The Language-Literacy Connection: Strategies for promoting language and literacy skills in children with developmental disabilities

CIDD Community Talk Series
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About You?

Tell me about you:
• Name
• Professional or parent? Other?
• What interested you about coming to this talk?
• Is there someone in particular you’d like to learn strategies for?
  » If so, what are his/her current skills in reading and writing?
  » What strategies have been used?
  » What are your goals for him/her?
Learning Objectives

1. Understand the connections between language and literacy with regard to phonology, semantics, morphology, syntax, and pragmatics.

2. Learn about the stages of typical literacy development

3. Learn strategies to help children with developmental disabilities at various literacy levels participate in reading and writing activities and develop literacy skills
Credit Where Credit is Due!

A large portion of the information in this presentation comes directly from or is modified from my graduate lectures and courses I have taken from professors, Karen Erickson, Ph.D., Patsy Pierce, Ph.D., and Penny Hatch, Ph.D. at the UNC Center for Literacy and Disability Studies (CLDS). Many of their lectures contained overlapping material and shared information; therefore, I have generally cited the UNC CLDS for some of the common materials.  
http://www.med.unc.edu/ahs/clds
Objective 1

LANGUAGE AND LITERACY CONNECTION
The Five Domains of Language

- Phonology
- Morphology
- Semantics
- Syntax
- Pragmatics
Phonology: the area of language pertaining to individual sounds and how we assemble sounds to create words

- Phonological awareness is the broader awareness of sound
  - Important for decoding words
  - Phonological awareness and letter naming predicts written language decoding skills
  - Poor phonological skills result in difficulty understanding the systematic relationship between letters and sounds

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Catts and Kamhi (2005)
Phonological Awareness

• Patterns of sounds in language
  » Ability to hear words that aren’t allowed in the language

• Activities that show development of phonological awareness:
  » rhyming (e.g., cat-mat-hat)
  » alliteration (e.g., the big brown bear blew bubbles)
  » clapping syllables (ba-sket-ball)

http://www.asha.org/public/speech/emergent-literacy.htm#sthash.JhJLKN00.dpuf
Phonemics and Phonics

• Phonemic awareness is the ability to identify and manipulate single sounds in words (auditory)
  » More specific skill of phonological awareness
  » Phoneme is smallest unit of sound
    • Identifying initial, medial, final sounds
    • Segmenting sounds in words
    • Blending sounds in words
    • Sound manipulation

• Phonics is the rules and patterns of letter to relationship of written words (print/text)
  » 26 letters in the alphabet & they make ~ 44 sounds
  » Letter names don’t always match the sound
    • C - /s/ or /k/
  » Some letters make different sounds in different words
    • CH: child (ch); machine (sh); chrome (k)
  » Alphabetic principle – reading and writing
Morphology

- Morphology: area of language pertaining to word formation and structure. Morphemes are the smallest linguistic units that have meaning; every word contains at least one morpheme.
  - Important for decoding longer words, deriving meaning from words, and indicating grammatical markers.
  - Morphology affects word identification, reading prosody, and comprehension of text.
  - How parts of words change their meaning.

- Examples:
  - Cats (+s = plural); cat’s (+’s = possessive)
  - Jump, jumps, jump-ing, jump-ed
  - Unladylike

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Catts and Kamhi (2005)
Semantics

Semantics: area of language that pertains to word meanings, relationships between word, and word combinations

- **Vocabulary**
  - Learn word meanings
  - Learn links between words = mapping

- When reading, semantic abilities help with word identification and comprehension of text

> it was ... ah, words can't describe!

> are you sure? that's what they do

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Catts and Kamhi (2005)
Syntax

• Syntax: the area of language pertaining to the rules and organization of phrase and sentence structure
  
  » Sentence structures impact understanding and expression of language
  
  » Syntax helps the reader to comprehend sentences based on their sequence and punctuation use

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Catts and Kamhi (2005)
**Pragmatics**

- Pragmatics: area of language that pertains to language in context and successful communication, whether in spoken language or text; it involves the rules of discourse.
  - Variety of purposes of language: requesting, refusing, declaring, asking for or giving information, sharing interests, greeting, etc.
  - Context contributes to meaning, in addition to syntax and semantics
  - Higher order language skills that are necessary at the discourse level
  - Understand the author’s intention and the motivation of characters
    - Intent is often inferred from context
  - Make inferences and predictions
  - Theory of Mind
  - Sarcasm and humor; metaphors; underlying meanings

[UNC Center for Literacy and Disability Studies](http://www.med.unc.edu/ahs/clds)
Summary Language and Literacy Connection

