If you stop to consider what's involved in learning to read, it should come as no surprise that children need help to become a reader for life… Between the ages of four and nine, children will have to master some 100 phonics rules, learn to recognize 3,000 words with just a glance, and develop a comfortable reading speed approaching 100 words a minute.

-Paul Kropp, Raising a Reader (1996)

Session 2

Understanding Print Knowledge

Learning Objectives

◊ **Define** the terms print knowledge, concept of word, letter naming, and emergent writing.

◊ **Demonstrate** awareness of three ways to examine children's knowledge of letter names.

◊ **Analyze** young children's performance on a variety of print knowledge tasks.

◊ **Reflect** on why young children's knowledge about print is an important aspect of literacy development.

◊ **Describe** five different areas of development represented by the term print knowledge.

Overview

Print knowledge is an interesting and important aspect of young children's emergent literacy development. **Print knowledge generally refers to children's early understandings of the *forms* and *functions* of print.** *Print forms* refers to the various shapes that print makes (letters and words). *Print functions* refers to the various roles that print plays in the world around us (to entertain, to inform, to acknowledge, to invite).

Print knowledge is an umbrella term that includes five different areas of development:

- *Print Interest:* Children's interest towards print as a specific type of symbol and children's motivation to learn about print.
- *Print Terms:* Children's knowledge of the names of different print forms (*letter, word, spell, comma, question mark, title, author,* and *exclamation point)*.
- *Print Concepts:* Children's knowledge of how print is organized within books and other genre (where the title is located, where the author's name is written, and where to start reading on a page).

- *Concept of Word:* Children's knowledge of what a word is in written language – that a word is made up of letters and that written words correspond to spoken words.
- *Alphabet Knowledge:* Children's knowledge of the names of the alphabet letters, including both lower- and upper-case forms.

Children begin to learn about various print forms and functions very early in life. For instance, a 2-year-old child might hold up a block with a letter B on it and say "B" or point to a sign on the road and say "Stop!"

Children at ages 3 and 4 years gradually increase their knowledge about print so that by age 5, they are likely able to:

- Identify all of the letters in their own name.
- Write their own name.
- Point along to the words in a book as someone else reads.
- Identify the author and title of a storybook.
- Read many familiar signs in the environment.
- Talk about print using words such as *period, comma, letter, word, write,* and *spell.*
- Understand the different purposes of various print genre, such as lists, signs, invitations, notes, and calendars.
- Differentiate between the upper- and lower-case forms of a letter.
- Produce in writing several different print genre, including letters, notes, and menus.

Developing these important understandings about print, as well as many others, is necessary for children to learn to read. Children who develop a solid understanding about how print works during the years of early childhood will:

- Be interested in print and motivated to participate in reading activities.
- Incorporate print into their play through use of books and writing materials.
- Explore print concepts through their own writing and drawing.
- Make faster progress in beginning reading instruction in the early primary grades.

Terms and Background Knowledge

Vocabulary

Print concepts – Children's knowledge of how print is organized within books and other genre, including its directionality (left to right and top to bottom in English).

Alphabet knowledge – Children's knowledge of the names of the alphabet letters, including both lower- and upper-case forms.

Concept of word – Children's knowledge of what a word is in written language; realizing that a word is made up of letters and that written words correspond to spoken words.

Print genre – The various roles or functions that print may take, such as lists, menus, signs, invitations, stories, and letters.

Emergent writing – Children's early writing attempts, which may include unconventional directionality (e.g., right to left instead of left to right), word/letter spacing and use of random symbols and letters.

Activity 1. Thinking About Print Knowledge

As you begin to think about print knowledge development in young children, it may be helpful to consider how children's knowledge of print grows over time. Look at the sign on the following page produced by four-year-old Addie:

- What letters does Addie know?

- What print concepts does she know?

- Does she seem to understand left-to-right directionality?

- Does she seem to understand top-to-bottom organization of print on a page?

