

Language, Literacy, and Reading in the Early Years: Do They Make a Difference?

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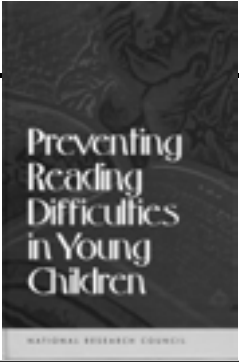
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The Reading Problem

- ❖ 35% of US children enter kindergarten unprepared to learn, with most lacking the vocabulary and sentence structure needed (*1991 Carnegie Foundation Report*).
- ❖ One in three children experience difficulties in learning to read (*Adams, 1990*).
- ❖ High school graduation can be predicted with good accuracy by reading skill at the end of 3rd grade (*Snow, Burns, & Griffin, 1998*).
- ❖ There is a .88 correlation between student's reading level at the end of 1st grade and the end of 4th grade (*Juel, 1988*).

Report of the National Research Council 1998
(www.nap.edu)



Early Predictors of Reading Problems
(Whitehurst & Lonigan, 1998)

- ❖ Phonological Sensitivity
- ❖ Print Knowledge
- ❖ Oral Language

Phonological Sensitivity:
The Ability to Manipulate the Sound Structure of Oral Language

- ✓ Word Awareness – Clap for each word with me
- ✓ Syllable Awareness – Clap with me for each part of the word /wa ter/
- ✓ Rhyming – What word rhymes with 'cat'? 'bat'
- ✓ Blending Syllables/Phonemes – What word is /k/ /a/ /t/? 'cat'
- ✓ Syllable splitting – The onset of 'cat' is /k/, the rime is /at/
- ✓ Phoneme segmentation – What are the sounds in cat? /k/ /a/ /t/
- ✓ Oddity – What word doesn't belong with the others: 'cat' 'mat' 'bat' 'ran'? 'ran'
- ✓ Phoneme deletion – What is 'cat' without the /k/? 'at'
- ✓ Phoneme manipulation – What would 'cat' be if you changed the /t/ to /n/? 'can'

✓ *Feldman (2001)*

Phonological Sensitivity
(Wagner et al., 1997; Lonigan et al., 2000)

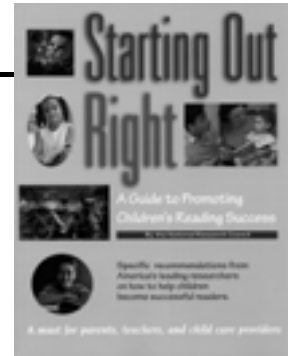
- ❖ There is a core phonological deficit in nearly all poor readers.
- ❖ Phonological sensitivity is highly stable from kindergarten to fourth grade, ranging from .83 to .95 year-to-year stability correlations.
- ❖ Measures of phonological sensitivity in preschoolers predicted 100% of the variance obtained on measures of phonological sensitivity in kindergarten and first grade.

Print Knowledge

(Adams, 1990; Purcell-Gates, 1996)

- ❖ Children's print knowledge (*knowing the names of letters and the sounds they represent*) is one of the strongest predictors of short- and long-term success in learning to read.
- ❖ Understanding the conventions of print (*orientation of print, differences between pictures and print on a page*) and function of print (*that print tells a story or gives directions*) predict reading comprehension and decoding (*sounding out words*) from 1st to 2nd grade.

Report of the National Research Council 1999 (www.nap.edu)



Language and Literacy Activities in Preschool

- ❖ Phonological Awareness
- ❖ Sociodramatic Play
- ❖ Listening
- ❖ Oral Language
- ❖ Shared Reading
- ❖ Exposure to Books
- ❖ Letter-Naming
- ❖ Drawing and Writing
- ❖ Computer-Based Literacy

(National Research Council, 1999)

Oral Language

(Bishop & Adams, 1990; Wagner et al., 1997)

- ❖ There are strong correlations and longitudinal continuity between oral language and later reading differences.
- ❖ Oral language and *reading comprehension* are strongly correlated.
- ❖ Some research shows that vocabulary skills impact on *decoding skills*.