**Phonology**: decoding words and word identification

**Morphology**: decoding longer words, deriving meaning from words, and to indicate grammatical markers

**Semantics**: comprehension of vocabulary in text

**Syntax**: comprehension phrases or sentences based on organization and punctuation

**Pragmatics**: understanding meanings beyond syntax and semantics

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LITERACY DEVELOPMENT
Traditional View of Literacy Development

Linear, Sequential View of Literacy Learning:

• develops in a predetermined, linear sequence

• is school-based

• requires mastery of pre-requisite skills

Koppenhaver, 1992
Erickson and Donnally, 2011

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http://www.med.unc.edu/ahs/clds
Communication and Literacy

Koppenhaver, Coleman, Kalman & Yoder, 1991; adapted from Teale & Sulzby, 1989

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http://www.med.unc.edu/ahs/clds
Contemporary View of Literacy Development

Erickson and Donnally, 2011

http://www.med.unc.edu/ahs/clds
Oral and Written Language

- Develop simultaneously
- Assist in each system’s development
- Share the same basic sound system (phonemes)
- Share the same basic rule system (morphemes and syntax)
Early Literacy

The foundations of reading and writing begin in infancy

Babies explore books, listen to songs and nursery rhymes, hear stories, draw and scribble to build their early literacy skills

Reading to children, even before they can understand words, teaches them to associate books with love and affection.
Early Literacy Skills

Infants may begin to:

• Explore books and paper by tasting, mouthing, crumpling, banging, and patting

• Listen to simple and repetitive books, stories, and songs in different languages

• Take turns with caregivers making facial expressions and sounds in different languages

• Look at/attend to pictures of faces and other simple objects

• Make appropriate sounds when looking at pictures (vrrrooom! noise when looking at car)

http://literacy.nationaldb.org/index.php/literacy-development-continuum/
Early Literacy Skills

Early toddlers may begin to:

- Show increasing interest in books
- Hold and carry books
- Point to and name/label pictures; may treat pictures as real (lick picture of ice cream; rub “fur” of cat in book)
- Turn pages of books
- Bring a book/Ask to be read to
- “Read” to self
- Recite familiar passages
- Search for favorite pictures
- Handle writing materials; scribble
- Listen to and repeat simple and repetitive books, stories, and songs; notice and/or protest when adult gets wrong/leaves out a word
- Recognize some environmental print and logos (golden arches for McDonald’s, favorite cereal box, sign for store they go to often)

http://literacy.nationaldb.org/index.php/literacy-development-continuum/
Early Literacy Skills

Late toddlers may begin to:

- Listen for longer periods of time to books, stories, songs and finger plays in different languages
- Participate in rhyming games and notice sounds that are the same and different
- Hold a book upright, turn pages appropriately most of the time, shut book and say “done” or “the end”
- “Chime in” on a repeated line in a book while being read to.
- Pretend to “read” familiar books from memory; repeat familiar phrases while looking at a book.
- Answer simple questions about stories
- Show they understand the need for and the uses of print (scribble a “grocery list” during play, say “There what they have” when looking at a menu)
- Enjoy story books and storytelling in different languages
- Understand the meaning of realistic symbols such as photographs, and later abstract symbols such as signs and print (know which pictures stand for which activities on a daily schedule, say “Sign says ‘Wal-Mart.’”)

http://literacy.nationaldb.org/index.php/literacy-development-continuum/
Foundations for Reading

- Motivation
- Vocabulary and Comprehension
- Book and Print Awareness
- Alphabet Knowledge
- Alphabetic Principle
- Phonological Awareness

NC Department of Public Instruction Office of Early Learning
Motivation

• Show an interest in books, other print & reading-related activities, including using & sharing books & print in their play.

• Enjoy listening to & discussing storybooks, simple information books & poetry read aloud.

• Independently engage in reading behaviors (e.g., turning pages, imitating adults by pointing to words, telling the story).

• Independently engage in writing behaviors (e.g., write symbols or letters for names, use materials at the writing center, write lists with symbols/letters in pretend-play, write messages that include letters or symbols).

• Show preferences for favorite books.

• Use books that communicate information to learn about the world by looking at pictures, asking questions and talking about the information.

Vocabulary and Comprehension

• Develop knowledge about their world – what things are and how they work – and use this knowledge to make sense of stories and information books.

• Discuss books by responding to questions about what is happening in stories & predicting what will happen next.

• Relate personal experiences to events described in familiar books.

• Ask questions about a story or information in a book.

• Imitate the special language in storybooks & story dialogue – repetitive language patterns, sound effects, and words from familiar stories – use it in retellings & dramatic play.

Book and Print Awareness

- Be aware of print and understand that it carries a message by recognizing and creating it in different forms and for a variety of functions (e.g., labels and signs).

- Recognize that print can tell people what to do, and understand that print and simple symbols are used to organize classroom activities (e.g., where to store things, when they will have a turn).

- Pretend to read familiar books in ways that mimic adult reading.

