The National Early Literacy Panel

The National Early Literacy Panel was convened in 2002 to conduct a synthesis of the most rigorous scientific research available on the development of early literacy skills in children from birth to age 5. The primary purpose of the panel was to identify research evidence that would contribute to decisions in educational policy and practice that could help early childhood providers better support young children’s language and literacy development.

The panel’s work represents a major contribution to the early literacy knowledge base and a significant step in helping early childhood educators understand what the research says about the early literacy skills that are essential for future success in reading. Through an extensive review of the research literature, the panel identified studies with the strongest findings and synthesized this data using rigorous analytical techniques to answer important questions about the relationship between early skill development and later literacy achievement, and the impact of instructional interventions on children’s learning.

In January 2009, the panel released its final report. This report provides detailed information about the National Early Literacy Panel, its charge, the methodology and analytical approach used to conduct the synthesis, and, most important, the research findings and implications for improving early education. For more information about the panel and to download a copy of the report, visit www.nifl.gov.

Funding for the panel was provided by the National Institute for Literacy in consultation with the National Institute for Child Health and Human Development, the U.S. Department of Education, and the Head Start Bureau, U.S. Department of Health and Human Services.
Cornerstones: An Early Literacy Series

The National Institute for Literacy has prepared this series of research-based publications to support early literacy practices. The publications draw on the National Early Literacy Panel’s core findings about early literacy development and suggest instructional practices in early childhood education to support children’s acquisition of literacy skills related to future success in reading.

*Early Beginnings:* This first booklet in the series is intended as a guide to help early childhood administrators, supervisors, and professional development staff provide teachers with the support and training needed to increase their knowledge base and refine current literacy practice.

**Use this booklet to:**
- learn about early literacy development,
- review the early predictors of later success in reading and writing,
- reflect on the knowledge and training needed by teachers to improve current practice,
- read suggestions for planning literacy activities based on research evidence, and
- understand what to look for in a successful classroom literacy environment.

**Quick Reference Guide:** Definitions of early literacy terms can be found in this resource.
Introduction

Learning and Development in the Preschool Years

The years from birth through age 5 are a critical time for children’s development and learning. Early childhood educators understand that at home and in early childhood education settings, young children learn important skills that can provide them with the cornerstones needed for the development of later academic skills. Research confirms that patterns of learning in preschool are closely linked to later achievement: children who develop more skills in the preschool years perform better in the primary grades.

The development of early skills appears to be particularly important in the area of literacy. It is estimated that more than a third of all American fourth graders (and an even higher percentage of our at-risk students) read so poorly that they cannot complete their schoolwork successfully. Providing young children with the critical precursor skills to reading can offer a path to improving overall achievement.

Connection between Early Literacy Skills and How Children Learn to Be Readers, Writers, and Spellers

Early literacy skills have a clear and consistently strong relationship with later conventional literacy skills, such as decoding, oral reading, fluency, reading comprehension, writing, and spelling. Even before children start school, they can become aware of systematic patterns of sounds in spoken language, manipulate sounds in words, recognize words and break them apart into smaller units, learn the relationship between sounds and letters, and build their oral language and vocabulary skills. These are all skills that the National Early Literacy Panel found to be precursors to children’s later growth in the ability to decode and comprehend text, to write, and to spell.

Although there is evidence of a link between early literacy and later-developing literacy skills, some early literacy skills appear to be more important than others. The strongest and most consistent predictors of later literacy
development are alphabet knowledge, phonological awareness and memory, rapid automatized naming of letters and objects, and writing letters. As shown on the next page, there are other early foundational skills that also can make a difference in getting children ready for the next step…for learning how to read.
Early Predictors of Later Conventional Literacy Skills

Here are the early literacy skills that the National Early Literacy Panel found to be most important for the later development of literacy skills such as decoding, oral reading fluency, reading comprehension, writing, and spelling. As an early childhood administrator or professional development specialist, you know that many teachers already help children develop literacy skills, often through informal ways. Now, you can share with them the research evidence supporting the value of teaching foundational skills in a more purposeful way to provide a strong start for learning how to read.