- Does she seem to understand the use of upper-case letters to start sentences?

- Does she seem to understand the use of punctuation to close sentences?

- Does Addie have an understanding of what a word is? If so, what evidence is available to show this?

- Do you see Addie as below average, typical, or above average for a four-year-old child in terms of what she knows about print?

Activity 1.
Thinking About
Print Knowledge –
Children's
Awareness of
Print as Expressed
Through Writing

ADDIES ONLY
DO NOT
OR ELSE ILL ENTER
GET ANOTHER
IN HEAP!

Activity 2. Learning Objectives

Review the learning objectives for the target domain of Print Knowledge addressed in *Read It Again–PreK!* These include:

- To recognize that print carries meaning and to distinguish print from pictures
- To recognize the left-to-right and top-to-bottom directionality of print
- To identify some upper-case letters, including those in children's own names and those of some friends or family members
- To understand and use new words describing aspects of books (e.g., illustrator, author, cover, title page) and print (e.g., word, letter, spell, read, write)
- To recognize the difference between letters and words
- To recognize some common sight words, including environmental print.

Of these six objectives, which ones do you feel you address often in your daily instruction?

_____

_____

_____

_____

What teaching techniques or materials do you commonly use to address these objectives?

_____

_____

_____

Which objectives do you tend not to address, and why?

_____

_____

_____

_____

Activity 2. Learning Objectives – Reviewing Print Knowledge

What's New?

This lesson addresses two new topics related to print knowledge:
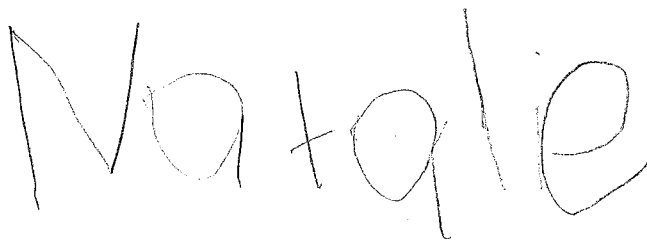
◊   Exploring Alphabet Knowledge

◊   Children with Limited Knowledge of Print

Topic 1. Exploring Alphabet Knowledge

Learning the letters of the alphabet is an important event in the life of a young child. Alphabet knowledge is also one of the more important indicators of later reading success. Children who arrive at beginning reading instruction knowing many (if not all) of the alphabet letters develop reading skills more rapidly than those who know few letters. Many preschoolers graduate knowing most, if not all, of the alphabet letters, and research shows that including a focus on alphabet learning within preschool is beneficial to later reading achievement. Not surprisingly, many state preschool standards now include an explicit emphasis on improving children's outcomes in alphabet knowledge.

Many preschool educators want to know if letters should be taught in a certain order or if children learn letters in a certain order. For many children, alphabet knowledge seems to develop largely in response to interest in their own name in that they tend to be most familiar with the letters of their name. Most preschoolers, even if they know very few alphabet letters, do know the first letter of their name – a phenomenon known as the *own name advantage.* In fact, children are 11 times more likely to know their own first initial (e.g., J for Juan, A for Alex) than any other letter of the alphabet. This is interesting because it suggests that letter learning is highly individualized.

Topic 1. Exploring Alphabet Knowledge

In general, beyond the own name advantage, there is no general order in which children tend to learn letters, nor is there any agreed-upon order of instruction. Some letters do seem to be learned a little earlier than others (including B, O, and X), whereas others tend to be learned a little later (G, N, and V). We don't really know why this is the case, and we also don't know whether this has any real implication for instruction. Some approaches teach letters in order (A, B, C...), whereas others use what seems to be a random order of instruction. It may not matter at all what order is followed, so long as all children (over the course of a year of preschool instruction) have the opportunity to learn most, if not all, of the letters of the alphabet.