- Hold a book upright while turning pages one by one from front to back.

- Occasionally run their finger under or over print as they pretend to read a familiar book.

- Understand some basic print conventions (e.g., concept of letter, concept of word).

- Learn to identify their name and the names of friends.

Alphabet Knowledge

• Know that letters of the alphabet are a special category and are different from pictures and shapes.

• Recognize and name some letters of the alphabet, especially those in their own name and in the names of others who are important to them.

Alphabetic Principle

• Understand that letters function to represent sounds in spoken words.

• Make some sound-to-letter matches, using letter name knowledge (e.g., writes “M” and says “This is Mommy”).

Phonological Awareness

• Enjoy listening to songs, poems and books that have rhyme and word play and learn the words well enough to complete familiar refrains and fill in missing words.

• Enjoy and repeat rhythmic patterns in poems and songs through clapping, marching or using instruments to beat syllables.

• Play with the sounds of language, learning to identify and then create rhymes, attending to the first sounds in words.

• Associate sounds with written words, such as awareness that different words begin with the same sound (e.g., Keshia and Katie begin with the same sound).

Whole to Part Reading
Cunningham, 1993

Silent Reading Comprehension

Word Identification
- Automatic
- Mediated

Print Processing
- Projecting Prosody
- Integration
- Print to Meaning Links

Listening Comprehension/Language
- Knowledge of Text Structures
- Knowledge of the World

Eye Movements

Inner Speech

Cunningham, 1993

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Word Identification

• **Automatic Word Identification**
  » Sight words; you do not have to decode

• **Mediated Word Identification**
  » Phonics: Sounding out/blending sounds
    • Internal phonological representations
    • High levels of phonemic awareness to get started

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Language Comprehension

Knowledge of the world:
• Vocabulary gets the most attention
• All five domains of language

Knowledge of Text Structures:
• Basically the pragmatics of written language
  » What is it the author expects you to do?
  » How do you figure out what isn’t written?
  » How do you deal with different forms of written language?

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Print Processing

• Beyond automaticity in word identification

• Silent Reading Fluency
  » Behavioral indicator of successful print processing

• Requirements
  » Inner Speech
  » Eye-Movements
  » Print-to-Meaning Links
  » Prosody
  » Integration of Print Processes

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Foundations for Writing

- Children begin to use a variety of writing tools and materials (e.g., chalk, finger paint, clay, computers)
- Use a variety of writing in their play and for a variety of purposes (e.g., labels, lists, signs)
- Represent thoughts & ideas through drawings, marks, scribbles & letter-like forms
- Learn how to tell their thoughts for an adult to write
- Play with writing letters & mastering conventional letterforms, beginning with the first letter of their name
- Use known letters & approximations of letters to write their own name
- Attempt to connect the sounds in a word with its letterforms

Development of Spelling

- Print has meaning
  - graphic elements can represent ideas
  - scribble, numbers, letter-like strings, letters...

- Random Letters
  - Only letters are used but no awareness of sound-symbol relationships

- Semiphonemic
  - attempt to represent sounds in words
  - only use 1 or 2 letters/sounds in a word
  - may integrate random strings of letters

- Phonetic (letter-name spelling)
  - learning letter/sound correspondences
  - phonetic spellings often using letter names rather than sounds

- Transitional
  - rule-based, though not always conventional
  - words look like real words
Objective 3

STRATEGIES TO PROMOTE READING AND WRITING
Foundations for Reading

- Motivation
- Vocabulary and Comprehension
- Book and Print Awareness
- Alphabet Knowledge
- Alphabetic Principle
- Phonological Awareness

NC Department of Public Instruction Office of Early Learning
Strategies for Motivation
Increasing Motivation to Read

Story Boxes
- Real life props represent salient words in the book will help a student understand the meaning of the vocabulary
- Example: A story box for a book about the beach might contain a shovel, sand, a towel, sunscreen, etc.

Create books based on pictures of self, relevant people or pets, and interests
- *Tarheel Reader* [http://tarheelreader.org](http://tarheelreader.org)
- *Pictello* app
- *Stories About Me* app

Predictable Line Books
- Repeated line books are great when children can say the words (or access a switch that says the words while the adult points to each spoken word).
- [http://www.pathstoliteracy.org/predictable-books](http://www.pathstoliteracy.org/predictable-books)
Motivations, cont.

