Abstract:
How do predictable texts fit with children's early reading experiences? In this article, Johnston explores three important factors in facilitating young children's word learning: the reader, the text, and the task.

Article:
I began teaching first grade when basal reading programs were standard in most class rooms. I was bothered by the fact that my students had to learn a great many sounds and sight words before they read anything, but I didn't know an alternative. I was introduced to predictable texts and the shared book approach (Holdaway, 1979) in a university reading course in 1986. That fall I taught all my children to read The Cat on the Mat by Brian Wildsmith (1982) on the first day of school. Of course the children could not actually read it in a conventional sense. They had quickly memorized it and with the help of pictures could recite it accurately, but they were, I felt sure, on their way to becoming engaged and confident readers.

It was not until I worked with an older child that my faith in predictable text began to falter. Eliza was a third grader reading at a beginning level, but she was bright and had good language skills. After we read a predictable book together she reread it easily, but I could see she was paying only superficial attention to the print on the page even when I asked her to slow down and point to the words.

One more event had an important influence on my thinking about predictable text. Pat Crook, my professor of children's literature, told me about her grandson, Kenny. His kindergarten class had been reading Brown Bear, Brown Bear, What Do You See? (Martin, 1967), and he recited the entire text to her over the phone. Pat's response was, "Kenny, you are learning to read." But Kenny replied, "I don't have to read it; I already know it." Despite his love for and mastery of the language in this predictable book, Kenny knew reading involved something more than memorization. He was right, of course. In order to read we must be able to identify the words on the page, and to read well we must be able to identify those words effortlessly and accurately.

While contextual cuing strategies (Clay, 1985) have captured the attention of the reading community, a large and stable sight vocabulary continues to be the hallmark of a successful reader. Good evidence exists that only beginning and struggling readers rely upon context to identify words (Biemiller, 1970; Nicholson, 1991; Stanovich, 1994). Extensive and automatic word knowledge frees fluent readers to focus on the meaning of what they read rather than figuring out or guessing at unfamiliar words (Perfetti, 1985).

I grappled with the question of how to facilitate word learning as a classroom teacher and now as I instruct future teachers. From the reading and research I have done, as well as from my experiences working with students in the early stages of reading, I have identified three critical factors: the reader, the text, and the task.

The reader
The young reader brings varying amounts of word knowledge and print skills to the task of recognizing and learning words. This developmental continuum has been well researched by Ehri (1994, 1995) and Juel (1991).
Children with little or no alphabet knowledge and weak phonological awareness have been described as "pre-alphabetic" readers by Ehri or "visual cue" readers by Juel. These emergent readers rely upon nonphonetic graphic cues as a guide to word recognition. They might recognize the name of their favorite fast food restaurant on a cup emblazoned with a familiar print style or logo but would not be able to recognize that word somewhere else.

Beginners who have some understanding of letter-sound relationships and a concept of word are described by Ehri as "partial alphabetic" readers. These beginning readers might confuse lion and leopard in a story about big cats found at the zoo because they often use only initial letters as a cue for word recognition. As children's knowledge of letters and sounds grows to include more consonants and vowels, they are known as "full alphabetic" readers by Ehri or "decoders" by Juel. These more advanced beginners might confuse words like boot and boat or past and paste if seen in isolation.

With experience students acquire knowledge of vowel spelling patterns (such as ai and ay for the long sound of a) and orthographic chunks (such as -ing and -tion) and are able to make sense of and remember a large number of words. These students have reached an "automatic" stage as described by Juel or a "consolidated alphabetic" phase as described by Ehri, where there is little evidence of conscious word analysis. They have a large sight vocabulary that can be accessed immediately and accurately without reference to contextual cues. It is only occasionally that they confront unknown words that require decoding strategies.

We know that children do not learn large numbers of words by sight in the sense that they simply memorize the graphic form in a holistic way as an unanalyzed series of letters (Venezky & Massaro, 1979). Instead, children construct a complex system of storing and retrieving words, which grows ever more sophisticated, accurate, and automatic as they see the same words over and over in various contexts and as their word knowledge grows (Ehri, 1992, 1994). While only a partial representation of a word may be stored initially, repeated encounters and advancing word knowledge help to "fill in" the letter-sound details.