Meaningful Differences in Vocabulary

Hart & Risley, 1995

Monthly Samples of 42 Families	Words per hour	Encouragements per hour	Discouragements per hour
Professional Families	2,153	32	5
Working Class Families	1,251	12	7
Families on Welfare	616	5	11

Cumulative Differences in Experience

Hart & Risley, 1995

	Words per hour	Words per week	Words per year	Words in 4 years
Professional Families	2,153	215,000	11 million	45 million
Working Class Families	1,251	125,000	6 million	26 million
Families on Welfare	616	62,000	3 million	13 million

3 to 4 Year-Old Accomplishments

Starting Out Right, National Research Council, 1999

- ❖ Knows that alphabet letters are a category of visual graphics that can be individually named
- ❖ Recognizes print in the local environment
- ❖ Knows that it is the print that is read in stories
- ❖ Understands that different text forms are used for different functions of print (e.g., a list for groceries is different than the list on a menu)
- ❖ Pays attention to separable and repeating sounds in language (e.g., in Peter, Peter, Pumpkin Eater: Peter Eater)
- ❖ Uses new vocabulary and grammatical constructions in own speech
- ❖ Understands and follows oral directions
- ❖ Is sensitive to some sequences of events in stories
- ❖ Shows an interest in books and reading
- ❖ When being read a story, connects information and events to real-life experiences
- ❖ Questions and comments demonstrate understanding of literal meaning of story
- ❖ Displays reading and writing attempts, calling attention to self: "Look at my story."
- ❖ Can identify about 10 alphabet letters, especially those from own name
- ❖ Writes (scribbles) message as part of playful activity
- ❖ May begin to attend to beginning or rhyming sounds in salient words

Birth to 3 Year-Old Accomplishments

Starting Out Right, National Research Council, 1999

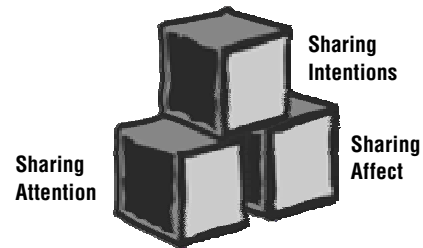
- ❖ Recognizes specific books by cover
- ❖ Pretends to read books
- ❖ Understands that books are handled in particular ways
- ❖ Enters into a book-sharing routine with primary caregivers
- ❖ Vocalization play in crib gives way to enjoyment of rhyming language, nonsense word play, etc.
- ❖ Labels objects in books
- ❖ Comments on characters in books
- ❖ Looks at picture in book and realizes it is a symbol for real object
- ❖ Listens to stories
- ❖ Requests/commands adult to read or write
- ❖ May begin attending to specific print, such as letters in name
- ❖ Uses increasingly purposeful scribbling
- ❖ Occasionally seems to distinguish between drawing and writing
- ❖ Produces some letter-like forms and scribbles with some features of English writing

Predictors of Reading Problems in Infants and Toddlers

- ❖ Phonological sensitivity and print knowledge are not predictors in infants and toddlers because most children under 3 are not successful on these measures.
- ❖ Prelinguistic predictors of oral language may be the earliest indicators of reading problems in young children.

Intentional Communication

Stern, 1985



Major Stages of Oral Language Development

- ❖ Intentional Communication
- ❖ Using and Understanding Words
 - There is slow vocabulary growth from 12 to 18 months and a vocabulary burst at 19 months, when children begin to combine words
 - The richest moments for early language learning are when the child is sharing attention, affect, and intentions and the caregiver talks about the child's focus of attention.
- ❖ Having Conversations
 - Children are learning the rules of grammar to form sentences from 2 to 5 years
 - Children learn how to connect sentences in conversation and story telling (Discourse)

Parallel Development in Play

- ❖ Intentional Communication
 - exploratory actions on objects
 - use objects conventionally
- ❖ Using and Understanding Words
 - pretend with realistic objects
 - combine actions in play
- ❖ Having Conversations
 - logical sequences of actions
 - pretend with miniatures
 - take on roles and cooperate with peers in dramatic play

What are early indicators of language problems in infants and toddlers?

