



Getting Comfortable with the Early Literacy Research *Staff Training Handout and Worksheet*

Introduction

As part of their 2009 evaluation of the first edition of Every Child Ready to Read®, Dr. Susan B. Neuman and Dr. Donna Celano conducted an extensive literature review of the latest research in early literacy development. The review identified critical skills associated with long-term reading achievement and best practices used in highly regarded early literacy programs around the United States. This document is available in the ECRR Manual, and we encourage all staff to read the complete research review.

The following pages highlight some of the key points identified by Drs. Neuman and Celano during their review of early literacy research. The highlights are excerpted from the complete literature review. At the beginning of each section, a summary of the key points is presented, followed by selected highlights and an interactive section.

Library staff may want to use the complete literature review and this handout/worksheet to become more comfortable with the research as they prepare to present workshops to a variety of audiences.

This handout can be used as an interactive exercise for staff in workshop settings or in private tutorials. A space is provided for staff to create their own “talking point/s” for various aspects of the research. This will enable staff to feel more confident as workshop presenters and to field questions with greater ease.



Key Points and Highlights of the Early Literacy Literature Review excerpted from “An Evaluation of Every Child Ready to Read: A Parent Education Initiative”
by Dr. Susan B. Neuman and Dr. Donna Celano
The complete literature review is available in the Every Child Ready to Read® Manual

Code and Comprehension

Key Points:

- **To become successful readers, children need an understanding that written letters (a code) represent spoken sounds.**
- **Children also need comprehension skills to understand the meaning conveyed by print. Comprehension skills develop from a rich general knowledge base and a broad vocabulary.**
- **Children develop decoding and comprehension skills through interactions with adults and their environment.**

Highlights:

The last decade has brought a growing consensus on the range of skills that serve as the foundation for reading and writing ability. (*Dickinson & Neuman, 2006; National Reading Panel Report, 2000; Neuman & Dickinson, 2001; Snow, Burns, & Griffin, 1998*)

To become skilled readers, children need a rich language and conceptual knowledge base, a broad and deep vocabulary, and verbal reasoning abilities to understand messages that are conveyed through print. Children also must develop code-related skills, an understanding that spoken words are composed of smaller elements of speech (phonological awareness), the idea that letters represent these sounds (the alphabetic principle), the many systematic correspondences between sounds and spellings, and a repertoire of highly familiar words that can be easily and automatically recognized. (*McCardle & Chhabra, 2004; McCardle, Scarborough, & Catts, 2001*)

...to attain a high level of skill, young children need opportunities to develop these strands, not in isolation, but interactively. Meaning, not sounds or letters, motivates children’s earliest experiences with print. (*Neuman, Copple, & Bredekamp, 2000*)

My Talking Point/s:

The Critical Dimensions of Language and Literacy in Early Childhood

Language

Key Points:

- Oral language and vocabulary are foundational skills critical to reading comprehension and success

Highlights:

Verbal abilities are consistently the best predictors of later reading achievement. (*Scarborough, 2001*)

Vocabulary size...may increase exponentially in the early years (some estimate about seven words a day), with children learning to comprehend words spoken to them before they are able to produce them on their own. (*Snow et al., 1998*)

Word knowledge, however, is not just developed through exposure to increasingly complex language, but to knowledge-building language experiences. (*Neuman, 2001*)

Children's sentences often start at two words, but quickly lengthen to four or more words as children communicate their ideas increasingly through language. (*Bloom, 1970*)

With word learning occurring so rapidly, children begin to make increasingly fine distinctions of words not only based on their meaning but also based on their sound.

Distinguishing between these similar sounding words both quickly and accurately, children begin to hear sequences of sound that constitute each known word. Children with large vocabularies become attuned to these segments and acquire new words rapidly; children with smaller vocabularies may be limited to more global distinctions. Consequently, vocabulary size and vocabulary rate are important for lexical restructuring (i.e., making sound distinctions between words), and are strongly tied to the emergence of phonological awareness. (*Goswami, 2001*)

Recent analyses have made it abundantly clear, however, that oral language skills, and more specifically vocabulary development, not only play a role in phonological awareness but also are critical skills for the development of reading comprehension later on. (*Dickinson et al., 2003*)

Therefore, it is essential...to recognize that oral language and vocabulary development is the foundation for all other skills critical to successful reading.

