Literacy and Students with Severe Disabilities: The Time Is Now!

The "Hour Glass" Model of Literacy Development and Instruction
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http://www.med.unc.edu/ahs/clds/
Oral and Written Language Connectivity

• 40% of preschool children with language impairments develop significant literacy learning difficulties (Aram & Nation, 1980) even if their delays appear to have been resolved by age 5 (Scarborough, 1990; 2002)

• Approximately 90% of individuals with severe communication impairments experience significant literacy learning difficulties (Koppenhaver & Yoder, 1992).

But, they are never too...
Connections, cont’d.

- Develop concurrently;
- Assist in each system’s development;
- Share the same basic sound system (phonemes);
- Share the same basic rule system (morphemes and syntax)
Oral and Written Language Development

Speaking/AAC:
- Knowledge of narratives; vocabulary

Reading:
- Letter name and letter-sound knowledge, beginning decoding; emergent reading

Listening:
- Comprehension, phonological & syntactic awareness

Writing:
- Early preconventional/developmental spelling

All 4 modes of communicating develop together and help one another to develop throughout a lifetime.
How do we help ALL children to become literate?

• Let’s gather and use everything we need for this wonderful journey.
DOE Learning Standards
Guide Book

- Learning Standards, like a guide book that shows you many of the wonderful sights you will see as a child grows, develops, and learns.
- Learning Standards, like a guide book describing many of the fun and exciting things you can do while traveling together with a child on this fascinating journey of development.
- Learning standards help to answer the questions, “where are we going?” “what might it look like?” and “what might we do?”
DE ELA Content Standards

1. Use written & oral English appropriate for various purposes and audiences;
2. Construct, examine, and extend the meaning of literary, informative & technical texts through listening, reading and viewing;
3. Access, organize, and evaluate information gained through listening, reading, and viewing;
4. Use literary knowledge accessed through print and visual media to connect self, society and culture.
National Early Literacy Panel (National Family Literacy Center, 2005, reflected in Early Learning Standards)

- Receptive/expressive vocabulary, syntax development and narrative retelling predicts written language comprehension;
- Phonological awareness and letter naming ability predicts written language decoding skills;
- Vocabulary has positive impact on phonological awareness.

- http://literacynetwork.verizon.org
Curriculum=Map

- The curriculum or curricula that you use in the classroom (e.g., Montessori, Creative Curriculum, OWL, Emergent, High Scope) is the map that helps you to transport all of the children to that fabulous wonderland called “being literate”.

Many “maps” are needed to help all children to learn!
IEPs= Street Map with Specific Directions

- Ongoing assessment helps you to develop specific goals and target areas for each child. These goals, including the IEP for children who need this plan, are the specific directions and strategies to help each and every child to have a safe, enjoyable and successful journey to literacy.
Other items for the journey:

- Materials and adapted materials
- Technology and assistive technologies
- Indoor and outdoor arrangement of space, time, materials, equipment
# Literacy Inclusion Matrix

<table>
<thead>
<tr>
<th>Child:</th>
<th>IEP Goal reflecting standards</th>
<th>IEP Goal reflecting standards</th>
<th>IEP Goal reflecting standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Routines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities/Experiences</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Literacy Inclusion Matrix

<table>
<thead>
<tr>
<th>IEP Goal: Student will read and write informative/technical texts such as recipes and instructions at the first grade level</th>
<th>Content Standard 2. Construct, examine, and extend the meaning of literary, informative &amp; technical texts through listening, reading and viewing.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Selected Reading Time:</strong></td>
<td>Students will read, look at, and hear recipes read to him and will indicate preferences.</td>
</tr>
<tr>
<td><strong>Writing Time:</strong></td>
<td>Student will write recipes of favorite foods using personal word bank.</td>
</tr>
</tbody>
</table>
Family Involvement

Ongoing Assessment

Rich Oral Language Environment

Play-based, contextual experiences

Supports for Emergent Reading/Writing

Guided ABC & Phonological Awareness Activities

Teaching Strategies

Pierce, 2004 adapted from Roskos, Christie, & Richgels (2003), The essentials of early literacy instruction, Young Children, (58), 52-60.
National Reading Panel
“Fab 5”, 2003

