

Evidence-Based Strategies for Emergent Literacy Interventions

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Presentation Goals

- This session will...
 - Provide research and policy contexts for current understanding of emergent and early literacy
 - Present an overview of critical achievements in emergent literacy,
 - Summarize evidence-based practices for meeting the emergent literacy needs of the children with whom we work



Current Research & Policy Context

1. Early indicators of later reading problems are present early in life
2. Primary prevention is more cost effective than secondary and tertiary prevention
3. Instruction must be tailored to meet the individual needs of children
4. The rate of reading problems is substantially higher than need be



Early Indicators of Later Reading Problems

- Historical perspectives viewed reading as originating with reading instruction
- We now know:
 - Preschoolers develop important precursors to reading
 - Skills prior to reading can reliably predict the likelihood that a child will achieve in reading



“Big” Predictors

- Print awareness
- Alphabet knowledge
- Phonological awareness
- Oral language
- Motivation and interest
- Socio-economic status



Example

- Prospective examinations of reading outcomes of children with language impairments
- Retrospective examinations of early language skills of children with reading difficulties



Primary prevention

- Preventive actions
 - Primary prevention
 - Secondary prevention
 - Tertiary prevention
- Can this concept be applied to reading?

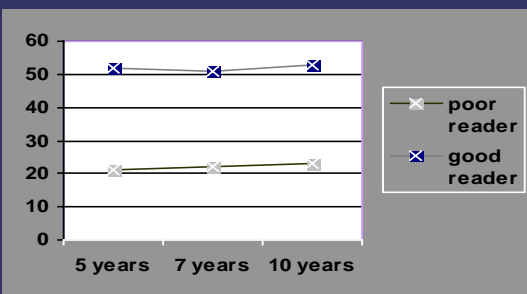


Primary prevention

- Can this concept be applied to reading?
 - What does it require?
 - High quality preschool programs with:
 - Solid language and literacy curriculum
 - High instructional quality
 - Universal application of first tier of excellence
 - Secondary tiers for children who “resist” first tier



Stability in literacy



Layering Instructional Support

- Two primary causes for reading problems:
 - Environmental
 - Biological
- Response to intervention
 - Tailored first tier of instruction
 - Layers of instructional support



Rate of reading problems

- Higher than they should be?
 - 40% from NAEP data versus
 - 2 to 6% in research (non-responders following intervention delivered to lower quartile)
- Over-representation of some children
 - Children who are ethnic and racial minorities
 - Children with disabilities
 - Children who are poor



Early Differences Foreshadow Later Differences

- Early experiences with books: 10% of variability in reading achievement
- 25% of preschoolers are never read to or once weekly
 - Least frequent : low maternal education, limited English proficiency
 - Most frequent: high maternal education



Historical Trends in N. America

- 1600's to mid-1800's: alphabet-spelling method
- mid-1800's to 1950's: whole-word look-say method in 90% of schools
- 1950's to 1970's: phonics methods
 - *Why Johnny Can't Read* (Flesch, 1956)
 - *Learning to Read: The Great Debate* (Chall, 1967)



- 1970's to 1990's: whole-language methods
 - *Reading Without Nonsense* (Smith, 1971)
 - *What's Whole in Whole Language* (Goodman, 1986)
- 1990's: phonological awareness, prevention
 - *Beginning to Read* (Adams, 1990)
 - *National Research Council: Preventing Reading Difficulties in Young Children* (Snow et al., 1998)
 - *National Reading Panel* (2000)
- 2001: No Child Left Behind
 - Close the gap for poor children and children who are racial/ethnic minorities
 - Scientifically-based reading instruction
 - Response-to-intervention



Where are we now? A summary

- Reading difficulties can be prevented before they are allowed to manifest (primary prevention)
- Reading difficulties manifest due to environmental and biological reasons
 - *Response-to-instruction* allows us to differentiate and more appropriately identify true disabilities
- Emergent literacy intervention is the first tier to preventive models



Overview of Emergent Literacy

Simple view of reading:

Decoding
Comprehension

$$D \times C = R$$



$$D \times C = R$$

- Decoding
 - Alphabet knowledge
 - Phonological processing
 - Alphabetic principle (phonics)
- Language comprehension
 - Morpho-syntax
 - Vocabulary
 - Narrative
 - Metalinguistic awareness



When do “D” and “C” start?

Emergent literacy period:

- 1. Precursory “D” skills:**
 - Print awareness
 - Alphabet knowledge
 - Phonological awareness
- 2. Precursory “C” skills:**
 - Morphology and grammar
 - Vocabulary
 - Narrative



Curriculum Complexities

LEARNED skills:

Print awareness
Alphabet knowledge
Phonological awareness

INNATE-LEARNED skills:

Morphology and grammar
Vocabulary
Narrative



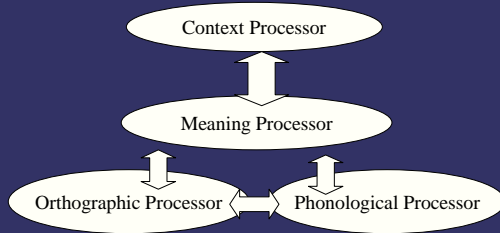
“Emergent Literacy” Perspective

Active and incidental literacy learners
Begins well before schooling
Quasi-parallel developmental sequence
Supported through context
Learn through scaffolding and adult mediation
Oral language is an early bootstrap
Socio-culturally influenced



Conceptualizing Skilled Reading

(Adams, 1990)



Emergent Literacy Foundations: Key areas

Written language awareness

Phonological awareness

Motivation



Written Language Awareness

An individual's knowledge of the system of marks marking up her written language

- Print and book handling concepts
- Alphabet knowledge
- Emergent writing



Key Concepts

- Letter naming is one of the best predictors of later reading
- Highly influenced by home experiences and oral language
- Unfold in a gradual progression