Remnant or Brag books
- Scraps of paper with text (e.g., Twix wrapper or ticket stub)
- Most remnants have print on them
- Also excellent communication starters

Logos
- Point out written words in fast food restaurants, on signs, on food boxes, and on toys
- Recognizing logos is a good way to begin reading words on sight

Technology
- Interactive books on computers or tablet-based apps

Adapted Books
Adapted Books

http://praacticalaac.org/strategy/literacy-for-everyone-through-adapted-books/
<table>
<thead>
<tr>
<th>Let me</th>
<th>read</th>
<th>What's that?</th>
<th>book</th>
<th>That's funny!</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>uh-oh</td>
<td>Look at that!</td>
<td>Who is that?</td>
<td>That's scary!</td>
<td>I don't know about that</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn the page</td>
<td>Use a funny voice!</td>
<td>What do you think?</td>
<td>Awesome!</td>
<td>That's crazy!</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wait! Go back!</td>
<td>Act it out!</td>
<td>Read it again!</td>
<td>another book</td>
<td>I don't like that</td>
</tr>
</tbody>
</table>
Dialogic Reading: PEER

During shared reading, the adult:

- **P**rompts the child to say something about the book ("What is this?")
- **E**valuates the child's response ("That's right!")
- **E**xpands the child's response by rephrasing and adding information to it ("It's a cow! It says 'moo!'")
- **R**epeats the prompt to make sure the child has learned from the expansion ("Can you say cow?")

http://www.reachoutandread.org/resource-center/literacy-materials/dialogic-reading/
**Dialogic Reading Prompts: CROWD**

**Completion prompts:** Fill in the blank
- Provides information about the structure of language that is important to later reading.

**Recall prompts:** Questions about what happened in a book a child has already read
- Help children understand story plot and describe sequences of events
- Can be used not only at the end of a book or before reading a book the child has read already

**Open-ended prompts:** focus on the pictures in books
- Help children increase their expressive fluency and attend to detail

**Wh- prompts:** what, where, when, why, and how questions
- Teach children new vocabulary

**Distancing prompts:** ask children to relate the pictures or words in the book they are reading to experiences outside the book
- Help children make connections between books and the real world
- Helps with verbal fluency, conversational abilities, and narrative skills

http://www.reachoutandread.org/resource-center/literacy-materials/dialogic-reading/
Follow the CAR

Following the child’s lead during shared reading (or play)

**C:** *Comment* and *wait* (5+ seconds)

**A:** *Ask questions* and *wait* (5+ seconds)

**R:** *Respond* by adding a little more.

http://www.walearning.com/products/language-is-the-key/car-strategies/
Strategies to Promote Phonological Awareness
Increasing Phonological Awareness

- Count words in text
- Clap syllables
- Rhymes & Riddles
- Blending & Segmenting
- Tongue Twisters & Alliteration
- Sound manipulation
Rhyming

• Read and discuss so students are comfortable with text

• Reread and stop after each rhyme to let students identify parts that rhyme

• Read again and ask students to fill in the rhyming portion

• Have students make up their own rhymes or riddles

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Blending and Segmenting

Start by blending and segmenting using onset (everything up to the first vowel) and rime (first vowel to end of syllable)

- Ex: “d-og” to “dog” and “cat” into “c-at”

Then blend and segment individual letters

- Ex: “d-o-g” to “dog” and “cat” into “c-a-t”

Riddle Game: Name a category and giving a clue

- Blending: “I’m thinking of an animal that lives in the water and is a f-ish (or f-i-sh)” (fish)
- Segmenting: “That’s right! Now, who can stretch out all the sounds we hear in fish?” (f-ish or f-i-sh)
Blending and Segmenting

“What’s in the Bag?” Game:

- Place mystery items in a bag
- Have a student pull out an item while hiding it from the group
- Ask student to stretch out the sounds found in the name of the mystery item (segmenting)
  » Ex: “p-a-p-er,” “m-a-r-k-er,” “b-a-l1”
- Encourage group to guess (blending)
  » e.x. “paper,” “marker,” “ball”
Sound Boxes

Students push chips, blocks or other objects into the boxes as they hear the sounds in a word (boxes represent sounds, not letters)
Strategies for Increasing Word Identification

Silent Reading Comprehension

Word Identification

Automatic

Mediated
Word Identification
Increasing Automaticity

Automatic or sight words are the words you do not have to decode

• Child’s own name
• Other important names (Mom, Dad, siblings, friends, pets)
• Environmental words: logos, labels, signs
• High-frequency word lists
  » http://www.literacyconnections.com/content/high-frequency-sight-words
  http://www.literacyconnections.com/Dolch.html
  » http://www.k12reader.com/Fry-Words/fry_first_100.pdf
Strategies to Learn Sight Words

- Songs

- Repeated word books
  - “I like ____”
  - “I see ____”

- Memory game with matching words

- Using context in text or pictures to figure out words in text

http://www.pinterest.com/pragmaticmom/sight-word-fun/
Word Identification
Promoting Automaticity

Other strategies to learn to read and spell high frequency words:

• Word Sorts
• Compare and Contrast words
• Guess the covered word
• Word Wall
• Making Words

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Word Sorts

• Teaches about the common visual elements in words

• Reinforces what students have learned about the alphabetic principle

• Build upon knowledge of personally relevant words with high frequency spelling patterns

• As soon as students understand the visual sorting process, begin getting them to sort words based on phonological similarities before checking visually.