Strong and Consistent Predictors

- Knowing the names of printed letters
  - ✓ Being able to label letters correctly, e.g., that ‘F’ is the letter called “eff”
- Knowing the sounds associated with printed letters
  - ✓ Understanding that the sound /f/ goes with the letter ‘F’
  - ✓ Or, knowing that the letters ‘at’ at the end of words are pronounced “aah-tuh”
- Being able to manipulate the sounds of spoken language—breaking words apart into smaller sound units such as syllables or phonemes, adding or deleting sound units
  - ✓ Understanding that the word bulldozer is made up of 3 syllables, ‘bull’, ‘doz’, and ‘er’
  - ✓ Or, knowing that if you take away the /j/ sound from the word change, you get the word chain
- Being able to rapidly name a sequence of letters, numbers, objects, or colors
  - ✓ When shown a set of numbers, being able to name numbers in order, quickly and easily
  - ✓ Or, being able to recognize patterns of objects or colors
- Being able to write one’s own name or even isolated letters
  - ✓ Being able to put one’s own name on a drawing
  - ✓ Or, being able to correctly write letters that are shown on a set of word cards
- Being able to remember the content of spoken language for a short time
  - ✓ Being able to remember simple, multi-step instructions from the teacher about getting ready for outdoor time (e.g., clean-up table, put materials on shelf, stand in line at the door)
  - ✓ Or, being able to remember earlier parts of a story read aloud to make sense of later parts of the story
**Moderate Predictors**

- Knowing some of the conventions of English print, including how to use a book or other printed materials
  - ✓ Understanding that print is read and written from left to right, top to bottom
  - ✓ Or, knowing the difference between the front and back of a book and that books are read from front to back
- Being able to recognize and identify environmental print
  - ✓ Being able to decode or read common signs and logos
  - ✓ Or, being able to identify product or company names for common products or establishments (e.g., “Coke,” “McDonald’s”)
- Knowing how to put concepts, thoughts, and ideas into spoken words, and understanding other people when they talk
  - ✓ Having the vocabulary to be able to talk about interesting topics such as insects, dinosaurs, or weather
  - ✓ Or, being able to have a conversation and be understood because you know the correct word order (the subject of the sentence usually comes first), the correct form of verbs to indicate things in the past
- Being able to see similarities and differences between visual symbols, i.e., visual processing
  - ✓ Knowing that capital letters are different from small letters
  - ✓ Or, being able to pick out a picture of a stop sign from among a set of pictures including other road signs with other shapes
Sharing Early Literacy Knowledge with Teachers

Now that you know about the early precursors to later-developing literacy skills, what can you do to help teachers build early literacy skills and better prepare children for success as readers and students? Although continuing research is needed to develop a deeper understanding of instructional approaches to prepare preschoolers for learning how to read, the current knowledge base does provide sufficient evidence to suggest important content knowledge and practices that show promise for building early literacy skills.

As an early childhood administrator or professional development provider, you make important decisions about what students need to learn and what teachers need to do to help students achieve these learning goals. You play an essential role in building teacher capacity for understanding content and implementing instruction. You set the tone and direction for what happens in the classroom. What can you do to help build teacher knowledge and understanding of important literacy skill development?

- Begin by sharing what you know about the key research findings on early literacy skill development.
- Review the list of early literacy predictors of later conventional literacy skills.
- Help teachers understand the important relationship between early literacy skills and later success in reading.
- Schedule a series of weekly meetings or staff development sessions.
- Provide opportunities for coaching observations and conferences.
- Plan professional development experiences focused specifically on building teachers’ content knowledge about early literacy skill development.

Helping Teachers Plan Literacy Instruction and Activities

What early literacy skills are essential?
What do early childhood teachers need to know?
How can you help teachers plan instruction?

Research findings can help us to better understand what early literacy skills are essential and what early childhood teachers need to know about language and literacy development. Let’s take a look now at how to help teachers plan instruction focused on these foundational skills. There is a growing consensus among educators that suggests key activities, resources, and interactions that administrators and professional development providers can share with teachers to improve literacy instruction.
Again, it’s important for you to recognize that many preschool teachers may already implement some sound literacy practices without being aware of the real value of doing so. Identify what elements your early literacy program already has in place and what additional resources are needed to fully support teachers. Through weekly meetings or a series of staff development workshops, early childhood administrators and professional development providers can increase teachers’ instructional skills through activities that help them (1) reflect on literacy activities already happening in their classrooms, (2) recognize that they are on the right path, and (3) build on those activities to make sure they include practices that work.
Be mindful about literacy throughout the school day

Here are just a few suggestions for early literacy activities. You can use this list as a starting point for helping teachers plan classroom instruction that reflects current knowledge about early literacy teaching and learning.