There are several different ways in which children can demonstrate their knowledge of the alphabet:

1. Letter naming:

A letter naming task asks children to name individual letters of the alphabet. This examines the child's ability to match a letter name to a specific symbol. One challenge of letter naming tasks is children's ability to pronounce words. Young children often make errors of speech (such as substituting /v/ for /f/ as in saying *vive* for *five*). Therefore, it can be hard to assess whether a child really knows the correct name of a letter or if there are pronunciation errors.

2. Letter pointing:

A letter pointing task asks children to point to individual letters of the alphabet as they are named. This examines the child's ability to distinguish one letter from among many but does not determine whether the child can actually name letters. This type of task can be helpful for children who make a lot of pronunciation errors (e.g., saying /t/ for /d/).

3. Letter writing:

A letter writing task asks children to write individual letters of the alphabet as they are named. This examines the child's ability to produce letters in a written format. While this task provides an interesting window into children's ability to express letters in writing, it can be difficult for children who have hand-eye coordination difficulties or for those who do not practice writing very often.

Examining alphabet knowledge using different types of tasks at different points in time can provide more sophisticated insights into a child's understanding and development.

Listen and Learn

Activity 3.   Assessing Children's Print Knowledge

Turn on your DVD player and select *Session 2, Activity 3* from the RIA DVD menu.

Observe this four-year-old as she completes a letter pointing task. Identify which letters of the alphabet she knows and which ones she does not know on the following grids.

1

B	Z
M	P

2

f	b
x	z

3

A	Q
I	V

4

D	B
C	T

5

s	a
y	r

6

|	
h	g
k	c

Listen and Learn

Activity 4.   Assessing Children's Print Knowledge

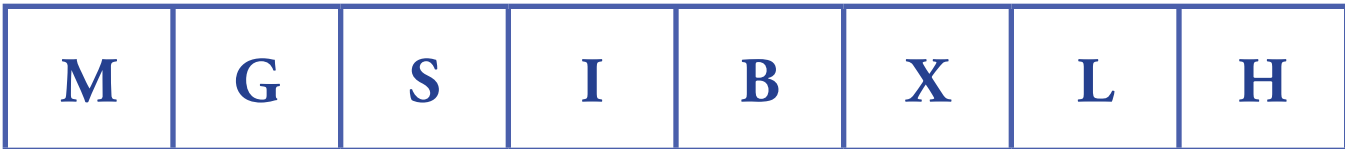Turn on your DVD player and select *Session 2, Activity 4* from the RIA DVD menu.

Watch this four-year-old complete a letter writing task. Identify which letters of the alphabet she correctly forms and which ones she does not on the following grid. Circle letters she knows and place an X over those she does not know. Note any instances where the child needs additional prompting or assistance.

Activity 4. Assessing Children's Print Knowledge: Letter Writing

Child's Production

M	H	e	I	b	X	L	H

Target

M	**G**	**S**	**I**	**B**	**X**	**L**	**H**
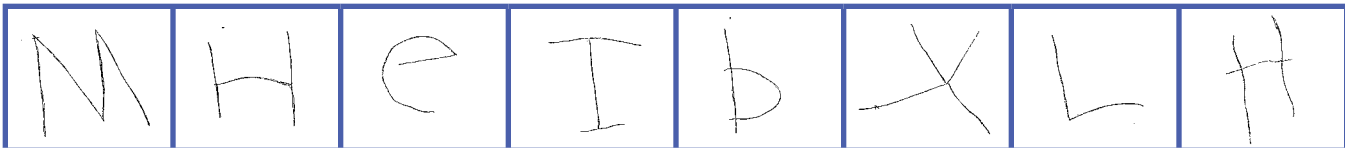
Do you think a letter pointing task or a letter writing task would be more difficult for a young child developing print knowledge? Why?

_____

_____

_____

_____

_____

Now, listen to what we have to say:

Turn on your DVD player and select *Session 2, Activity 4 Discussion* from the RIA DVD menu.