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Word Sorts Strategy

Sorting

• Refocuses students on the words they have made
• Have student sort words based on similarities; ex:
  » beginning sound
  » number of letters
  » spelling pattern

Transferring

• Gets students to use what they have learned to do something they haven’t been taught directly
• Encourage student to think of another word that would be appropriate in each category:
  » starts with the same sound
  » ends with the same sound
  » shares the spelling pattern
Word Sort Example

Compare and Contrast Words

• Give student a few cards/sticky notes with words he/she can already read written on them (e.g., man, all, play, fair)

• Write a sentence with an underlined word that shares an ending with one of the words the student has on cards

• Then ask the student to identify which word would help him/her read the underlined word:
  » The boy was tall.
  » I sat on the the chair.
  » The fan was beautiful.

• After identifying which word would help, then the student would be guided in comparing and contrasting the features of the known word and the new word that were similar and dissimilar.
Guess the Covered Word

• Write a sentence covering one word with two sticky notes

• Read the sentence and have the student make several guesses for the missing word (write down the responses)

• Then show only the first letter of the word and have the student mark out all the words in the list that do not begin with this letter and add other possibilities

• Then take off the second sticky note to see if the word in the sentence matches one of the words he selected

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Example of Guess the Covered Word

• Sentence: “I ate all the _____!”

• Student’s guesses: crackers, grapes, hot dogs, etc.

• First sticky note is removed: “I ate all the c_____!”

• Student crosses out grapes & hot dogs and adds corn & candy to the list

• Reveal the sentence, “I ate all the candy!”

• The student then looks at the guesses to see if he has listed the word that matches the underlined word

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Word Walls

• Many classrooms have word walls, but students can also keep a personal word wall
  » Start with high frequency words and words with high frequency spelling patterns that the student can use to read and spell other words

• A file folder could be used to create a personal word wall

• New words should be added and taught systematically

• The student should have a personal responsibility to spell word wall words correctly when he/she is writing, and teachers should help refer the student to it for support when he/she encounters unknown words when reading
Classroom Word Walls
Personal Word Walls
Making Words

• Select sets of letters that include 1 vowel and 3-4 consonants
  » Eventually add a second vowel

• Systematically guide the student to make words, beginning with 1- and 2-letter words from the letters provided
  » Stop at words that are 2 letters longer than words the student currently spells
  » Eventually make 3-, and 4-letter words

• As the student makes each word, the adult displays a correctly spelled version of the word written on a card and the student compares his/her attempt to the model letter-by-letter making corrections as necessary

• After he/she makes all of the words, the student sorts the word card based on their similarities

• Last, the student should spell some new words that have the same spelling patterns as the words made in the lesson
Other word learning strategies
Strategies to Promote Language Comprehension

Silent Reading Comprehension

Listening Comprehension/
Language

Knowledge of Text Structures

Knowledge of the World
Language Comprehension

Knowledge of the world:
• Vocabulary is important
• But all five domains of language are needed

Knowledge of Text Structures:
• The pragmatics of written language
  » What is it the author expects you to do?
  » How do you figure out what isn’t written?
  » How do you deal with different forms of written language?
Language Experience Activities

• Language experience activities encourage a real life understanding of language, especially when the activities relate to the text that will be read
  » Ex: If reading a story about gardens, it would help the student to understand the language used in the text if it was taught in an activity, such as planting seeds, watering, and monitoring the growth of a plant in real life

• These types of experiences will give the student and an adult something to refer back to when reading

• Incorporating visual, tactile, and auditory cues promotes deeper levels of processing so that new concepts and information have a higher likelihood of being learned and recalled later.
Language Experience Activity

• Perform a task (game, nature walk, cooking etc.) with the child.
• Ask the student to tell you what occurred during the activity: What happened first? Second?
• Try to illicit as much from the student as possible.
• While they are talking, write their ‘story’ in their words on paper. Go back and re-read as necessary.
• Once the story is completed ask the student to reread with you orally.
• Keep the story to refer back to in future readings.

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Language Experience Variations

- **Personal Pictures:**
  - Get pictures of the student doing something at home or in school.
  - Ask the student to tell you about what was happening in the picture.
  - Write down their story in their own words.
  - Reread the story with the student.
  - Use the stories for repeated readings and discussions in the future.