Outcomes
Phonemic Awareness
Phonics
Vocabulary
Fluency
Comprehension
Phonics
Guided Alphabet/Phonological Awareness Activities
Ongoing Assessment
Rich Oral Language Environments, Play-based Activities
Supports for Emergent Reading/Writing
Vocabulary
Fluency
Comprehension
The Time is Now!
Being Literate

• Print Processing Beyond Word ID
  – Eye-movement, Print-to-Meaning Links, Prosody, Inner-Speech, Integration

• Comprehension
  – Knowledge of Text Structure
  – Knowledge of the World

• Word Identification
  – Automatic
  – Mediated

Adapted from Cunningham, J. by Erickson, K. & Koppenhaver, 2006
Family Involvement

• Literacy resources (e.g., library cards, books, literacy education for families);
• Children’s literacy workshops for families, based on their needs and interests;
• Family members reading to children in classrooms, sending in taped readings reflective of cultural and linguistic backgrounds.
Ongoing Assessment

• Informs practice (Where do you think “squishy books” came from?)
• Uses multiple, authentic approaches
  - Observation Notes
  - Work Samples
• Look at the Bridge

The Bridge is available at
http://www.governor.state.nc.us/Office/Education/ConferenceTraining.asp
This “squishy” book can be easily modified by removing the label and replacing it with more sophisticated text.
6. How does ______________write his name? (Motor & Cognitive item)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes an inconsistent mark/scribble to represent their name</td>
<td>Makes a consistent mark/scribble to write their name</td>
<td>Makes letter like forms in scribble to write their name</td>
<td>Writes some letters to form name (not necessarily in order)</td>
<td>Writes name in recognizable form</td>
<td>Writes first and last names and/or other names</td>
</tr>
</tbody>
</table>
Item 6.1
Item 6.2
"Ms. Linda"
"Your Hair"
"Your Shoes"

Connor
8/17/04

Item 6.3
Item 6.4

Dre

letter to mommy -
"I Love you"

Come

D.10

Dre's name

1-18-05
Writing
Emergent writing using a keyboard
August, 2005
Topic: Going to Greensboro

September, 2005
Topic: Going to the Doctor's

September, 2005
Topic: Meeting Steffi

December, 2005
Topic: My New Remote Control Dinosaur

School Journal Entry: Jake
January, 2006
Topic: Bingo Game (which Jake won!)
Rich Oral Language Environment

- Children talk more than adults;
- ALL children have multiple ways to communicate;
- Adults really listen—show true interest in what children are doing and saying;
- Reflect on what children are doing; use encouragement rather than praise;
- Label their feelings;
- Ask open-ended, action questions; give suggestions;
- Encourage choice & rule making;
- Have real conversations with each child everyday; use a variety of words.
- Help children learn at least 2 new words everyday.
Inclusive First Grade
Science center in pre-K classroom, Mongolia
Story telling and retelling props

Now is a good time to shop!
Make It Interactive!

• Fill-in-the-blank from text, communication boards in sequence with story, simple communication boards: acts it out, turn the page...
• Require some type of interaction: eye gaze, touching, single word/sign, phrase (verbal or augmented) Remember to Follow the CAR!
• Ask open-ended questions when appropriate; e.g., “What do you think will happen?”, “How did this happen?”
• Increase the child’s opportunities/abilities to physically interact with the book through interactive books (e.g., lift the flaps; slots, predictable), props, and adaptations.

Otherwise known as dialogic or shared reading.
General Interaction Board

<table>
<thead>
<tr>
<th>Read it again!</th>
<th>Act it out!</th>
<th>Show me!</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Head reading]</td>
<td>![Acting scene]</td>
<td>![Eye looking]</td>
</tr>
<tr>
<td>Turn the page!</td>
<td>That's funny!</td>
<td>What's that?</td>
</tr>
<tr>
<td>![Open book]</td>
<td>![Laughing face]</td>
<td>![Pointing hand]</td>
</tr>
<tr>
<td>I don't like that!</td>
<td>Use a funny voice!</td>
<td>Walt, go back!</td>
</tr>
<tr>
<td>![Discontent face]</td>
<td>![Speaking]</td>
<td></td>
</tr>
</tbody>
</table>

Wolf overlays were developed by ADAMLAB using the Boardmaker from the Mayer-Johnson Co.