Phonological Awareness

An individual's non-lexical sensitivity to the sound structure of oral language

- conscious use of phonological knowledge to break down running speech into segmental properties



Key Concepts

- PA is an umbrella term
- Preschool years are a time of active growth
- PA difficulties are a core deficit in reading disability



PA is an umbrella term

- PA emerges incrementally, starting at about 2 years
 - **shallow**: rudimentary sensitivity to large units
 - rhyme
 - segment sentences into words, words into syllables
 - detect cross-word onset similarities
 - **deep**: explicit, analytical knowledge of small units
 - count phonemes in words
 - segment words into phonemes
 - Identify phonological segments



Preschool is a time of active growth

- Incremental growth in preschool years
- Best represented as a series of insights
 - words as units of sentences: mastery by 4-5 years
 - syllables as units of words: mastery by 4-5 years
 - intra-syllabic segments: mastery around 5 years
 - phonemes as units of syllables: 90% by 6-7 years



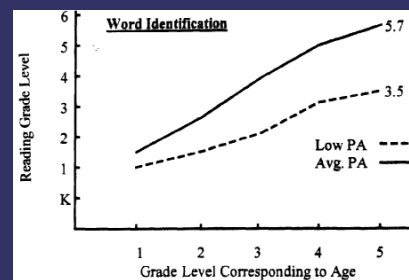
PA difficulties are a core deficit in RD

- children can fail to develop sensitivity to the discrete units of continuous speech
- a core deficit of PA for many readers
- early language problems and later reading difficulties seen as varied manifestations of single underlying impairment
- Caveat: early PA weaknesses grow into bigger problems



Phonological Awareness Ability and Reading Achievement

Torgesen and Mathes, 2000



Motivation

- What is it?
 - Children's persistence and engagement in literacy-related events
 - Children's interest in print



How important is motivation?

- Matthew Effect
- Print interest linked to:
 - Later reading and language skills
 - Responsiveness to intervention



Planning for Emergent Literacy Interventions

Evidence-based practice:
Theoretical knowledge
Child knowledge
Scientific knowledge



Certain populations are vulnerable

- children from low-SES households
- children with limited early literacy experiences
- children with histories of otitis media
- children of parents with reading disabilities
- children with speech-language impairments
- children with intellectual disabilities



Early interventions can shift the odds

- An integrated *embedded-explicit model* of emergent literacy intervention
- Intervention goals:
 - Early knowledge and skills about sound and print
 - Early interest in sound and print
 - Widespread change across interdependent domains



The Embedded-Explicit Model

- **Current tensions in designing preschool emergent literacy programs:**
 - Code-based versus meaning-making
 - Literacy versus language
 - Explicit versus implicit
 - Incidental versus directive
 - Hierarchical goals versus vertical goals
 - Curriculum versus instructional quality



The Embedded-Explicit Model

- **What really matters:**
 - Code-based and meaning-making
 - Literacy and language
 - Explicit and implicit
 - Incidental and quasi-directive
 - Hierarchical goals and vertical goals
 - Curriculum and instructional quality



The Embedded-Explicit Model

- **Practices should range along the continuum of naturalness**
 - Child-initiated – teacher-initiated
 - Child-selected materials – teacher-selected materials
 - Child-initiated targets – teacher-initiated targets
 - Functional and authentic contexts – nonfunctional contrived contexts

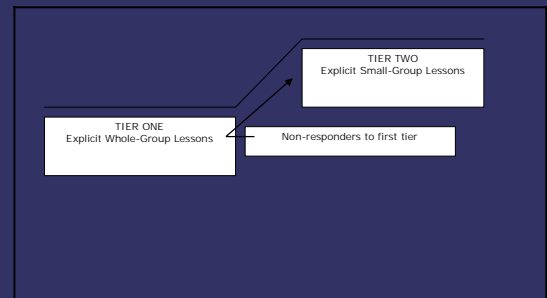


Delivering Interventions

- **A two-tiered approach emphasizes:**
 - Universal application of best practice for all children
 - Embedded opportunities throughout the day
 - Large-group explicit teacher-directed learning
 - Targeted add-on “explicit” instruction for non-responders



Delivering Interventions



Intervention targets

- Motivation & interest
- Bottom-up skills
 - Written language skills
 - Phonological skills
- Top-down skills
 - Oral language
 - Narrative



Evidence-Based Possibilities

- Storybook reading
 - Print referencing
 - Dialogic reading
- Literacy-enriched play settings
- Print-rich environment
- Discrete activities



Print- and sound-referencing

- Print and sound an explicit focus of conversation
- Use print-salient books
- Recruit the child's attention and interest
 - Questions about print (*Is that a D?*)
 - Comments about sound (*Those words rhyme!*)
 - Track the print
 - Point to print



Print- and sound-referencing

- Adults reading with children tend to be directive, tend to focus on pictures, and tend not to engage children's interest in print
- Just reading books with children is implicit exposure: we need to ramp this up!



Dialogic reading

Create a dialogue by:

- Open questions
- Recasts and expansions
- Repetitions
- Praise
- Have fun!



Keys to success

- Just reading books is not enough
- Salient print is important design feature
- Adult mediation is key
- Widespread opportunities are critical
 - Home-school connections



Literacy-enriched play settings

- Dramatic play centers:
 - Shopping
 - Post office
 - Hair salon
 - Home
- Literacy artifacts:
 - Lists
 - Writing utensils
 - Genre
 - Signs



Literacy-enriched play settings

- What really matters?



