

# Emergent Literacy in Children with Slow Speech-Language Development

## Evidence-Based Intervention

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## Overview

- Important aspects of literacy development and risk factors
- Support for acquisition of literacy skills in children at risk due to slow speech-language development

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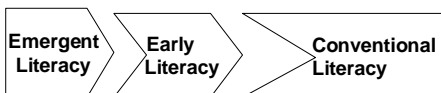
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## Emergent Literacy

Emergent Literacy is the time when a child acquires knowledge and skills that provide a foundation for reading, writing, and spelling



Learning about print and sound patterns

Decoding: early reading "learning to read"

Comprehension of text "reading to learn"

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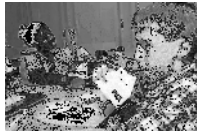
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## Emergent Literacy

- A period from birth to age 4 or 5 for typical children
- Skills are mainly acquired rather than innate



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## Aspects of Emergent Literacy (National Early Literacy Panel, 2004)

- (1) Oral language
- (2) Emergent writing
- (3) Print knowledge
- (4) Alphabet knowledge
- (5) Phonological awareness

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## National Early Literacy Panel Review (2004)

- Looked at 234 longitudinal studies investigating specific emergent literacy skills and later literacy outcomes

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## Strong Predictors of Decoding

- Emergent writing (invented spelling, writing name)
- Alphabet knowledge
- Phonological awareness
- Oral language
- Print knowledge

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## Strong Predictors of Comprehension

- Alphabet knowledge
- Phonological awareness
- Oral language

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## Important Aspects: 1. Oral Language

- Strong receptive and expressive vocabulary
- Rapid acquisition of new vocabulary
- Comprehension of grammatical forms
- Beginning narrative comprehension and production

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**Important Aspects:**  
**2. Emergent Writing**

- Representation of letter forms and other symbols
- Expression of meaning
- Understanding and use of various genres of written expression (signs, lists, letters, invitations, emails, etc.)

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**Important Aspects:**  
**3. Print Knowledge**

- Understanding book conventions (title, authors, direction of text, print functions)
- Interest in print for communicating
- Knowledge of different written genres and their uses
- Knowledge of print “units” (letters, words, sentences)
- Understand of the concept of a “word” in print

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**Important Aspects:**  
**4. Alphabet Knowledge**

- Understanding and use of many, if not all, letter names (both upper and lower case)
- Beginning knowledge of letter-sound relationship
- Understanding letter-word relationship

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**Important Aspects:**

**5. Phonological Awareness**

- Larger sound segments (lower level skill)
  - Recognition of words as a unit of phrases and sentences
  - Recognition of syllables as a unit of multisyllable words
- Smaller sound segments (higher level skill)
  - Recognizing onset-rime distinction
  - Recognizing phonemes (initial, final sounds)

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**What Puts Children at Risk?**

- Intrinsic → individual characteristics of the child
- Extrinsic → socio-demographic factors in the environment
- Interaction

intrinsic

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extrinsic factors

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**Intrinsic Risk Factors**

- Speech-language delay/disorder
- Sensory deficit (hearing loss, visual impairment)
- Cognitive impairment
- Physical issues that impede access to the environment (CP, fragile health)

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### Extrinsic Risk Factors

- Quantity of opportunities to participate in literacy activities
- Quality of opportunities, quality of participation in literacy activities
- Related factors include:
  - Parent education/literacy
  - Parental responsiveness
  - Access to resources (books, library, good-quality preschool, etc.)
  - Home language

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### Interaction of Risk Factors

- In most cases, risk is multifactorial and may be bi-directional
  - The child with a significant speech disorder (intrinsic) has fewer opportunities to interact with others, who may find it hard to be responsive to an unintelligible child (extrinsic)
  - A child with frequent ear infections and fluctuating hearing loss (intrinsic) has difficulty playing along with phonologic awareness games, so begins to avoid/resist, resulting in less practice (extrinsic)

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### A Study of Risk Factors

(Justice, Skibbe & Bowles, 2006)

- Examined knowledge of print concepts in 4 groups of children:
  - Typical, middle SES
  - LI, middle SES
  - Typical, low SES
  - LI, low SES
- Low SES children scored an avg of 22 points less than middle SES children
- Children with Language Impairment scored an avg of 18 points less than typical children
- Low SES plus LI did not lead to increase/additive risk

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## A Study of Risk Factors

(Raitano, et al., 2004)

- Examined pre-literacy skills in children with
  - Speech sound disorder plus LI
  - Speech sound disorder without LI
  - Resolved speech sound disorder without LI
  - Control group
- Results showed
  - ALL children with speech problems performed less well on phonological awareness tasks
  - Even children with resolved speech problems are at greater risk for literacy difficulties
  - Persistent speech problems plus LI **are** additive risk factors for literacy difficulties

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## What to do?!?

- *Prevention* is a key concept!
  - Look at where the child is and where they need to be
  - Less focus on delay/disorder
  - Focus on frequent, informal, naturalistic interactions with written and oral language in supported, mediated opportunities with adult caregivers

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## What to do?

