

# Assessing Book Knowledge Through Independent Reading in the Earliest Years: Practical Strategies and Implications for Teachers

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Published online: 8 May 2011  
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**Abstract** The purpose of this current study is to build on the previous body of emergent literacy research by investigating the necessity of assessing book knowledge (e.g., print knowledge, interpretive knowledge, and letter identification) in toddlerhood to set up successful literacy development by providing independent storybook reading opportunities. This study suggests strategies that teachers can employ in their toddler classrooms for accomplishing activities such as (i) setting up common and recurring opportunities to read books independently with toddlers and (ii) informally observing and assessing children's book knowledge. Additionally, implications for practice are provided with detailed examples of how toddlers demonstrate their book knowledge and their understandings about books through independent reading.

**Keywords** Book knowledge · Assessment · Toddlers · Checklist

## Introduction

Children in literate societies have knowledge about written language long before they read conventionally from print (Neuman et al. 2000). Consider the following example of a two-year-old and his knowledge that written language represents something meaningful:

Parent: Eric knows that [written language] if he goes to Kroger [the grocery store], because I let him ride

the cart for children, it looks like a car, whenever I go to Kroger with him, he will ride it. In the middle of playing outside, if I take him into my car to go to Kroger, he is irritated because he doesn't like to be interrupted while playing, but, um, once I say, let's ride a honk-honk, then he calms down and sits still in the car. Then, right after he sees Kroger, he starts screaming, honk-honk ((chuckles)). He knows he is about to ride a car-cart ((chuckles)) by saying honk-honk, ah ((...)) also, when he sees the plastic bags with the Kroger mark, he says, honk-honk.

Galda et al. (1997) noted children make sense of new situations by seeking patterns and applying their childlike logic to those situations. Likewise, the above example suggests that while Eric is not able to read or decode words in a conventional sense, he employs environmental print, recognizes the symbol for the grocery store, and applies it to his own experience. Thus, this example indicates that children of very young ages have knowledge about written language. It is consistent with the argument that it is important for young children to be frequently exposed to print, which would facilitate young children's early literacy development as they learn to recognize environmental print, such as logos and shop signs (Makin and Whitehead 2004).

Studies have highlighted the importance of young children's emergent storybook reading experiences prior to formal instruction for reading (Anderson and Matthews 1999); the more very young children are exposed to written language, the more likely they are to develop knowledge such language. Studies have also demonstrated that through parental interaction, teacher support, and quality literacy environments, young children develop a positive socio-emotional relationship with books and experience book

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handling behaviors in an authentic manner, setting them up for successful literacy development with invaluable information about why people read, how to handle books, and how written communication works (DeBruin-Parecki 1999).

Therefore, studies regarding literacy development, including those on emergent literacy, have emphasized the importance of developing pre-reading skills at an early age through exposure to print, such as book exploration either with adults or independently. These studies suggest the use of repeated reading routines to enhance early literacy skills by having adults hold young children on their laps, offer age-appropriate books, engage children in conversations such as labeling the pictures on the pages of books, and ask children to describe what is going on in the story (Venn and Jahn 2004; Zevenbergenn and Whitehurst 2003).

Although researchers have investigated what strategies facilitate early literacy development, they have not yet studied how to assess young children's book knowledge at very early ages. Assessment of young children's book knowledge may be a crucial factor in helping teachers to provide best practice for young children in their development of these literacy skills which may ultimately result in proficient readers.

### What is Book Knowledge?

Book knowledge is a necessary tool for children when they transact with books to facilitate "sensitive and meaningful enculturation into the world of books" (Owocki and Goodman 2002, p. 39). It is categorized into three domains: book handling knowledge (e.g., turning the book right side up, turning one page at a time, etc.), print knowledge (e.g., understanding that print and pictures are different, understanding that print carries meaning, etc.), and interpretive knowledge (e.g., eagerness to read books, reading books by using cues) (Owocki and Goodman 2002).