Make it interactive!
Play-Based, Contextual Experiences

- Based on children’s interests: topical, people/interactions, sights, sounds, smells, tastes, touch/textures, limitations of these attributes
- Modeled, pointed out during play
- Related to themes based on children’s interests (personal and situational)

www.puckett.org
Literacy-rich water play
Literacy-rich outdoor play
Supports for Emergent Reading

- Story Sharing
- Environmental Print (e.g., logos, newspapers, magazines)
- Print in the environment (e.g., labels, books, directions, dictation)
- Book Sharing
  - Follow the C*A*R* (comment and wait; ask questions and wait, respond by adding a little more)
  - Video available through http://www.ncei-eclibrary.org;
  - www.wri.org
- Shared Reading of Big Books
- Dialogic Reading (CROWD)
- Modeling Use of Reading for Real Purposes (e.g., learning, problem solving, task completion)
- Information books, ABC books, Story books in centers (literary, informative & technical texts)

Shared reading everyday keeps non-literacy away!
Purposeful Shared Reading Across a Week

- Monday: Read book with title covered & identify the best title
- Tuesday: Reread book and reveal title; compare & contrast what title is better
- Wednesday: Reread to describe how characters are feeling
- Thursday: Reread to expand dialogue
- Friday: Reread to decide what would happen if...
Books that go with center themes
Logo play

Everyday Literacy,
Gryphon House
Song, story, poem props inside and outside of the classroom

Provide multiple opportunities to use vocabulary
Reading daily schedule
Reading observation notes
For children with disabilities...

- Book reading is a language-based activity and may be overwhelming for children with language delays & impairments (Kaderavek & Sulzby, 1998);
- Children’s enjoyment of story reading/sharing is dependent upon their active engagement (Justice & Kaderavek, 2002). Children with disabilities may not be as actively engaged (Marvin & Mirenda, 1993).
Active engagement books
Physical Book Adaptations

- Take books apart, laminate pages, add page fluffers
Books made of samples
Accordion book
Accordion and squishy books
Wallpaper sample book
Page “turners”

- Add “elongations” to pages to increase ease of turning and to emphasize desired word/symbol
Angle it!

• Books on an angle often make them more physically and visually accessible

With a slant board
Reaction to the Book

That's funny!

That's crazy!

That's yucky!

That's scary.

I wish I could do that.

That would make me mad.

That would make me happy.

That was a good story!

Please read it again!

Wolf overlays were developed by ADAMLAB using the Boardmaker from the Mayer-Johnson Co.

Mayer-Johnson Co.
P.O. Box 1579
Solana Beach, CA. 92075
(619) 481-2489
Types of books

Information books
Rhyming books
Supports for Emergent Writing

- Language Experience Approach
- Shared Writing
- Modeling use of writing for real purposes (e.g., memory, self-expression, ownership)
- Writing props
- Sign in
Sign in for center choices
Writing on all types of surfaces with all types of tools!
Shared reading/writing

Pierce, 2005
I'm writing Annie Apple with lots of legs.
Writing props in pretend play

Waiting list

Shared Writing

Modeling uses of writing

Supports for Emergent Writing

P. Pierce, 2005
Pretend Writing for Real Purposes

Sign In

Charting

P. Pierce, 2005
Supports for Writing Development = People, Pencils, Paper, Purpose

P. Pierce, 2005
Light Tech Adaptations
Writing motivators and props
Guided alphabet and phonological awareness activities

• Point out letter in child’s name while reading and/or looking at environmental print (have ABC books in centers)

• Play with letter names and letter sounds throughout the day (sign in, word walls, letter walks).

• Singing, Rhyming, and Alliteration (e.g., chore charts, word walls)

• Segmenting of names for transition activity
ABC toys
ABC books and props
Talking about letters in names
Letter Play
ABC's Everywhere!

Name Games

Mailboxes

Block Designs
Sequence in Phonological Awareness

• Begins at about three and improves gradually over many years
• Enhancing the development of phonological awareness prior to the start of school is the newest research-supported approach to preventing early reading failure

What might constitute “enhancing” such development?
Enhancing Phonological Awareness

- Studies have shown that just 20 minutes three times a week over four months has a dramatic difference in children’s awareness.
  - Play rhyming games to call attention to rhyme
    - “One two three, come along to me” What two words rhyme?
  - Offer fun chances for segmentation of morphemes and syllables
    - Can you say only a little bit of “butterfly?” What would butterfly be without the butter?
Applesauce Song
(to the tune of "The Mulberry Bush")

This is the way I cut the apples, cut the apples,
This is the way I cut the apples,
Making applesauce.