- **Pictures of Familiar Activities/Events**
  - Get pictures of an activity or event the student has experienced or is familiar with.
  - Ask the student to tell you about what was happening in the picture.
  - Write down their story in their own words.
  - Reread the story with the student.
  - Use the stories for repeated readings and discussions in the future.
Building Vocabulary

- Make new words meaningful by finding them in context while reading or making sentences with them.
- Encourage the student to create new sentences using the same word.
- Create a "personal illustrated dictionary" using a small pocket-sized notebook.
  » Encourage the student to record words that he/she does not understand, along with their definitions, and to ask questions, when he/she is uncertain of a word’s meaning.
  » It may also be helpful for him/her to create illustrations that relate to each of the words in his/her dictionary in order to make them more meaningful.
Building Vocabulary: Word Mapping

*Word mapping* enables visualization of word families by constructing semantic maps; word maps help with

- recognizing relationships between words and their meanings
- categorization of words
- identifying attributes
- synonym development

- Frequent use of word maps for learning new concepts and word meanings may enhance ability to organize and retrieve words from one’s lexicon and to link new vocabulary to his/her background knowledge
Steps to Create Word Maps

1. Write a target word on a sheet of paper or a chalkboard

2. List all the synonyms the student can generate, with prompting if necessary, on the one side of the word

3. List the antonyms on the other side of the target word

4. Finally connect all these words to the target word

This results in a graphic representation, or a semantic map, of the word to be learned, which may help a student store it in long-term memory as well as relate it to words that he or she already knows.

templates: [http://www.enchantedlearning.com/graphicorganizers/vocab/]
Word Map Example

Word map example of concept Dog

Diagram:
- dog
  - barks
  - four legs
  - collar
  - dog house
  - brown
  - fur
Word Map Example

Example of a map for the concept *planets*

![Diagram of a word map with planets concept](image-url)
To design a purposeful comprehension lesson, an adult should:

1. choose an appropriate text
2. set a purpose
3. choose a task related to the purpose
4. decide what background knowledge and vocabulary is needed
5. give feedback about the purpose and other connections
Before, During, and After Comprehension Lessons

• **Before**
  » Language experience activities
  » Build or activate background knowledge (includes personal connection-making)
  » Set a clear purpose for Reading/Listening (e.g., “read/listen, so that you can tell me three things the character likes about school”)

• **During**
  » Reading/listening for bulk of allocated time
  » The student should spend as much time as s/he needs to read or listen to the passage
  » Allow the student to reread, ask questions, and make comments
  » Thinking out loud

• **After**
  » Complete a task directly related to the stated purpose
  » Follow-up and feedback
Graphic Organizers

Graphic organizers are a way to reinforce the focus of reading and support discussion and writing.

Graphic organizers can encourage classroom participation and provide organization of new information as well as a visual opportunity to process this information.

Templates:
http://www.enchantedlearning.com/graphicorganizers/storymap/
Thinking Out Loud

- Thinking out loud:
  » I just thought of...
  » So far, I've learned...
  » I wonder why...
  » Wait! That didn't make sense.
  » I think ___ will happen next.
  » I think this is an important part because...
  » That is interesting/important because…
  » I reread that part because…

On page ___ I was thinking...

This was a:
- Prediction
- Question
- Connection
- Reflection
Braidy the Story Braid

Head – CHARACTER: Who?
Star – SETTING: Where & When?
Shoe – KICK-OFF: What happened?
Heart – FEELING: How does he/she feel?
Hand – STOP/PLAN: What is the goal?
Beads – ATTEMPTS/ACTIONS: What to do/How?
Bow – TIE-UP: Outcome/Consequences
Heart – END FEELING: Resolution/How does he/she feel?

http://mindwingconcepts.com/braidy-the-story-braid

Pragmatics in Text

I Get It! Building Social Thinking and Reading Comprehension Through Book Chats
By Audra Jensen

Strategies to Improve Print Processing
Print Processing

• Beyond automaticity in word identification

• Silent Reading Fluency
  » Behavioral indicator of successful print processing

• Requires
  » Inner Speech
  » Eye-Movements
  » Print-to-Meaning Links
  » Prosody
  » Integration of Print Processes
Strategies to Promote Print Processing

Lots of practice reading books at the student’s level will allow him/her to progress

• Repeated readings- going from oral to silent

• Easy reading of a wide range of texts
  » The key to improve print processing is to process more print at the easiest level possible

• Free writing

• Highlight vocabulary & homophones before reading

UNC Center for Literacy and Disability Studies
http://www.med.unc.edu/ahs/clds
Easy Level Books

Reading lots of very easy, beginning level texts is important; however, the biggest challenge is identifying texts an older student both can read and in which he/she is interested, since most books at beginning reading levels were written for very young children.