Because most literature has focused on the assessment of book knowledge for older children, Fig. 1 represents a modified version of checklists (Owocki and Goodman 2002) appropriate for use with toddlers.

### Why Do We Need to Assess Book Knowledge?

By observing and documenting children's book knowledge, teachers may foster effective teaching strategies (Owocki and Goodman 2002). Conducting meaningful assessments allows teachers to reflect on emergent literacy goals they have for their students (Puckett and Black 2008). As they become increasingly sensitive to individual differences in children's book knowledge, teachers create

opportunities to engage in shared reading with children, focusing on an individual child's need to develop literacy skills based on what she or he has already mastered. In this way, teachers help children to become aware of their capabilities and the learning process.

Emergent literacy skills, which are critically linked to later literacy success, are acquired in the social and cultural contexts in which young children participate (Justice and Pullen 2003). Thus, there is a need to explore and understand social and cultural contexts to learn what motivates children to engage in reading books. It is important for teachers to question in which settings (contexts) young children read books and appear to be comfortable sharing books, and in which contexts young children read books alone, read books to someone else, or ask to read books for adults (teachers). While assessing book knowledge, teachers have great opportunities to extend or refine children's learning experiences and to have knowledge about the socio-cultural nature of literacy learning.

Using the findings of assessment of children's book knowledge, teachers should share their understandings and strategies for promoting children's literacy skills with the parents of their children. In this way, the parents may understand which age-appropriate strategies will help build their child's literacy skills so that parents can assist in the vital role in fostering precursors of formal literacy skills. Such support from teachers will also assist parents in the provision of early, affectionate, and positive settings in which their children may acquire book knowledge, not only in early care and education settings but also at home.

### How to Assess Book Knowledge

#### Step 1. Enriching Reading Environments

Teachers need to create genuine opportunities as often as possible for children to read books by themselves and with adults or peers. Meaningful and effective assessments may occur in individualized and small group situations in various contexts (Puckett and Black 2008). Not only is it important to place various kinds of books that are both age- and developmentally-appropriate in a library (reading) area, it is crucial for students to be motivated to read books in natural settings so that they may be exposed to enriched reading environments. For example, teachers may plan for children to have independent reading time right after story time. Children are eager to have the books that their teachers have held and read to them during story time, and they are not satisfied with just sitting, looking at the pictures, and not being able to have the books in their hands. Alternatively, after nap time and during free play time, teachers can set up a table with books in which children

## Book handling knowledge

This child can....

- Hold book in an upright position
- Turn pages left to right
- Look at left page before right page
- Indicate top edge or toward top when asked if s/he can show me the top of the page
- Indicate bottom edge or toward bottom when asked if s/he can show me the bottom of the page
- Use cover illustration to predict what the story is about
- Use illustration to make predictions
- Use book title to predict what the story is about
- Understand or use terms such as story, page, cover, or title\*
- Show me the front of the book\*\*
- Show me the back of the book\*\*
- Show me where the title is
- Show me where the story begins (where to start reading)

## Print knowledge

This child can....

- Point to pictures when asked to show me where s/he reads
- Point to words when asked to show me where s/he reads
- Pointing to pictures on the left page and the right page by using a finger when asked to show me where s/he reads
- Pointing to words on the left page and the right page by using a finger when asked to show me where s/he reads
- Understand that print proceeds from top to bottom
- Know where a letter is (name or point to a letter when asked; use the term conventionally during conversations)
- Know where a word is (name or point to a word when asked; use the term conventionally during conversations)
- Understand that pictures are viewed and print is read
- Participate in reading when the language is predictable
- Attempt to match voice with print
- Point to a capital letter when asked\*\*\*
- Point to a lowercase letter when asked\*\*\*

## Interpretive knowledge

This child....

- Is eager to select a book to read alone
- Is eager to select a book to someone else
- Is eager to be read a book

This child can....

