Language Development and Emergent Literacy in Preschool

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To promote school readiness, preschool and Head Start teachers are incorporating more emergent literacy activities into their curriculum. This article argues that emergent literacy is subordinate to oral language development, rather than language development being subordinate to emergent literacy. Literature on components of emergent literacy is reviewed and a framework for a preschool curriculum that promotes oral language development and emergent literacy is presented. The article concludes with the recommendation that phonologic sensitivity and letter knowledge be taught in developmentally appropriate ways within the context of a language-rich preschool environment that specifically targets vocabulary enrichment.

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RECENTLY THERE HAS BEEN a renewed interest in early childhood education, specifically in adding a literacy component to Head Start and preschool classrooms. The developmental appropriateness of emergent literacy activities for preschool has cautiously been endorsed in a joint position statement by the International Reading Association and the National Association for the Education of Young Children. Commercial publishers have responded by producing literacy programs for preschools that offer activities such as phonological awareness, letter identification, and storybook reading. Relatively rare, however, are the preschool programs that explicitly target vocabulary development.

This article argues for putting oral language development back in the literacy equation, as a superordinate component rather than a subordinate component of emergent literacy. This is shown to be the best way to ensure that children’s vocabulary size is sufficiently large to allow them to comprehend the words they read beyond the primary grades. Differences in children’s vocabulary size most frequently occur because English is being learned as a second language or because of limited learning opportunities in the home. Gaps in vocabulary size due to socioeconomic differences emerge very early in life and increase exponentially such that children from advantaged families may enter first grade with twice the vocabulary as children from less advantaged homes. Hart and Risley argue that it would take 41 hours per week of rich vocabulary intervention—more hours than those available in a preschool setting—to close the gap. We must start earlier—in the home and in early childhood settings—if we are to close the gap and afford children the joy of understanding what they read. First, our case is made by emphasizing the notion of oral language as a superordinate concept to literacy. Second, the literature on components of emergent literacy is reviewed. Third, a framework is presented for a preschool curriculum that promotes oral language development and emergent literacy.

ORAL LANGUAGE AS A FOUNDATION FOR EMERGENT LITERACY

From a cognitive neuroscience perspective, humans have a genetic predisposition towards language, what Pinker calls an “instinct,” that is nurtured by interactions with caregivers to mold brain development and foster neural reorganization. The multilingual talents of infants are well known as they shift at 10 months from ability to perceive minimal sounds (phonemes) in all languages to attention solely to the phonemes of the language environment in which they live. Surrounded by an endless flow of phonemes, babies’ ability to detect word boundaries seems to be aided by attention to prosodic cues and acoustic patterns. In the language of mothers and caretakers (motherese), clauses tend to be grouped under an intonation contour that is clearly marked by the lengthening of the terminal segment and by modulation of vocal pitch at the end of the clause. These prosodic groupings are generally consistent
with grammatical organization (syntax) and thereby serve to parse meaningful units.8

This burst of phonological development in the first year of life is followed in the second and third year of life by bursts of semantic and syntactic development. Babies move beyond a phonetic representation of words to attend to semantic representations, which are highly contextualized. At 12 months, babies are estimated to understand 40 to 50 words when presented in familiar contexts. From 12 to 16 months, babies comprehend 100 to 150 words on average, and at the end of this period they produce about 50 words that are mostly nouns. From 16 to 20 months, babies comprehend an average of 200 words and produce 50 to 170 words. From 20 to 24 months, there is a rapid increase in vocabulary with average production of 250 to 300 words. However, for some children vocabulary will be much more restricted. At 20 months Huttenlocher et al9 found that children of talkative mothers had 131 more words in their vocabularies than children whose mothers were more taciturn. By age 2, the gap had increased to 295 words.

Toddlers’ burst of words in the second year is quickly organized into a discrete combinatorial system. This grammar is based on knowledge of how semantic agents (agent, recipient of action) map onto syntactic structure (first noun phrase, second noun phrase in English). Thus, within 6 months, toddlers go from simple pivot constructions (“allgone cookie”) to complex utterances, such as “mommy, tell Daddy that this baby be lying down.” During the refinement of grammar up to the preschool years, children’s creative application of their grammatical knowledge often yields morphologic over-regularization, such as “fet” for “fitted.”10

During the early childhood years, children acquire skill at the social uses of language (pragmatics). They learn how to participate in conversations (eg, turn-taking) and to manage relevant speech acts (eg, requesting) in order to maintain social interactions with adults and other children.11 After analyzing parent-child interactions in 42 families over a two and one-half year period, Hart and Risley12 describe this interaction as a “conversation, . . . a social dance that involves not just talking but also speaking and listening in partnership with another person” (p 194). Around the world, babies interact with caregivers in conventional and idiosyncratic ways that stimulate the growth of the phonological, semantic, syntactic, and pragmatic aspects of language. American mothers tend to be more eager to have their babies and toddlers name objects than French mothers. Japanese mothers attend to conventions of politeness and Kalihii mothers speak little to their babies until the babies can speak to them.13 Stylistic differences between babies and toddlers tend to fall along a continuum of referential versus expressive strategies. The referential style is characterized by naming objects, whereas the expressive style is characterized by holistic expressions and conversational contours.