- ALL 5 aspects should be targets
  - Phonological awareness is necessary, but not sufficient for later literacy
  - Skills should be addressed through experience as well as explicit instruction; child-led and adult-led activities
  - Lots of repetition
  - Functional, meaningful activities

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## 1. Oral Language

- Intervene early
  - Research suggests that oral language intervention showed greatest effect among the young children, age 0-3
- Talk about daily routines as they happen
- Provide a variety of experiences to expand vocabulary
- Narrate events, and retell them expressively
- Listen to how different people talk

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## 2. Emergent Writing

- Writing with any kind of symbols and “invented spelling”
- Modeling the use of writing for communication through letters, emails, story-writing, warning signs, labeling, etc.

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## 3. Print Knowledge

- Identify the parts of a book (title, author, direction of print/reading, use of fonts, etc.)
- How are different symbols used to communicate a message (store logos, community/safety signs, etc.)
- Look at how letters go together to form words and sentences

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#### 4. Alphabet Knowledge

- Note letters in the environment, look at upper and lower case
- Talk about letter names and sounds
- Play games to see how fast you can retrieve the name of a letter
- Develop an interest in letter sounds as well as letter names

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#### 5. Phonological Awareness

- Sing nursery rhymes/songs/fingerplays
  - recognizing and producing rhymes
- Tap out beats in multisyllable words or multi-word sentences
- Listen for sounds at beginning or end of words
- Match up letters and sounds

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#### Use Your Literacy Skills

(Activity)

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## A Review of Some Integrated Evidence-Based Interventions

- Shared book-reading approaches
  - Dialogic Reading
  - Print referencing
- Providing a print-rich environment
  - Literacy-enriched play settings
  - Mediated writing
- Formal curricula

(Justice & Pullen, 2003)

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## Shared Book-Reading

- Example = Dialogic Reading  
<http://www.readingrockets.org/article/400>
- Intent is to enhance the quality and/or quantity of storybook reading
- Considerations:
  - Adult participation is important
  - Activities supplement the text
  - Need to choose appropriate texts
  - Outcomes may differ depending on how it is applied (home/school, group/individual)

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## Shared Book-Reading

- Example = Print Referencing
- Talking about print/letters and their sounds as an explicit part of conversation
- Using books that facilitate recognition of print and sound (example = Chicka-Chicka Boom Boom, Mr. Brown Can Moo)
- Attracting the child's interest by:
  - Tracking/pointing to words as they are read
  - Commenting about sounds/rhymes
  - Referring to the print (I see a letter "D"!)

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## Providing a Print-Rich Environment

- Home or classroom bookshelf “library”
  - Include a variety of genres
  - Comfortable and accessible reading space
- Print embedded throughout the room
  - Labels on important items
  - Directions for use clearly visible
- Space for writing
  - Materials readily available

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## Print-Rich Environment

There are downloadable checklists for print richness in the home:

[http://www.getreadytoread.org/images/stories/downloads/home\\_checklist\\_rev.pdf](http://www.getreadytoread.org/images/stories/downloads/home_checklist_rev.pdf)

And classroom:

<http://www.getreadytoread.org/images/stories/downloads/classroom%20literacy%20checklist2006.pdf>

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## Literacy-Enriched Play Settings

- Dress-up clothes
- Materials for pretend play
  - Shopping items
  - Post office
  - Hair salon
  - Veterinarian
- Literacy tools
  - Lists
  - Signs
  - Price tags, item descriptions, appointment books

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## Literacy-Enriched Play Settings

- Start with themes familiar to the child
- Add novel themes or complexity to freshen the routines
- Within the themes, use reading and writing in “real world” ways
  - Sign-in sheets                      appointment books
  - Phone books                         magazines
  - Lists                                    maps
  - menus

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## Mediated Writing

- This can be a powerful tool for developing all five emergent literacy skills!
  - Includes 3 aspects of writing development
    - Motor
    - Meaning
    - orthography
  - Preschoolers may be unnecessarily held back due to concerns about motor skill

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## Mediated Writing

- Examples:
  - (1) Child Dictation/Language Experience
    - Child dictates, adult models aspects of writing process as they occur
  - (2) Child Emergent Writing
    - Child writes their own messages or stories in a way meaningful to him/herself
  - (3) Child-Directed Writing Lesson
    - Adult asks child to help him/her write, focusing attention on specific sounds and letters

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## Formal Curricula

- Convenient, pre-packaged lessons that work on some or all of the important aspects
- Frequently are theme-based to incorporate into preschool routines
- Often have systematic plan for providing guided practice and facilitating increased independence in skills as they are acquired

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## Formal Curricula

- Examples:
  - Ladders to Literacy
  - Phonemic Awareness in Young Children
  - Road to the Code: A Program of Early Literacy Activities
  - Sound Foundations

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## Summary



- Many children have weaknesses in areas of emergent literacy development
  - Children with speech-language delay/disorder and from lower SES are at significantly increased risk compared to typical and/or middle SES children
- Early intervention can increase chances of desirable outcome
- Evidence-based interventions are available to guide parents and teachers in providing practice for needed skills

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Questions?

Thank you!

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