The first and most important information we need to know is where beginning readers are on the developmental continuum in order to plan instruction that will enhance word learning. Teachers can get a good sense of this development by noting reading errors, children's invented spellings, and word identification ability in isolation. For example, a child who reads favorite as flavor in the sentence "Chocolate is my favorite," spells it as FAVRT, and names it as fort when she sees it in isolation is clearly using consonant and vowel knowledge to make logical sense of the word. These partially correct efforts offer us valuable insights into her word knowledge.

The text
A substantial body of recent research supports the developmental nature of word learning, but there is little research on how the nature of the reading material influences word learning. The work that has been done suggests that this is an important issue. Juel and Roper/Schneider (1985) found that the type of text used by first graders played an important role in their word identification strategies. Children who used a decodable basal developed a phonological strategy based on letter-sound correspondences, and those using a high-frequency basal adopted a primarily visual strategy for word identification. The decodable basal group could read significantly more of the core words from the high-frequency basal series than vice versa.

Traditional basal text was designed to facilitate word learning by using words that were high in utility or frequency, repeated in a cumulative fashion, and easily decodable. Controlled vocabulary led to rather contrived text, and the basal program became lockstep, when ease of reading depended upon the cumulative mastery of words at earlier levels.

The nature of text considered appropriate and easy for beginning readers has undergone dramatic change as reflected in the recent first-grade materials created by basal publishers (Hoffman et al., 1994). Anthologies of predictable literature have replaced preprimers, and the vocabulary control of the past is hardly evident. Word
recognition is supported by the illustrations, by patterned repetitive language, by rhythm and rhyme, and by the child's ability to anticipate and quickly memorize the language. Word learning is assumed to happen as children read and reread the text (Bridge, Winograd, & Haley, 1983), but evidence for this is limited.

Bridge et al. (1983) found that first graders reading in predictable materials learned significantly more target words than children reading basal text; however, another study of kindergarten children (Bridge & Burton, 1982) found no significant difference. My experience with Eliza led me to wonder if word learning was negatively affected when reading became more a matter of memorization than attention to print. Although predictable text facilitates the beginner's efforts to identify words, it may not optimize word learning.

Despite my growing concern with predictable text I still felt that it offered needed support for beginning readers. Perhaps word learning in predictable text could be enhanced by the manner in which these materials were used and the follow-up activities employed. The instructional methods or tasks constitute the third critical factor.

The tasks

Beginners may zip through predictable books with joyous familiarity (Martin & Brogan, 1971) without paying much attention to the print. Attention is important if they are to learn the words. A number of studies offer evidence that children learn words faster and more completely when those words are studied in isolation (Ehri & Roberts, 1979; Ehri & Wilce, 1980; Nemko, 1984). Ehri and Roberts (1979) attributed this learning to the notion of processing depth. Retention is a function of the depth to which a stimulus has been processed (Craik & Lockhart, 1972). Adams (1990) has warned that, "Where context is strong enough to allow quick and confident identification of the unfamiliar word, there is little incentive to pore over its spelling. And without studying the word's spelling, there is no opportunity for increasing its visual familiarity" (p. 217).

Activities such as flashcard drill, worksheets, writing words in sentences, decoding exercises, and most recently "word walls" (Cunningham, 1995) help focus children's attention on the printed form of words in isolation. However, Holdaway's shared book approach (1979) offers a whole-to-part model aligned with current literature-based practices. Children begin with the full support of the text, but they also work with sentences, words, letters, and sounds in a way that demands close attention to print. I wondered if this model might be used to compensate for any disadvantages associated with predictable text.

A study of word learning in predictable text

I developed a study to compare three word learning tasks using predictable text (Johnston, 1995). Each task represented a different point on the whole-to-part continuum and required a different degree of attention to print: (a) repeated readings (RR) of familiar text in which students had the full support of context, (b) working with sentence strips (SC) in which students had some support from the context, and (c) a modified word bank approach (WB) in which students worked with words in isolation. I selected these tasks because they seemed to be congruent with current practices. Repeated readings (Chomsky, 1976; Samuels, 1979) have been well researched with older readers and are frequently used by teachers. Word banks are a long-standing tradition associated with the Language Experience Approach developed by Stauffer (1970). Whole-to-part activities have been described by a number of practitioners in addition to Holdaway (e.g., Heald-Taylor, 1987; McCracken & McCracken, 1979, 1986; Rhodes, 1981) but have not been tested experimentally.

In addition to tasks, I wanted to examine the nature of the text by analyzing the kinds of words that occurred and which words were learned most readily. Words were rated according to four features: repetition, general word frequency, decodability, and concreteness. Concreteness was added because meaningful words such as cakes or alligator may be more memorable than abstract words like you or some (Ashton-Warner, 1963).