My Talking Point/s:

Phonological Awareness

Key Points:

- **Phonological awareness, the ability to hear and play with the sounds in words, leads to an understanding that spoken words can be represented by written words. This decoding skill is a predictor of reading achievement.**

Highlights:

Based on a massive body of research, phonological awareness is a critical precursor, correlate, and predictor of children's reading achievement. (*Burgess, 2006; Lonigan, 2006*)

Discriminating units of language (i.e, words, segments, phonemes) is strongly related to successful reading. Typically developing children begin first to discriminate among units of language (i.e., phonological awareness), then within these units (i.e., phonemic awareness).

Phonological awareness refers to the general ability to attend to the sounds of language as distinct from its meaning. Phonemic awareness is the insight that every spoken word can be conceived as units of sounds that are represented by the letter of an alphabet. (*Snow, Burns, & Griffin, 1998*)

Children must not only be able to recite and play with sound units, they must also develop an understanding that sound units map onto whole or parts of written language.

Recent reviews and analyses have placed phonological awareness as a critical part of a complex braid of language abilities. (*Dickinson et al., 2003; Scarborough, 2001*)

(Phonological awareness)...tie to children's ability to decode has been clearly established. ...phonological awareness skills are integrally connected to other important language skills which need to be strongly bolstered in these early education and care programs.

My Talking Point/s:

Letter Knowledge

Key Points:

- Learning letter names and sounds is critical to learning how to decode, or read, words

Highlights:

Knowledge of the alphabet letters is a strong predictor of short- and long-term reading success.

(Bond & Dykstra, 1967; Chall, 1967)

However, its influence on later reading is not about knowing the letter names, per se. Rather, the learning of letter names mediates the ability to remember the sounds associated with the letters.

(Ehri, 1979)

My Talking Point/s:

Background Knowledge

Key Points:

- Understanding the meaning of words and text—comprehension—is related to the amount of background or general knowledge a reader possesses.
- The more general knowledge, the easier it is to understand a book or story, as well as to acquire additional knowledge

Highlights:

For children to become skilled readers they will also need to develop a rich conceptual knowledge base and verbal reasoning abilities to understand messages conveyed through print.

(Neuman & Celano, 2006)

Successful reading ultimately consists of knowing a relatively small tool kit of unconscious procedural skills, accompanied by a massive and slowly built-up store of conscious content knowledge. It is the higher-order thinking skills, knowledge, and dispositional capabilities that enable young children to come to understand what they are reading.

Well-read to children internalize a form of story grammar, a set of expectations of how stories are told which enhances their understanding. Knowledge becomes easier to access, producing more knowledge networks.

...those with a rich knowledge base find it easier to learn and remember. *(Neuman, 2001)*

My Talking Point/s:

Print Conventions

Key Points:

- **Print conventions like knowing how to hold a book, turn pages, and follow sentences on a page help a beginning reader, but they are not a predictor of later reading achievement.**

Highlights:

Recognizing that concepts about print in the English language are not intuitive, Marie Clay (1979), in her pioneering work with Maori children in New Zealand, identified a set of conventions that could be understood without being able to read. These conventions included, among others, the directionality of print in a book (left-to-right, top-to-bottom, front-to-back), differences between pictures and print, uses of punctuation, and definitional characteristics of a letter and a word. Knowing these conventions, she found, helped in the process of learning to read.

...print conventions act as an immediate indicator of children's familiarity with text, and are not integrally related to the other language based skills associated with reading success. Therefore, while such conventions might be helpful to young children in navigating through books, these skills may not in the long run play a powerful role in learning to read.

My Talking Point/s:

Summary of Skills

Key Points:

- Experiences that develop oral language, phonological awareness, letter knowledge, and background knowledge play an important role in helping children get ready to read.