Now I'll pour the water on, the water on, the water on,
Now I'll pour the water on. (pretend to pour water)
Making applesauce.

This is the way the apples cook, the apples cook, the apples cook.
This is the way the apples cook, (pretend to stir)
Making applesauce.

Now I'll stir the cinnamon in, etc... (pretend to sprinkle cinnamon on the children.)
Now I'll stir the apples 'round, etc... (pretend to stir the children)
Now it's cooked and it can cool, it can cool, it can cool,
Now it's cooked and it can cool,
I've made my applesauce.
What's for lunch?

What's for lunch?
Phonemic Awareness: the ability to hear, identify, and manipulate phonemes (individual sounds) in words.

- **Isolation**: recognize individual sounds in words;
- **Identity**: same sounds in different words;
- **Categorization**: which word doesn’t belong because of a different sound?
- **Blending**: Listen to separately spoken phonemes, then blend to speak, read, and write the word;
- **Segmentation**: Separate sounds in words, tapping/counting them out;
- **Deletion**: What word remains when a phoneme is removed?
- **Addition**: What new word is formed by adding a phoneme to an existing word?
- **Substitution**: What new word is formed when one sound is substituted for another?

*easiest; **greatest impact (Armbruster, Lehr, Osborn, 2001)
A message about phonics from the US Government:

- Phonics instruction is only beneficial when provided alongside opportunities to independently read connected texts. Therefore phonics instruction alone is not a complete reading program, particularly for students beyond the early grades."

Phonics Instruction can look different

- Synthetic Phonics Instruction
- Analytic Phonics Instruction
- Onset-Rime Phonics Instruction
- Analogy Based Phonics
- Phonics Through Spelling
  - The key to effective phonics instruction is that it is systematic and explicit
Center for Literacy and Disability Studies Finding

• Onsets in Three Levels of Ease of Learning
  - Easiest: h, n, d, fl, m, j, r, h, t, s
  - More Difficult: sh, dr, cr, f, bl, pl, tr, cr, pr
  - Most Difficult: sp, sn, str, sc, th, ch, br, ch, k
Center for Literacy and Disability Studies Findings

• Rimes in Three Levels of Ease in Learning:
  - Easiest: it, ay, in, ap, ill, an, ack, ip, ing, at, ore, ug, ell
  - More difficult: aw, ide, ake, ock, unk, ick, oke, ank, ice, ash, ump, ink
  - Most difficult: ine, ain, ate, ail, est, ale, ight, ot, uck, eat, op, ame
Vocabulary

• Core and specific (Erickson, 2005):
  - Categories of words (e.g., animals, foods) including the category label as well as individual items within a category (e.g., horse, dog, cat; Modifiers (e.g., hard, soft, rough, smooth; Mental state words (e.g., love, angry, afraid; Morphological endings (e.g., “s” for plural; “ed” for past tense; “s” for possessive)

Hirsh-Pasek, Kochanoff, Newcombe, de Villiers, 2005 available at http://www.srcd.org/spr.html

• Intentional planning of reading and storytelling experiences

• Through explorations in emotions, science and math

• Word walls
Promoting Intertextual Connections (Erickson, 2005)

• Let children talk (AAC!) during story time;
• Keep children in close proximity to the book (small groups!)
• Pursue connections when they are offered (What are you thinking, what made you say that, what made you think about that?)
• Offer core and specific vocabulary
Fluency: reading text quickly and correctly

- Lots of books for children to read and reread
  - KLP program (Sulzby, 2000)
- Reading to/with peers, parents
- Exposure to fluent role models
Comprehension

- Different types of narrative and information text language
- Prediction
- Retelling, summarizing stories
- Open-ended questioning, alternative endings, alternative versions
- Distancing
- Generating questions
- Graphic organizers
- ELSA from High Scope has pre-K comprehension questions
Enhancing Comprehension

• 1. Build background knowledge
• Set a purpose for reading
• 3. Read!
• 4. Complete the task related to the purpose
• 5. Give informative feedback on completing the task, remembering, comprehending
Phonics

Guided Alphabet/Phonological Awareness Activities

Ongoing Assessment

Family Involvement

Rich Oral Language, Play-based activities

Supports for Emergent Reading/Writing

Vocabulary

Fluency

Comprehension

The Time is Now!

Thank You For Your TIME!
Dog tired!