- Label pictures which looking through the pages of a book
- Read books by using picture cues to construct a meaningful, connected story
- Make personal connections with books (sharing their own experiences based on pictures or content of the books)
- Retell what the book was about (brief response or detailed response)
- Retell stories, referring to pictures in the books
- Retell stories, referring to problem in the books
- Retell stories, referring to resolution in the books

**Fig. 1** Assessing book knowledge for toddlers. Adapted from Owocki and Goodman (2002, pp. 104–108). Copyright 2002 by the authors. Adapted with permission. \*Single asterisk: display the book,

then ask “What’s inside it?” or “Show me \_\_\_ in this book.” \*\*Double asterisk: present book upside down with back cover toward child. \*\*\*Triple asterisk: use alphabet cards for these tasks

may be interested in reading, placing the table in the middle of the classroom so that children can find interesting books easily without having to go to the library area. Or, during morning transition times, teachers can establish a routine where children read books with their parents or the teachers themselves, an activity which may help students experience a smooth transition as well as positive opportunities for literacy development (Lee 2010).

## Step 2. Setting up Meaningful Assessment Opportunities

Simply observe children while they are reading books with a reflective eye and take notes on the quality of the children's behaviors. For some items, the assessor does not need to ask questions. By observing children reading books more attentively, the assessor may develop a sense for meaningful assessments and take a step toward documenting children's progress as well as identifying any concerns about a child's development. Because the assessor has already listed questions, deciding what characteristics the assessor wants to note about each child in the class, the assessor may notice previously unnoticed behaviors that may give him/her a better understanding of the children's current abilities.

Ask the students questions. The assessor will find that some items on the checklist cannot be assessed without asking such questions. Asking questions is one of the simplest ways to challenge children to attempt to express what they know. Thus, by asking questions, the assessor will assess children's language competencies as well as their book knowledge.

Assess one child at a time in a natural setting. The assessor may face some limitations when assessing children in a large or small group. The assessor may not succeed in getting enough detailed information to understand what the child knows because young children tend to copy what other children say. Thus, assess each child individually. Additionally, if a child feels any pressure or is forced to read books, like a type of test, the child may easily lose interest in reading books. Thus, ask a child to read books that he or she chooses. If the child is reluctant and says he or she cannot read, the assessor can reengage the child by stating that he or she can just tell the story of the book. Avoid assessing children with many items at the same time to avoid the child's loss of interest.

Assess items multiple times with a suggested number of three unique observations. The assessor does not have to assess one item three consecutive times. However, in order to get accurate, reliable information, the same result must occur three times. For example, if the assessor has observed a child holding a book in an upright position three consecutive times, then one may conclude that this child knows how to orient books correctly.

Finally, remind that young children develop physically, emotionally, socially, and intellectually at different rates. Additionally, toddlers may lack expressive skills. Thus, teachers or assessors need to be patient when assessing young children while at the same time implementing effective interventions to help toddlers develop appropriately.

## Toddlers' Book Knowledge

What kinds of emergent literacy skills, or book knowledge, may toddlers have? I assessed ten toddlers (four boys and six girls) enrolled in a classroom in a Southeastern university preschool program in the United States. The children's ages ranged from 26 to 38 months ( $M = 33.30$ ,  $SD = 4.11$ ). The parent-reported ethnicity for all children was White, non-Hispanic. The children's parents were all highly-educated (most holding advanced degrees) and worked in an institution of higher education (IHE).

Children were observed twice a week during their free play time for 5 months. The observation time usually lasted an hour. No child was forced to read books. During the free play time block, I could approach children and ask questions of them individually while they were reading books to assess their book knowledge. For each session, videotape equipment was used to document children's reading behaviors and to capture their book knowledge wherever and whenever the children chose to read a book by himself or herself. Children viewed themselves on camera prior to the assessment, a practice which helped children become comfortable with the videotaping process. Individual assessments were conducted and included an interview with each child and an assessment of the child using the modified checklist (see Fig. 1) with the child's self-chosen favorite book. All observed and recorded literacy knowledge, practices, and interviews were classified according to the items in the checklist.