Topic 2. Children with Limited Knowledge of Print

Some children develop their knowledge about print relatively slowly. This typically occurs for two reasons:

1.   The child has a developmental disability that affects literacy development (such as language disorder or cognitive disability).

2.   The child resides in a home in which literacy experiences occur infrequently.

We need to be concerned about children who are learning about print at relatively slow rates. This is because the amount of knowledge that a child has about print is an important predictor of how easily he or she will learn to read in the primary grades. Children who come to reading instruction with little knowledge about how print works will find learning to read very difficult.

It is easy to identify children who have little knowledge about print. We can use some of the alphabet knowledge tasks discussed previously (letter naming, letter pointing, and letter writing) to determine how many letters children know. Look at the following table and identify those children in this preschool classroom in need of some help in the area of alphabet knowledge.

Student	Letter Naming (number correct out of 26)	Letter Pointing (number correct out of 26)
Amir	0	2
Andrew	10	14
Azim	9	9
Brianna	0	0
Laura	0	1
Rashaun	2	3
Shahan	24	26
Yadira	26	26
Yasmin	0	1
Zabedt	9	9
Zoraiah	6	8

Which children's performance concerns you most? Why?

Which children's performance concerns you least? Why?

_____

_____

_____

Specific measures are also available to study young children's knowledge about print, including their knowledge of different print concepts. One way to examine children's knowledge of various print concepts is through direct assessment during a book-reading activity. Children who are found to have limited knowledge about print can receive specialized learning opportunities to help build their knowledge.

Listen and Learn

Activity 5. Assessing Children's Print Knowledge Through Reading

Turn on your DVD player and select *Session 2, Activity 5* from the RIA DVD menu.

Watch this four-year-old child being given a measure of print knowledge.

Identify five specific concepts about print that were assessed.

1. _____

2. _____

3. _____

4. _____

5. _____

What three concepts about print has the child clearly mastered?

1. _____

2. _____

3. _____

What three concepts about print did the child have difficulty with?

1. _____

2. _____

3. _____

Do you see this child as advanced, typical, or delayed in his understanding of print concepts as compared to other four-year-old children?