I also collected information about each student's reading ability in an individually administered assessment prior to the implementation of the study. The Early Reading Screening Instrument (ERSI) developed by Morris (1992) tests beginners' print-related word knowledge in terms of alphabet, concept of word, phonemic
awareness, and word recognition.

Subject and materials. Participants included 51 children in three first-grade classrooms at a U.S. public school serving primarily low- and middle-income families. For 3 weeks the regular classroom teachers used my plans and materials, substituting for the variety of books, chart stories, and poetry they had been using in the first 2 months of school. Each week the students read three predictable books from the Story Box collection (1990), a widely used set of predictable books equivalent to preprimer text. The three books for each week were similar in terms of difficulty and vocabulary load but did not have more than a few words in common.

Procedures. All three books were introduced to the students in a similar fashion on the first day each week using the shared book approach. The teachers discussed the title and cover with the students, read the book aloud, and invited the children to react to and discuss it. The children then read along with the teacher in their own copies of the book two times before attempting an independent reading.

After the first day, each book was used for a different task for the rest of the week. This meant that the teachers used all three books and all three tasks during the 30 minutes allotted to reading instruction, each book and task getting 10 minutes. They repeated the same lesson with three small groups, making some minor adjustments for differing degrees of literacy skills.

The books used in the repeated readings task (RR) were read 10 times over a 4-day period, always in the original context. In addition, the students participated in some simple dramatic interpretations. These typically involved acting the story out with stick puppets and story boards as one or more children read the story aloud.

The books used in the sentence context (SC) treatment were reread in context each day, but in addition the students read the text on a chart without the support of pictures. They also worked to rebuild the story using both large sentence strips that were put in a pocket chart and small individual sets of sentence strips.

The books used in the word bank task (W13) were also reread each day, but each child received a text-only copy of the story to read and selected known words by underlining them. The teacher then held up a small slip of paper or card with one of the selected words written on it. If the child could name the word it went into his or her word bank. On the third day students read through their words, using the book to look up any they did not know. They also had a chance to acquire additional words. On the fourth day students reviewed their words again and did a brief word study activity in which the teacher asked them to find words with a particular feature. For example, the teacher might say; "If you have a word that starts with f hold it up" or "Hold up a word that rhymes with not."

The students were pretested and posttested each week to determine the number of new words acquired in each task. They read from a list of all the words contained in the set of three books.

Findings. I will report the findings in terms of the three factors that appear to be critical aspects of beginning readers' ability to learn words.

• The task. Students learned significantly more words when they used sentence strips and word banks than when they simply read and reread the story, and they learned the most words using word banks (see Figure 1). These findings support the idea that word learning can be enhanced by planning whole-to-part tasks that increase the reader's need to attend to and process the print. My hypothesis had been confirmed, but I was disappointed to find that, despite reading the books 10 times over 4 days, students did not, on the average, seem to learn a great many words in any treatment. The average number of words learned in the word bank treatment each week was only 2.6. This was better than the average in the reread treatment, which was 1.0, and the sentence strip treatment, which was 1.8, but was still low enough to raise questions about the predictable text itself.
The text. I examined the nature of the words used in the predictable texts. The difference between traditional basal materials and predictable text is very evident in terms of word repetition. Over half of the words in these predictable books (52%) appeared only one time, and the average number of repetitions was only 3.3. In the 1985 study of basal preprimers reported by Juel and Roper/Schneider, the core vocabulary words repeated an average of 15 times in one series and an average of 26 times in another.

Two hundred words account for 50% of the words in reading materials (Carroll, Davies, & Richmond, 1971). These high-frequency words accounted for slightly less than the 50% of the words in the predictable books chosen for the study, but this difference was small. About a third of the words were single syllable and phonetically regular (e.g., box, bite, sleep, that). Concrete nouns (e.g., possum or chairs) with clear referents accounted for about 40% of the words.