## Findings

On the modified checklist, 35 items under three categories investigating book knowledge: book handling (13 items), print knowledge (12 items), and interpretive knowledge (10 items) are provided. Through recorded video clips and fieldnotes, I marked each item when I found a child demonstrating the indicated behavior more than three consecutive times. As a result, I determined the participants' book knowledge by synthesizing information once coded on the checklists. The following data describe children's overall book knowledge:

### Book Handling

Children displayed consistency in the frequency of several behaviors that were tallied on the checklist. For example, all children could hold a book in an upright position, turn pages from left to right, and indicate the top (or bottom) edge or toward the top (or bottom) when asked. Ninety percent of the children could use the cover illustration to predict what the story was about and use illustrations to make predictions. Another frequently noted skill was that children could show where the front of the book was (80%). Seventy percent of the children could use the book title to make predictions; appropriately understand (or use) terms such as cover, page, story, and title; and show where the back of the book was. Sixty percent of children could show where the story began. Half of the children could tell where the title of the book was. Additionally, 30% of the children looked at pictures on the left page before the right page.

### Print Knowledge

The frequency of several behaviors that were tallied on the checklist indicated that children could demonstrate print knowledge consistently. For example, 90% of the children could point to pictures when asked to show me where s/he read. Seventy percent of the children could participate in reading when the language was predictable. Half of the children knew what/where a letter was. Thirty percent of the children could point to pictures on the left page and the right page by using a finger. Additionally, 20% of the children knew what a word was. Lastly, only 10% of the children could point to words when asked to show me where he/she read, point to words on the left page and the right page by using a finger when asked to show me where he/she read, understand that print proceeds from top to bottom, or attempt to match a voice with the print.

In the case of letter identification, seven participants were able to identify at least two alphabet letters of 26 alphabet letters ( $M = 8.43$ ,  $SD = 10.26$ ). All of the children could identify the first letter of their names. Interestingly, the children with siblings recognized also the first letter of their siblings' names. Additionally, children who were able to identify an upper-case letter that had the same shape as a lower case letter such as *C*, *O*, *P*, *S*, *V*, and *X* were able to recognize the corresponding lower case letter. However, children were not capable of distinguishing upper case letters from distinct lower case letters.

### Interpretive Knowledge

The frequency of several behaviors tallied on the checklist indicated children also could demonstrate interpretive knowledge. For example, all the children were eager to be

read a book and labeled pictures while looking through the pages of a book. Ninety percent of the children were eager to select a book to read alone. Seventy percent of them could make personal connections with books by sharing their own experiences based on pictures, alphabet letters, or contents of the books. Seventy percent of them could also retell what the book was about. Among this 70% of the children, seven children could retell briefly what the book was about and three children could retell a story in detail. Additionally, seven of the ten children could retell stories, referring to only pictures in the books. However, only two children could retell stories, referring to problems in the books, and only one child could retell stories including resolution in the books. Lastly, 30% of the children were eager to select a book to read to someone else and read books by using pictures cues to construct meaningful and connected stories.

### Implications

In emergent literacy perspectives, researchers acknowledge young children have literacy knowledge. However, most studies focus on preschool-aged children because researchers believe children have to be at least 5 years old to be assessed properly to determine their literacy development. Even though researchers have claimed that learning to read is a developmental process, they overlook the possibility that even toddlers can be assessed well enough to determine their book knowledge, one of the crucial steps to help them to become proficient readers. By shedding light on what kinds of book knowledge toddlers have, this study suggests that teachers, parents, and educators need to be aware of age-appropriate book knowledge for toddlers in order to help toddlers to develop emergent reading behaviors.

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