- Activities that help children learn the **names of the letter-shapes in the alphabet** and the **sounds the letters make**
  - ✓ Play games like alphabet bingo to teach letter names and shapes.
  - ✓ Show a set of letters and ask the child to name them in order as quickly as they can.
  - ✓ Print a mix of upper- and lower-case letters on chart paper and ask the child to circle the capital letters.
  - ✓ Teach the sounds each letter can make as well as the name of the letter.
  - ✓ Sing songs and recite rhymes that include the sounds associated with letters (‘D’ is for dog /d/ /d/ /d/... dog).
  - ✓ Move from identification to writing letters and forming simple words, especially words with high meaning for children, such as their own names.

- Activities that help make children **aware of sounds** in language and provide opportunities to practice **manipulating sounds**
  - ✓ Use rhymes, songs, and poems to help children hear repetitive sounds at the beginning and end of words.
  - ✓ Move from simpler activities with sounds to practice with more complex operations.
    • Start with combining sounds to make words (‘tooth’ plus ‘brush’ makes toothbrush), to manipulating sound units that make up words (such as syllables, onset-rime, and phonemes), to breaking apart words.

- Activities that help children **remember spoken information**
  - ✓ Ask children to follow simple, multi-step directions in preparing for activities or carrying out classroom routines, such as getting ready for morning circle time, gathering materials and setting up for easel painting, cleaning up after snack, getting ready for lunch.
Activities that support oral language development

✓ Read books that expose children to varied and rich vocabulary through discussion of the pictures, text, and story development and sequence.
  ● Pose questions that ask the child to tell about what is happening in the story and in the pictures.

✓ Talk with children.
  ● Extend discussions so that the child actively practices new language skills.
  ● Initiate interactive dialogues that use new vocabulary and concepts and work with sounds and letters.
  ● Show children how to ask questions (such as what, when, where, why, how, and who).
  ● Help children develop language for making comparisons (These feel soft, but these feel hard).

✓ Go beyond building vocabulary to using vocabulary as a foundation for more complex skills such as grammatical knowledge, definitional vocabulary, and reading comprehension.
  ● Help the child develop a “deep” understanding of new vocabulary by selecting print that uses the new vocabulary in context, providing different meanings for the same word, using the same word in different kinds of sentences.

Activities with books or other forms of print to help children understand how print works

✓ Make sure children can see the print while it is being read, and use your finger to track the print as you read to show children the direction.

✓ Take dictation from children, having them tell what to write.
Observe a literacy classroom in action

Below is a snapshot of a preschool program that demonstrates what high-quality literacy environments for 3-year-olds and 4-year-olds should look like. Use this resource with your teachers to extend their understanding of good literacy practices. During staff development meetings or training sessions, the scenarios can spark further thought about what teachers have learned and discussions about how they can apply what they know to curriculum planning and daily classroom interactions with students.

What high-quality literacy classroom environments for 3- and 4-year-olds looks like

A high-quality literacy classroom for 3- and 4-year-olds provides an environment that not only supports emerging literacy skills but also engages children actively in practicing these skills. When you walk into this classroom you will:

See

- Each child’s cubby is labeled with their first and last name reinforcing the idea that words and names are written with letters. Other key areas of the classroom are also labeled, like the classroom learning centers; furniture that is used daily, such as chairs and tables; and physical aspects of the classroom, like walls, windows, and the carpet and floor areas. This helps build both a reading and sight vocabulary and provides opportunities to see how letters form words.

- Clearly defined learning centers that not only support exploration and learning through play, but reinforce key literacy skills. Examples of how learning centers support literacy are
  * **Writing centers** provide the opportunity to practice writing letters of the alphabet, writing letters in isolation, and writing one’s own name.
  * **Reading centers** create dedicated space for book reading with bookshelves offering a variety of books and print, like storybooks, newspapers, magazines, and other reading materials—with cozy places and work areas
that encourage children to look at the books, alone and together, and even to pretend to read.

