Cookie's Week
by Cindy Ward
 - Sunday Potatoes, Monday Potatoes
by Vicky Shiefman
- 

Repetition of Phrase and Repetitive Phrase

- Ten Out of Bed
by Penny Dale
- Knock, Knock! Who's There?
by Sally Grindley
- Is Your Mama a Llama?
by Deborah Guarino



Rhyming books

- Jake Baked The Cake
by B.G. Hennessy
- There's a Cow In The Road
by Reeve Lindbergh
- Silly Sally
by Audrey Wood



Questions/Comments?

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