- Prelinguistic predictors:
- ❖ sharing attention and affect
 - ❖ sharing intentions
 - ❖ inventory of gestures
 - ❖ inventory of sounds
 - ❖ use of words
 - ❖ understanding of words
 - ❖ use of objects in play

FIRST WORDS Project

Model Demonstration and
Research Project

<http://firstwords.fsu.edu>

Amy M. Wetherby, Ph.D.
Project Director

LANGUAGE AND LITERACY ACTIVITIES IN PRESCHOOL

(From *Starting Out Right*, National Research Council, 1999 www.nap.edu)

Phonological Awareness

- Rhyming songs, syllable-clapping, and grouping objects according to how their names begin to draw children's attention to the sounds of speech
- Isolating the first segment of a word
- Finding all the objects on a poster that begin with the "nnnn" sound

Sociodramatic Play

- Have special materials and play areas geared toward encouraging children in particular domains, such as art center, a nature center, a puppet center, and real-world play areas (a store or restaurant)
- Stock these areas with writing supplies and printed materials that can be used in play
 - maps and labeled photos in block area
 - labeled toy containers in toy area;
 - food packaging, menus, appliance instructions, plane tickets, travel brochures, and computer keyboards in house area
 - colored chalk, gardening books, and bird and tree guides in outdoor area

Listening

- Have children listen to books on tape in small groups
- Organize play activities, songs, and dances that involve listening to directions

Oral Language

- Have individual conversations with children daily and give the child the chance to take the lead in conversation
- Make a *Personal Experience Center* where children can talk about events in their lives while the teachers listen, prompt discussion, and record the experiences
- Use high quality storybooks to lead children to reenactments and discussions
- Have child dictate his/her own story- "You tell me the story and I'll write the words"
- Encourage children to write their own story, using *kid writing*, and then read it when they are done

Shared Reading

- With storybooks or big books, children should have shared reading experiences daily
- During shared reading, the teacher should not just read out loud but make sure to actively engage children
- Dialogic book reading, developed by Grover Whitehurst (www.whitehurst.sbs.sunysb.edu) employs two methods:
 - (1) a way of interacting with preschoolers while discussing books- called PEER sequence
 - **P**- Parent or other adult initiates an exchange about the books
 - **E**- Evaluates the child's response
 - **E**- Expands the child's response, and
 - **R**- Repeats the initial question to check that the child understands the new learning
 - (2) five types of prompts to use during the interactions- called CROWD
 - **C**- Completion questions about the structure of language used in the book
 - **R**- Recall questions relate to the story content of the book
 - **O**- Open-ended questions to increase the amount of talk about a book and focus on the details
 - **W**- "Wh" questions to teach new vocabulary
 - **D**- Distancing questions that help the child bridge the material in the book to their real-life experiences

Exposure to Books

- The classroom library should be well stocked with a variety of high-quality books and magazines
- Children should have the opportunity to select their own books
- The teacher should suggest books to extend an idea for a classroom activity or to suit a child's interest

Listening

- Have children listen to books on tape in small groups

Letter-Naming

- Include a number of alphabet books in the library
- Have a Letter of the Day for each of three days in a row and organize activities around finding things that start with the letter
- When children are pretending to write, be aware and congratulate them when they start to make letter-like forms
- Encourage them to copy letters from wall charts, to sign their drawings and to label them
- Ask children to bring in their favorite letters for show-and-tell on a t-shirt, book or cereal box

Writing

- Children need access to a variety of paper, writing utensils, and materials for bookmaking- glue, tape, stapler, and book covers
- Art area should offer paper in several sizes and colors, paints markers, crayons, and colored pencils
- Set up a separate writing or office area that includes blank books, paper, envelopes, mailing labels, stickers, and stamps
- Don't discourage scribbling and pretend writing, but do provide support and encouragement for writing letters
- Make time to write down the child's personal dictation and read back exactly what the child said

Computer-Based Literacy

- Classrooms should offer preschoolers access to an easy-to-use word processor, printer, software program for print concepts, stories on CD-ROM, and interactive computer programs.