- Song lyrics (often just the chorus of favorite songs), poems, simple directions, and other very easy texts [http://www.lyrics.com](http://www.lyrics.com) or [http://www.azlyrics.com](http://www.azlyrics.com)

- One free, online source of books written for older beginning readers is [http://tarheelreader.org](http://tarheelreader.org)
MeVille to WeVille

MeVille to WeVille provides high-quality, effective early literacy and communication instruction associated with state, alternate, and Common Core State Standards

- For students with significant disabilities “who need an appropriate starting place, slower paced lessons, and differentiation specifically designed to meet their unique needs”

http://www.ablenetinc.com/Curriculum/MEville-to-WEville-Literacy

UNC Center for Literacy and Disability Studies
http://www.med.unc.edu/ahs/clds
Start-to-Finish

Start-to-Finish is a collection of books available in paperback, audio, and computer formats from Don Johnson that are appropriate for older students (adolescents) with low comprehension levels.

Start-to-Finish Literacy Starters are curriculum-tied materials to go with the books.

- Some NC school systems (e.g., Orange County) have an unlimited site license to the Don Johnston Start-to-Finish series for the middle schools.

Literacy Lab
by Mayer-Johnson

• Comprehensive literacy tool for emergent and conventional readers and writers

• Meets the Common Core State Standards

• Activities focused on
  » reading comprehension
  » guided and independent readings
  » vocabulary
  » phonological awareness
  » word identification
  » writing

• Research-based

http://www.mayer-johnson.com/literacy-lab
Text Book Accommodations

For a student with limited reading abilities, special classroom accommodations should be made. The student would benefit from having audio textbooks or having someone read them aloud to him/her.

- Take care in supporting the student’s comprehension given that grade level texts could be 3 or more levels above the student’s current level of written language listening comprehension skills.

- Some of these texts will have to be simplified so he would have the same material that others in class are working on but at a lower difficulty level.

- *Recordings for the Blind & Dyslexic* ([www.rfbd.org](http://www.rfbd.org)) has contracts with most schools in North Carolina and [www.bookshare.org](http://www.bookshare.org) has a contract to offer these services to all students with print disabilities in public schools in the U.S.
Strategies for Beginning Writers
Writing Utensils

- Standard pencil, pen, marker, crayon, etc.
- Photo images
- Alphabet board or alphabet tiles
- Standard, alternate, or enlarged keyboards
- Assistive software (e.g., word banks, word prediction, organizational tools)
- Dry erase board (offered single or two-word combinations)
- AAC device & no tech AAC books
- Access Hardware (e.g., joystick, trackball, infrared sensor)
- Alternative Pencils (Center for Literacy & Disability Studies)
  - Color encoded eye gaze frame
  - Print alphabet flip charts

UNC Center for Literacy and Disability Studies [http://www.med.unc.edu/ahs/clds](http://www.med.unc.edu/ahs/clds)
Alternative Pencils

For students who are unable to hold a traditional pencil or use a traditional keyboard, there are many alternatives which can be used. They just need access to the full alphabet.

- Alphabet Eye Gaze Frames
- Flip Books of the Alphabet
- Magnetic letters
- Intellikeys adapted overlays
- Switch accessible software
- Abilipad for tablets/iPad

http://www.med.unc.edu/ahs/clds/products/available-for-purchase
http://sda.doe.louisiana.gov/Lists/Literacy/DispForm.aspx?ID=12 (videos and pics)
Scribbling

Ssssjjjdoofiiajbjvbnmmmmmmmmmnnnnnjjkssl
Write about a Picture

• Have student draw a picture, find a picture in a magazine or online, or use a photograph

• Talk about the picture

• “Write” about the picture using any form of writing utensil

• Have the student read what s/he has written

• The adult may also wish to write down what the student read
Development of Spelling

• Print has meaning
  » graphic elements can represent ideas
  » scribble, numbers, letter-like strings, letters...

• Random Letters
  » Only letters are used but no awareness of sound-symbol relationships

• Semiphonemic
  » attempt to represent sounds in words
  » only use 1 or 2 letters/sounds in a word
  » may integrate random strings of letters

• Phonetic (letter-name spelling)
  » learning letter/sound correspondences
  » phonetic spellings often using letter names rather than sounds

• Transitional
  » rule-based, though not always conventional
  » words look like real words
Intervention for Students at the Print Has Meaning and Random Letters

- Emergent reading and writing opportunities
- Writing without standards
- Talking word processors with speech feedback at the letter and word level
- Reading talking books
- Alphabet instruction
  » Foods, actions, familiar anything
- Reading text with others while following along with the text
  » Books you can read without actually reading the words (labeling)

UNC Center for Literacy and Disability Studies
http://www.med.unc.edu/ahs/clds
Strategies for Emergent Writers

• Shared writing/taking turns

• Modeling use of writing for real purposes (e.g., memory, self-expression, ownership)
  » Label something with name
  » Write a reminder to run an errand
  » Write a thank you note

• Writing props (clipboard, grocery list)