I explored the relationship between features of words and students' word learning through intercorrelations and a multiple regression analysis (see Table). It is not surprising that general word frequency and repetitions were correlated, because high-frequency words repeat a lot in text. But concreteness was negatively correlated with all the other factors, especially with frequency. A large variety of concrete words occurred in these texts, and many occurred only once. Only three of the factors were positively and significantly correlated with word learning: general word frequency, repetitions, and decodability. I concluded that while beginners are more likely to learn words that repeat and are easily decodable, these words were not the most common words in the predictable books I used. This may partially account for why word learning overall was low.
• **The reader.** I explored the "reader" factor by looking at how children with varying degrees of print skill differed in terms of word learning. The initial assessment scores revealed a range of ability, but no children were beyond the beginning reader stage. The children with the lowest scores were still unable to identify all their letters and had only rudimentary phonetic awareness as shown in their ability to represent a few initial consonant sounds in an invented spelling task. These children would be considered "pre-alphabetic" or at best "partial alphabetic" readers. Children with the highest scores knew all the letters and could represent initial, final, and some medial sounds in their invented spelling. They would be considered "partial" to "full alphabetic" readers. Not surprising, the better children did on the ERSI, the more words they learned (see Figure 2). Children with knowledge about letters and how letters map to sounds were in the best position to acquire and retain words.

The word bank did give the students in each achievement level a slight edge over the students in the next higher level who simply read and reread the text. The least able readers learned an average of 3.6 words using word banks, while the middle achievers learned 2.8 by simply reading and rereading. The middle achievers learned an average of 6.1 words using word banks, while the best readers averaged only 5.6 reading and rereading.

**Implications for teaching**

I found three critical factors for word learning: the reader, the text, and the task. Teachers need to know their students' ability to process print, they need to select books that support students' word recognition but at the same time enhance their word learning, and they need to structure learning tasks that further facilitate word learning by drawing attention to the printed form of words. Many ways to do this are possible both in the context of reading and in whole-to-part follow-up activities.

**The reader and the tasks.** Prealphabetic and partial alphabetic readers have a limited store of sight words and will need considerable support from predictable text and shared reading. In the shared book approach the teacher typically reads the entire text several times; prealphabetic readers need this memory support. Partial alphabetic readers need only a little support from shared reading, and students in the full alphabetic phase don't need shared reading at all because they have a core of sight words and should be able to read some predictable books independently.

All beginning readers will benefit from whole-to-part tasks that increase their attention to print. Teachers should see that every child is engaged in such activities. Even in small groups, turn taking means that most of the group is sitting unengaged while another child reads aloud, finds a word on a chart, or puts a sentence strip in a pocket chart. When children have their own copies of the text, of sentence strips, and of word cards, it is more likely they will be examining the print carefully for themselves. Here are some specific suggestions for enhancing word learning:

1. Introduce new words in context. Predictable reading materials provide a rich and meaningful context that supports beginning readers' efforts, no matter their level of word knowledge. The entire class can enjoy and take part in shared reading with predictable books even when ability is diverse.

2. Take away the pictures. After several readings of a predictable text, remove the support of the illustrations by covering the pictures or by working with a large chart containing the text. Better still, give the students text-only copies. They can follow the words with their own fingers as they read or listen to others read, which increases the visual familiarity of the print. Many publishers will grant permission for teachers to make these copies for use in classrooms. Students can accumulate a collection of these stories to illustrate and bind into their own books.

3. Examine words in context. When children hunt for known words to underline, as in the word bank approach used in this study, they must attend carefully to the print. Students might be asked to touch words the teacher calls out, or the children might take turns naming words for their classmates to find. For example, the teacher may ask each child to point to and name their favorite word, a word that begins with a particular letter, or a
word that rhymes with a given word. The masking technique described by Holdaway (1979) is another way of isolating words in context for careful examination.

4. Work with sentence strips. Ask the students to read the sentence strips and to rebuild the text in sequence. Students may need to refer back to the chart or book in order to do this. Although large sentence strips can be used with the whole group, children also need their own sets of sentences so that everyone can be involved in the task at the same time. Individual sets can be made from text-only copy in which each sentence is on a different line. Run a different color of crayon or marker down each paper before cutting it into strips, and then students can easily identify which sentence strips are theirs when they work side by side.

5. Examine words in isolation. A word bank approach accomplishes this nicely as children write words on cards or slips of paper for their own personal collections. Word bank activities encourage students to focus upon
words in context with the goal of finding words they know. Remember, too, children may use only partial cues to identify a word initially, but repeated encounters facilitate a more complete representation of a word in their memories.

6. Review words over time. When word bank words are kept from week to week, the students can review known words over a long period of time. In the absence of cumulative word review in the reading material itself, this might be an especially important advantage of word banks. Words are stored in an envelope or bag and reviewed two or three times a week. Unknown words may be identified by returning to the book in which they occurred. Children can review them on their own, with a buddy, or with an assistant or volunteer helper by going through and sorting the words into those known and unknown.