* **Blocks and manipulative centers** encourage hands-on work with creating patterns and sequences of shapes, colors, and textures.

* **Art centers** allow children to express, re-create, and integrate learning experiences via drawings, paintings, modeling, and multi-step art projects. Art activities encourage building of vocabulary and conversation skills and provide the opportunity to express concepts, thoughts, and ideas.

- A well-planned schedule that makes time for both large- and small-group learning, individual play in learning centers, and one-on-one teacher-child literacy experiences. Use large-group experiences to model book reading—front cover to back cover, reading print left to right and top to bottom. Use small groups to practice word games that involve combining sounds and breaking apart words into sound parts. Use one-on-one time to review sounds associated with printed letters and to practice labeling and naming letters.

**Hear**

- Adults in extended conversations with children throughout the day, with multiple back-and-forth sequences that build more complex language and thinking, providing opportunities for children to have more extended conversations with each other.

- Spoken language during routine and transition activities that provide multi-step directions from the teacher for children to follow.

- Language activities like rhyming poems and songs that alert children to the sounds of language; playing games with letters, such as bingo or letter search, that aid alphabet knowledge and letter recognition; and building visual processing skills.

- Teachers working with children in small groups on breaking words into syllables or separating the first sound from words.
Early Literacy

Quick Reference Guide

- **Literacy.** All the activities involved in speaking, listening, reading, writing, and appreciating both spoken and written language.

- **Early Literacy Skills.** Skills that begin to develop in the preschool years, such as alphabet knowledge, phonological awareness, letter writing, print knowledge, and oral language.

  Note: Early literacy skills are sometimes called “emergent,” “precursor,” “foundational;” or “predictive” literacy skills to distinguish them from more conventional literacy skills, such as decoding, oral reading, fluency, reading comprehension, writing, and spelling.

- **Alphabet Knowledge.** Knowing the names and sounds associated with printed letters.

- **Concepts (Conventions) about Print.** The knowledge of print conventions (e.g., left-right, front-back) and concepts (e.g., book cover, author, and text).

- **Conventional Literacy Skills.** More mature skills such as decoding, oral reading, fluency, reading comprehension, writing, and spelling that are the focus of instruction in elementary and secondary school students.

- **Decoding.** The ability to apply knowledge of letter-sound relationships, including knowledge of letter patterns, to correctly pronounce written words.

- **Environmental Print.** The print of everyday life, such as the letters, numbers, shapes, and colors found in logos and signs for products and stores (e.g., Coke and McDonald’s).

- **Onset-Rime.** Parts of monosyllabic words in spoken language that are smaller than syllables—onset is the initial consonant sound of a syllable (the onset of ‘bag’ is ‘b’); rime is the part of a syllable that contains the vowel and all that follows it (the rime of ‘bag’ is ‘-ag’).
- **Oral Language.** The ability to produce or comprehend spoken language, including vocabulary or grammar.

- **Oral Reading Fluency.** The ability to accurately and quickly read a series of words or sentences.

- **Phoneme.** The smallest unit of sound that changes the meanings of spoken words (e.g., by changing the first phoneme in bat from /b/ to /p/, the word ‘bat’ changes to ‘pat’).

- **Phonological Awareness.** The ability to detect, manipulate, or analyze the auditory aspects of spoken language (including the ability to distinguish or segment words, syllables, or phonemes) independent of meaning.

- **Phonological Memory.** The ability to remember spoken information for a short period of time.

- **Print Knowledge.** A skill reflecting a combination of elements of alphabet knowledge, concepts about print, and early decoding.

- **Rapid Automatized Naming.** The ability to name rapidly a sequence of random letters, digits, objects, or colors.

- **Reading Comprehension.** The ability to understand and gain meaning from text.

- **Syllable.** A part of a word that contains a vowel or, in spoken language, a vowel sound (e.g., e-vent, news-pa-per).

- **Visual Processing.** The ability to match or discriminate visually presented symbols.
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The National Institute for Literacy, an agency of the federal government, is authorized to help strengthen literacy across the lifespan. The Institute provides national leadership on literacy issues, including the improvement of reading instruction for children, youth, and adults by dissemination of information on scientifically based research and the application of those findings to instructional practice.

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