_____

_____

Although this child performed quite well on this measure, some children do not. In fact, the following graph shows how young children with and without a language disorder compare on this same measure. As you can see, there is a large gap between the two groups' knowledge of print concepts.
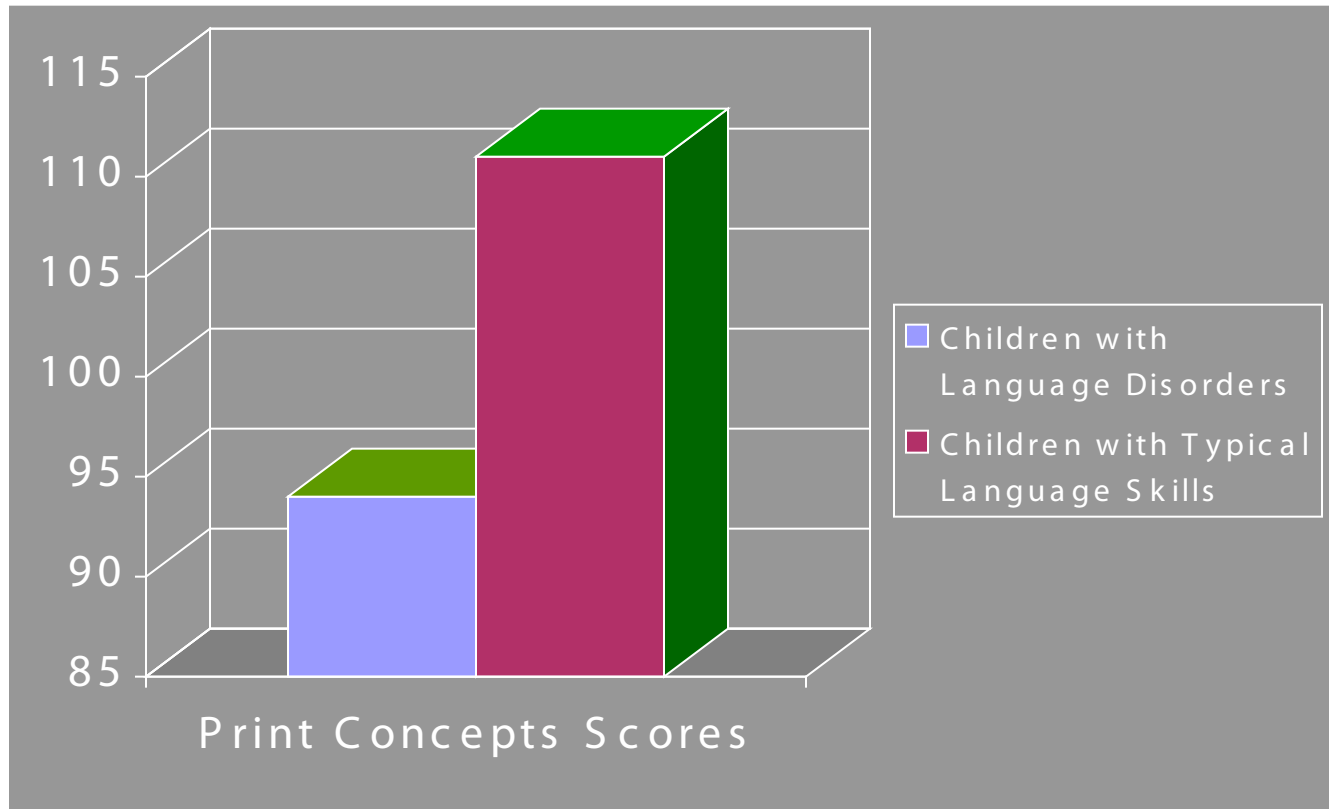
(From Justice, Bowles, & Skibbe, 2006)

Reflect and Apply

Reflect

1. Think about a child in your classroom. Write that child's name here: _____.

How often in a given week do you prompt this child to write something?

Do you think this is enough opportunity for this child to explore print through writing?

2. Look at the six print knowledge objectives addressed in *Read It Again–PreK!*

*   To recognize that print carries meaning and to distinguish print from pictures
*   To recognize the left-to-right and top-to-bottom directionality of print
*   To identify some upper-case letters, including those in children's own names and those of some friends or family members
*   To understand and use new words describing aspects of books (e.g., illustrator, author, cover, title page) and print (e.g., word, letter, spell, read, write)
*   To recognize the difference between letters and words
*   To recognize some common sight words, including environmental print

Which objective do you give the least attention to in your classroom? Why?

What could you do this week in order to provide additional opportunities for children in your classroom to learn this objective?

3. What else do you want to know about print knowledge development in young children?

_____

_____

What resources or materials would help you develop this knowledge?

_____

_____

Apply

1. Examine the alphabet knowledge of a child in your classroom using three types of tasks discussed in this lesson: letter naming, letter pointing, and letter writing. How does the child's performance vary across these different tasks?

_____

_____

2. Engage all of the children in your classroom in an art activity. Ask them to draw a self portrait and to write their name. Examine the name-writing skills of the children in your classroom. Which children included all of the letters of their name?

_____

_____

Which children did not include any of the letters in their name?

_____

_____

What does the children's performance on this name-writing activity tell you about their print knowledge?

_____

_____

3. Read a storybook with a child in your classroom, paying careful attention to his or her knowledge of the following print concepts:

- The front of the book.
- The back of the book.
- The title of the book (where it is located on the book cover).
- The author of the book (where it is located on the book cover).
- The difference between pictures and words.
- The difference between words and letters.
- The difference between upper- and lower-case letters.

Are there any concepts the child did not understand? If so, how might you help to build knowledge of these concepts?

Resources

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