• “Sign in” the classroom

UNC Center for Literacy and Disability Studies  [http://www.med.unc.edu/ahs/clds]
Intervention to Address Semiphonemic and Phonetic Spellers

- Talking word processors set to word level feedback
- Word prediction software (Co:Writer)
- The vowel rule in English (every word has one)
- Lots of writing with encouragement to read texts aloud
- Language experience texts (teacher as scribe)
- Word wall instruction with personal responsibility to spell word wall words correctly in final drafts
- Making words with 3-4 letters and 1 vowel
- Multimedia books, books on tape, big books
  » see and hear text simultaneously
- Rhyming texts and songs as texts
  » With lyrics visible and used by teacher and child

UNC Center for Literacy and Disability Studies
http://www.med.unc.edu/ahs/clds
Transitional writers

• Nifty Thrifty Fifty
  » lists of words containing common roots, prefixes and suffixes
  » helps decoding and spelling larger words

• Self-correction

• Use of word prediction and spellcheckers learning to “know when you don’t know”

• Wide reading to build mental graphemic representations (MRG):
  » Spelling and word-level reading are aided and become more fluent when clear MGRs of words or morphemes are established
  » MGRs are part of orthographic knowledge

• Reading-writing projects

UNC Center for Literacy and Disability Studies
http://www.med.unc.edu/ahs/clds
Writing without Standards

In order to encourage a student to write and spell, he/she should be allowed ample opportunities to write without standards.

No pressure should be put on him/her to spell correctly or use correct grammar, especially in a first draft.

However, he/she should be encouraged to read his own writing aloud and use his/her personal dictionary to edit his/her writing.
Process of Writing

• Planning
  » Generating Ideas
  » Organizing Ideas
  » Setting Goals

• Generating
  » Putting thoughts into words: word choice, spelling, sentence structure, cohesion, etc.

• Reviewing
  » Revising/editing text
  » Evaluating – does it following the plan
Plans and Strategies for Writing

PLEASE: A guided structure to plan and write a paragraph containing a topic sentence, supporting details, and concluding statement

» Pick a topic
» List your ideas
» Evaluate your list
» Activate the paragraph
» Supply supporting Sentences
» End with concluding sentence

STOP and LIST: Plan and write a paper by setting goals, brainstorming, and sequencing ideas.

» Stop and Think Of a Purpose
» List Ideas and Sequence Them
Story Telling

**SPACE**: Plan the story through

» **Setting** (who, where, when)

» **Purpose** (what the main character or characters want to do)

» **Action** (what the main character or character do)

» **Conclusion** (how the story ends)

» **Emotions** (how the main character or characters feel)
Graphic organizers are a way to reinforce the focus of reading and support discussion and writing.

Graphic organizers can encourage classroom participation and provide organization of new information as well as a visual opportunity to process this information.

Templates:
http://www.enchantedlearning.com/graphicorganizers/storymap/
Graphic Organizer Example

[Image of a graphic organizer example]

Name: __________________________ Date: __________________________

Let's Get Started

Visualize

Who?  Why?

What?  Feelings

Where?  When?  Tell More

http://teacherexpress.scholastic.com/graphic-organizer-pre-writing-let-s-get-started
Solo Literacy Suite
Don Johnston, Inc.

- **Write:OutLoud** - a talking word processor that provides speech feedback at the letter and word level
- **Read:OutLoud** - software that reads texts for a student.
- **Co:Writer** - word prediction software when he is writing.
  - Students can use knowledge of initial letter sounds to generate a list of predicted words that begin with the selected sound.
  - If the student cannot currently read the words that are predicted, he/she can run the computer mouse over the words to hear them read aloud by the computer with Co:Writer.
- **Draft:Builder** – a graphic organizer helps students write using
  - Outlining
  - note-taking
  - draft-writing

[http://donjohnston.com/solo/#.U3K6XV7JdGA](http://donjohnston.com/solo/#.U3K6XV7JdGA)
WordQ and SpeakQ by GoQ

• **WordQ** – Text to speech software that will read aloud any text one can highlight
  » Helps improve comprehension
  » Helps with proofreading skills.

• **SpeakQ** – Speech to text software that SpeakQ’s enables students with graphomotor challenges to write
  » Offers suggestions for words a student has difficulty pronouncing

• When WordQ and SpeakQ work together, a student can type the words he/she knows and speak the ones he/she does not.

Resources

• UNC Center for Literacy and Disability Studies
  http://www.med.unc.edu/ahs/clds/

• National Early Literacy Panel (NELP)

• Foundations Early Learning Standards for North Carolina Preschoolers and Strategies for Guiding Their Success

• ASHA: Emergent Literacy: Early Reading and Writing Development
References


Cunningham, James W. “Whole-to-Part Reading Diagnosis,” *Reading and Writing Quarterly*, 1993, 9, pp. 31-49.