Highlights:

In sum, research supports a particularly strong linkage between oral language, phonological awareness, letter knowledge, background knowledge, and to a much lesser extent, print conventions, in the preschool years. These skills are highly interdependent.

Phonological awareness appears to influence vocabulary development and vocabulary rate. Letter knowledge supports phonological awareness. Code-related skills are highly predictive of children's initial early reading success, while oral language skills and background knowledge become highly predictive of comprehension abilities and later reading achievement. Each of these skills, when integrated in meaningful activity, has an important role to play in children's literacy development.

My Talking Point/s:

Research on Constrained/Unconstrained Skills

Key Points:

- **Some early literacy skills are constrained or limited in their long-term impact. These include letter knowledge, phonological awareness, and concepts of print. These skills are predictors of early reading success. However, once these skills are mastered, they do not further influence reading achievement.**
- **Other literacy skills are unconstrained or unlimited in their long-term impact. Unconstrained skills are vocabulary, background knowledge, and comprehension. These skills can develop throughout life and influence levels of reading achievement and enjoyment.**

Highlights:

In 2002, the National Early Literacy Panel was convened to conduct a synthesis of the scientific research in the development of early reading skills for children ages 2-5. Their report (NELP, 2008) indicated that the most powerful predictors of reading achievement were alphabet knowledge, phonological awareness, rapid automatic naming, and that oral language and vocabulary were only moderate predictors of achievement.

Dr. Scott Paris, however, has demonstrated the flaws in what has come to be understood as this traditional view. Early literacy skills, such as letter knowledge (knowing the letters of the alphabet), phonological awareness (sensitivity to the sounds in words), and concepts of print are best described as constrained skills—skills that predict later achievement early on but that quickly asymptote after the age of 5.

Contrary to constrained skills are vocabulary, comprehension and background knowledge; these skills are unconstrained, essentially never asymptote as children get older. These skills have the potential to grow throughout one's lifetime, and can dramatically influence children's long-term abilities both in reading and content areas.

This research has significant implications for teaching and our focus on the skills necessary for children to read. It suggests that although letter knowledge, phonological awareness, and concepts of print are initially important and should be taught, they lead only to temporary gains on skills, and do not predict long-term outcomes. The critical skills are vocabulary, comprehension, and background knowledge—skills that take more time to teach and review and these skills should be a major focus in helping children learn how to read.

My Talking Point/s:

Features of the Environment that Support Literacy Development

Key Points:

- **The environment influences learning. Spaces at the library and at home can be organized to support the development of early literacy skills. How space is arranged and used affects how often and how long children engage in early literacy activities.**

Highlights:

The environment can play a major role in promoting these critical skills for literacy development. The organization, structure, and complexity of the early childhood setting influence patterns of activity and engagement.

The use of space in settings influences learning. (*Roskos & Neuman, 2001*)

...well-defined niches and nooks seem to encourage greater language and collaboration with peers and adults. Children are likely to use these more intimate settings to interact in longer and richer conversation with others. (*Morrow, 1988; Neuman & Roskos, 1997*)

Materials that involve children in constructive activity, for example, tend to generate more language than “pull toys.” (*Rosenthal, 1973*)

The physical placement of objects, as well, influences children’s engagement in literacy-related activity. Children become more involved in sustained literacy play when objects are clustered together to create a schema or meaning network. (*Neuman & Roskos, 1993*)

The proximity of quality books at children’s eye view supports involvement in literacy-like enactments. (*Morrow & Weinstein, 1986; Neuman, 1999*)

[Another study showed] children spent significantly more time interacting with books when they were placed in close proximity to children’s play activities. (Neuman, 1999)

...there is clear and abundant evidence that certain physical design features in environments support young children’s literacy engagement and subsequent achievement. Physical design features, uses of space, and resources, may help to focus and sustain children’s literacy activity, providing greater opportunity to engage in language and literacy behaviors. This research indicates, therefore, that a more deliberate approach to the selection and arrangement of materials according to specific design criteria may enhance children’s uses of literacy objects and related print resources.