INTERNET RESOURCES

Report of the National Reading Panel

www.nationalreadingpanel.org

Dr. Gover Whitehurst, State University of New York at Stony Brook Reading and Language Project

www.whitehurst.sbs.sunysb.edu

Dr. Roland Good and Dr. Kevin Feldman, U of Oregon, DIBELS (Dynamic Indicators of Basic Early Literacy)

www.scoe.org

Paul Brookes Publishing Company (Ladders to Literacy, Road to the Code, Phonemic Awareness in Young Children)

www.brookespublishing.com

The Letter People: A Phonological Awareness Program for Young Children

www.letterpeople.com

Read, Write & Type Learning System Computer Software

www.readwritetype.com

BOOK KNOWLEDGE	WORD KNOWLEDGE	PRINT KNOWLEDGE	SOUND AWARENESS
STAGE 1: Emphasizing Print Meaning			
Orients/opens books	Labels/comments	Recognizes pictures	Animal noises
Turns pages	Predicates	Words and letters on page	Sound effects
Looks at pictures	Makes up words	Letter names	Nursery Rhymes
Books provide information	Asks for word definitions	Print goes left to right/ top to bottom	Segments words into syllables
Books tell stories	Segments sentences into words	Reads logos and predictable words	Rhymes/ alliterates
STAGE 2: Emphasizing Print Form and Early Form-Meaning Correspondences			
Books have:	Defines words	Letter shapes	Sound awareness:
• titles, authors	Synonyms	Letter sounds	• word blending
• illustrators	Antonyms	Letter associations	• initial sounds
Books provide:	Homonyms	Sight words	• segments sounds
• predictions	Nonliteral meanings	Sounds out words	
• explanations			
• factual knowledge			

Adapted from van Kleeck, A. (1998). Preliteracy domains and stages: Laying the foundations for beginning reading. *Journal of Children's Communication Development*, 20, 33-51.

MAJOR STAGES OF LANGUAGE DEVELOPMENT

(Adapted from Bates, O'Connell & Shore, 1987; Prizant & Wetherby, 1993; Wetherby & Prizant, 1992)

INTENTIONAL COMMUNICATION: 9 - 13 MONTHS

- uses gestures and/or vocalizations to communicate intentionally in order to regulate other's behaviors, to engage in social interaction, and to reference joint attention
- demonstrates nonlinguistic comprehension strategies, including comprehension of nonverbal (gestures, facial expression, and directed eye gaze), situational (immediate environment and knowledge of what to do with objects), and paralinguistic (intonation) cues

FIRST WORDS: 13 - 18 MONTHS

- uses a small number of conventional signals referentially, i.e., to refer to objects or classes of objects
- shows slow vocabulary growth with some attrition of vocabulary; inventory of words usually does not exceed 10 to 20 single words at one time
- increases use of gestures and sounds in coordination to communicate intent
- most words are used to encode the semantic relations of existence, nonexistence, recurrence, & rejection
- repairs unsuccessful communicative interactions by repeating, modifying the form, or using an alternative strategy
- develops comprehension of single words to direct attention to relevant objects or to suggest actions appropriate to the immediate environment

FIRST WORD COMBINATIONS: 18 - 30 MONTHS

- shows a sudden surge in vocabulary growth from a few dozen to several hundred words; vocabulary attrition should no longer be evident
- shows expansion of single-word semantic relations (e.g., action, attribute, denial, location, possession)
- uses word combinations to encode semantic relations (e.g., action + object, agent + action, attribute + object, action + location, possessor + possession, etc.)
- uses words and word combinations for predication, i.e., to encode a state, quality, or relation about an object
- uses imitation as a predominant strategy in language learning
- begins to engage in conversation by providing new information about the previous speaker's topic, requesting information, and providing information about things in the past
- comprehends word meanings but depends on immediate environment, knowledge of prior similar experience, and knowledge of semantic relations to know how these elements go together.