Words that the child repeatedly fails to name should be taken out of the word bank so that reviewing the words remains a rewarding task. An alternative to simply discarding those words is to lay a collection of them face up and name a word for the student to find. This activity is a good way to review unknown words because it allows the student to use partial phonetic cues to find the words.

7. Sort words into categories. Words can be examined for common features such as words that begin with particular sounds; words that rhyme; or words that share semantic similarities such as animal words, color words, or action words. Word sorting activities (Bear, Invernizzi, Templeton, & Johnston, 1995) reinforce the recognition of familiar words and offer students the opportunity to make generalizations about graphophonetic and orthographic characteristics of words. In the absence of phonetically controlled text, these word study activities are very important.

8. Create word sheets for favorite books (see Figure 3). Students can cut these up and select the words they know. These words can then be quickly checked by the teacher or an assistant so that only known words go into the word bank. Every new word needn't go into the word bank and be kept forever. In this study good results were found in the use of word banks even though the number of words children could acquire was limited and the words were kept for only 1 week.

9. Use word banks only with children who need them the most. Word banks can be discontinued when children have between 150 and 250 words, because students with over 200 words in a word bank probably have internalized their own efficient system for storing and retrieving words mentally. They will still benefit from the study of words (e.g., Bear et al., 1995) but do not need word banks.

10. Words can be examined in many other ways in isolation. Cut sentence strips apart into words and ask children to rebuild the sentence. Glue library pockets into the back of books to hold word cards from the text, and students can go through these words on their own as part of independent reading. Hold up word cards for students to name, but do this only with the original context available for reference so that the prealphabetic or partial alphabetic reader can employ context cues as a way of figuring out unknown words. This is in contrast to the traditional flashcard drill, which is often more of a testing situation than a learning situation.

The text. Predictable text may be problematic in terms of word learning. It offers considerable support from context, making it easy to read, but it may not encourage careful processing of the print. In addition, the words used to write predictable text may not be the words children find easiest to learn. Traditional basal text was designed to facilitate word learning, but it often lacked appeal. I believe it is possible to use texts that combine the best of both kinds of materials or to use different kinds of materials for different purposes.

Many publishers of beginning reading materials, including basal publishers, are creating little books that combine predictable elements with phonetically regular words (e.g., Ready Readers by Modern Curriculum Press). These decodable readers can be used to match instruction in phonics with experiences in text as suggested by Juel and Roper/Schneider (1985). Rigby has a new line of little books called the PM Collection that features cumulative exposure to high-frequency words in a series that becomes less and less predictable.
One characteristic of traditional basal instruction was that children read very little other than their preprimers or primers. Now we can offer children a variety of reading experiences; the use of controlled-language texts seems well advised, especially for children who find learning to read difficult. Here are a few specific recommendations:

1. Limit the use of the shared reading model. When the reading material itself offers lots of support, students can work their way through the text independently and in the process attend carefully to the words. There is no reason to read everything in advance, even to prealphabetic readers, when the text itself is highly patterned and predictable. Often a well-planned book introduction (Clay, 1992) may suffice, or the teacher may read aloud only the first few pages to establish the pattern.

2. Move toward the use of less predictable text. As soon as students acquire a sizeable sight vocabulary and show evidence that they can read some material independently, move them into less predictable text. The majority of reading material is not especially predictable, and young readers must learn to rely less on context to be successful readers.

3. Use controlled-language texts. Although predictable text, especially top-quality literature, may form the core of the reading program in kindergarten and early first grade, students should also read texts that introduce and repeat high-frequency words in a cumulative fashion or include lots of phonetically regular words. I would not use such text exclusively, unless it is also good literature, but when students are studying a particular phonetic feature, such as short vowels, they benefit from lots of opportunities to read words with short vowels in the context of meaningful stories.

Conclusions
Teachers should reflect carefully on the reader, the text, and the tasks as they plan instruction to enhance word learning. New programs and books are flooding the market, but there is little research about how these texts interact with word learning or other reading tasks. This is an area ripe for further exploration.

Word study can be meaningful and rewarding. One of the teachers in my study reported that "the kids really seemed to love the word bank." The others agreed and expressed their belief that the children enjoyed the sense of accomplishment that came from getting tangible evidence of their learning. The focus of any reading program should be upon finding meaning in delightful stories, but children will not be able to enjoy reading and construct meaning unless they are able to read the words effortlessly.

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