Libraries might benefit from this research on the ecological features of environment. Creating cozy areas for children to sit and read together; constructing play spaces that help them learn to engage in playful behaviors that mimic library activities; and clustering objects such as books, toys, and writing implements together to encourage their sustained use of materials might enhance children’s independent engagement in the library areas.

My Talking Point/s:

Interactional Supports for Literacy Learning

Key Points:

- **Interactions between adults and children have a great impact on the development of early literacy skills. The more parents and other significant adults talk and listen to children, the greater the potential for children to acquire language, vocabulary, and background knowledge.**
- **Reading together with children continues to be one of the most powerful ways to develop early literacy skills**
- **How parents read to children makes a difference. Talking about books and extending the conversation about a story by asking and answering questions leads to greater learning.**
- **Repeatedly reading the same book helps children learn vocabulary, background knowledge, how stories are structured, and other literacy skills.**
- **Reading and writing go together. Writing activities help children learn about letter names and sounds, that print has meaning, and that writing has a purpose.**

Highlights:

Environments include not only physical settings, but psychological settings for literacy learning as well. (Tharp & Gallimore, 1988)

Children are influenced by the participants present in a setting, their background experiences, their values. It is the integration of place, people, and occasion that supports opportunities for learning.

Since language represents the foundational basis for literacy learning in the early years, there is evidence that the amount of verbal input in settings enhances children's language development. (Hart & Risley, 1995; Hoff-Ginsberg, 1991)

Children whose teachers engage them in rich dialogues have higher scores on tests of both verbal and general ability. (Whitehurst et al., 1994)

This is especially the case when discussions consist of adults encouraging, questioning, predicting and guiding children's exploration and problem-solving. Such verbal interactions contribute to children's vocabulary growth which, in turn, is strongly correlated with phonological awareness, comprehension, and subsequent reading achievement. (Palinscar, Brown, & Campione, 1993)

Adults also engage in activities that are highly supportive of literacy development. Reading stories to children on a regular basis is regarded as one of the more potent supports for literacy learning. (Bus, Van Ijzendoorn, & Pellegrini, 1995)

Studies have shown that a parent's style or approach to reading storybooks to children has both short-term and long-term effects on language and literacy development. (Dickinson & Smith, 1994; Whitehurst & Lonigan, 1998)

Shared book reading activities, such as dialogic reading, for example, and repeated readings have been widely studied and identified as an important source of knowledge about vocabulary, about letters, and about the characteristics of written language. (Whitehurst et al., 1994), (Biemiller, 2006)

... studies also highlight the importance of introducing children to a wide variety of books in different genres such as information books, poetry, and popular folk tales. (*Beck & McKeown, 2007; Duke, 2000*)

Attention to and support of emergent writing has also been shown to strongly connect with children's developing phonological awareness, phonemic awareness, and readiness skills. (*Clay, 1991*)

Taken together, activities that engage children in reading, writing, talking, and playing create occasions for meaningful communicative interactions involving language and print.

My Talking Point/s:

Addressing the Needs of English Language Learners

Key Points:

- **Parents who are English Language Learners are encouraged to read and talk about books in their home language. If parents use the language they speak most fluently, they can more easily help their children develop early literacy skills.**

Highlights:

All of these environmental supports are especially important for young English language learners (ELL). Their numbers have increased dramatically. In 1990, 1 in every 20 children was ELL, that is, a student who speaks English either not at all or with enough limitations that he or she cannot fully participate in mainstream English instruction. In 2008, the figure was 1 in 9. Although these children come from over 400 different language backgrounds, by far the largest proportions of students are Spanish-speakers (over 80%).

(Goldenberg, 2008; U.S. Department of Education, 2005)

... research suggest[s] that when feasible, children should be taught in their primary language. Primary language instruction helps to promote bilingualism and, eventually, biliteracy. Further, children will need support in transferring what they know in their first language to learning tasks presented in English. *(August & Shanahan, 2006; Rolstad, Mahoney, & Glass, 2005; Slavin & Cheung, 2005)*

My Talking Point/s:

References for the citations listed in the highlights are included in “An Evaluation of Every Child Ready to Read: A Parent Education Initiative” (See Section I page 15 of the ECRR Manual.)