SENTENCE GRAMMAR: 30 MONTHS - 5 YEARS

- uses language to regulate own and other's actions, plan and anticipate outcomes, report on present and past experiences, comment on imagined context, project own and other's feelings, and regulate interactions; expresses more than one function in a single utterance,
- develops semantic relational terms to encode spatial, dimensional, temporal, causal, quantity, color, age, and other relations
- uses grammatical morphemes (e.g., prepositions, tense markers, plural endings, pronouns, articles,)
- uses syntax (i.e., rules of word order) to construct declarative, negative, imperative, interrogative, passive and complex sentences
- comprehends sentences based on morphological and syntactic rules (e.g., uses word order strategy for agent-action-recipient relations)

DISCOURSE GRAMMAR: 4 - 8 YEARS

- learns to abide by conversational rules to be clear, informative, and polite
- produces connected discourse by setting up transitions between sentences and clarifying shifts in reference from one clause or sentence to another to convey personal experiences and tell stories
- comprehends connected discourse by using knowledge of scripts and story grammar to comprehend narratives
- develops metalinguistic awareness of language structure and meaning, i.e., ability to focus attention to both language form and content; develops skills such as making grammatical judgments, resolving lexical ambiguity, using multiple meanings of words in humor, and segmenting words into phonemes



FIRST WORDS Project

Sharing Books with your Child

Children play with books in different ways. They might...

6-12 months

- ⊙ Chew them
- ⊙ Play peek-a-boo with them
- ⊙ Open and close them
- ⊙ Pull them off the shelf
- ⊙ Tear the pages
- ⊙ Look at a book with an adult for a brief time
- ⊙ Look at the pictures
- ⊙ Bang on the pages
- ⊙ Some children are not interested in books yet but they will still need the opportunity to explore them

12- 24 months

- ⊙ Enjoy reading the same story over and over again
- ⊙ Point to pictures to get you to notice them
- ⊙ Label familiar pictures
- ⊙ Turn pages
- ⊙ Sit for several minutes looking at the book
- ⊙ Pretend to read
- ⊙ Relate the picture in the book to a real object (e.g., goes to a ball after seeing it in the book)
- ⊙ Want to take books on and off the shelf
- ⊙ Enjoy a variety of interactive books (e.g., textures, flap books)

What to do...

6-12 months

- ⊙ Don't worry about reading a book word for word or from cover to cover.
- ⊙ Don't expect your child to sit long enough for you to read an entire book.
- ⊙ Talk about what you and your child are doing with the book. For example, you could say "Close" and "Open."
- ⊙ Use single words to talk about the pictures your child notices.
- ⊙ Allow your child to play with the book the way he or she wants.

12- 24 months

- ⊙ Don't worry about reading a book word for word or cover to cover.
- ⊙ Talk about what you and your child are doing, like "Turn the page," "Open," and "All done."
- ⊙ Wait to see what pictures your child notices or points to and talk about them.
- ⊙ Use short simple phrases to describe what you and your child see.
- ⊙ Let your child take a turn talking about the book.

You can also expose your child to literacy by using...

6-12 months

- ⊙ Picture boards
- ⊙ Photographs or photo albums
- ⊙ Simple designs
- ⊙ Flapbooks
- ⊙ Texture books

12- 24 months

- ⊙ Picture boards
- ⊙ Photographs or photo albums
- ⊙ Simple designs
- ⊙ Flapbooks
- ⊙ Texture books
- ⊙ Interactive books
- ⊙ Magazine or newspaper pictures

FIRST WORDS Project

FIRST WORDS Project 625 B North Adams Street, Tallahassee, FL 32301 - <http://firstwords.fsu.edu> (850) 488-5780
 Funding for the FIRST WORDS Project has been provided by the U.S. Department of Education
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