Pragmatics, or communication skills, is consistent with the emphasis on socialization in the federally funded preschool program for low-income families of three- and four-year-olds, Head Start. But the building of communication skills in Head Start has expressly not been linked to decontextualized language skills or to literacy. Decontextualized language is language that minimizes contextual cues and shared assumptions by explicitly encoding referents for pronouns, actions, and locations.14 Decontextualized language is at the core of literacy instruction because it allows literate individuals to discuss literary products. This literate language or academic language is a specific oral language register valued in traditional schooling15,16 and is isomorphic to Bernstein’s17 notion of elaborated code, in contrast to restricted code. For Bernstein,18,19 an elaborated code was the product of socialization in literate households. Unfortunately, Bernstein’s perceived alignment of codes with class differences rather than literacy opportunities made his theory controversial.20

Links between decontextualized language and literacy have been made by Dickinson et al22,23 in a longitudinal study of 85 children from low-income families started in 1987. Composite variables that significantly influenced kindergarten literacy and vocabulary scores were: home variables of literacy support, density of rare words used, and extended discourse; and prekindergarten variables of vocabulary environment, quality of teachers’ talk, and curriculum quality. Kindergarten outcomes, in turn, predicted vocabulary and reading comprehension scores in middle school.23 Behaviors central to the quality of teacher talk were rare word usage, ability to listen to children and to extend their comments, and tendency to engage children in cognitively challenging conversations (ie, conversations about nonpresent topics). These prekindergarten variables of quality of teacher talk,
vocabulary environment, and curriculum quality predicted kindergarten outcomes above and beyond home variables, thereby emphasizing the importance of instruction in literate language and quality emergent literacy curriculum in preschool classrooms for children from low-income homes.

**EMERGENT LITERACY COMPONENTS**

Most early childhood educators refer to “emergent literacy” as the process by which children naturally acquire literacy through a sequence of oral language and literacy experiences that normally occur in a literate society. This natural approach to literacy acquisition has been contrasted with a “reading readiness” approach where prerequisite skills are directly taught to young children to prepare them for formal reading instruction. This dichotomy is unfortunate in that the two approaches to reading acquisition are not necessarily mutually exclusive and, in fact, can be quite complimentary, especially for young children at risk for developing reading problems.

Emergent literacy research can be categorized into research that examines the experiences that may affect the development of reading (ie, research on emergent literacy environments and early interventions), research that examines child characteristics associated with reading development (ie, research on emergent literacy components), and policy research that advocates for increased social interactions in literacy environments (ie, research on the emergent literacy movement). Unfortunately, there has been little interface among these different lines of research, which partially explains why professionals hold conflicting views about how young children acquire literacy and about what constitutes “best practices” in early literacy instruction.

A synthesis of findings from two separate research agendas suggests that emergent literacy consists of six child characteristics that should be emphasized in a comprehensive and balanced emergent literacy curriculum. These components of emergent literacy include oral language, phonological sensitivity, letter knowledge, print awareness, print motivation, and emergent reading and writing. For each emergent literacy component, this article reviews its normal development, its known relation or relations with literacy acquisition, and its assessment.

**Oral Language**

We have already argued for a prominent role of the enhancement of oral language in emergent literacy curricula. This position has strong backing from empirical research that documents the relation between young children’s oral language and subsequent reading proficiency. Specifically, the connection between oral language and later reading comprehension is widely accepted and well understood. That is, oral language—vocabulary in particular—is essential for understanding the text that is read. Additionally, recent longitudinal research suggests that young children’s vocabulary has an impact on decoding skills very early in the process of learning to read, but the explanatory mechanisms behind this relation have yet to be identified. Finally, growth in young children’s oral language is associated with growth in phonological sensitivity. It is theorized that this relation reflects an increasingly segmental structure of spoken word recognition that occurs with oral language development, and that this increasingly segmental structure of word recognition supports the acquisition of increasingly higher levels of phonological sensitivity that require segmenting the voice stream (eg, phoneme segmentation). In other words, oral vocabulary growth may be indirectly related to text decoding through its influence on phonological sensitivity development.

**Phonological Sensitivity**

Phonological sensitivity refers to children’s ability to attend to or manipulate the sound structure of their language. Recognizing that two words rhyme or blending sounds together to form a word are examples of specific phonological sensitivity skills.

Sufficient research exists to assert a developmental and multidimensional conceptualization of phonological sensitivity. Specifically, phonological sensitivity develops simultaneously across dimensions of linguistic and task complexity. Within the dimension of task complexity, there is a relatively clear developmental pattern in the type of operations that young children can perform on phonological information. Specifically, young children can first detect similar and dissimilar sounding words. Next, they can blend sounds together, and finally they can remove sounds from words. The ability to substitute sounds is
learned later in child development, usually alongside learning to read and spell.

Within the dimension of linguistic complexity, phonological sensitivity, in its early stages of development, manifests in sensitivity to large phonological units such as words, syllables, and large intrasyllabic units (ie, onsets and rimes). Phonological sensitivity takes these forms from approximately 2½ to 4½ years of age in normally developing, American children who speak English as their first language. Phonological sensitivity begins to manifest as awareness of phonemes around age 5, but the precise timing can vary greatly depending on instructional experience in phonological sensitivity or letter knowledge. The developmental hierarchy of phonological sensitivity skills parallels a hierarchical model of word structure, such that children are increasingly sensitive to smaller linguistic units. That is, children achieve syllable sensitivity earlier than intrasyllabic sensitivity (ie, sensitivity to onsets and rimes), and children achieve intrasyllabic sensitivity before they achieve sensitivity to phonemes.37,42-44

The development of phonological sensitivity within dimensions of task complexity and linguistic complexity does not follow a discrete, stagelike progression. Instead, it follows a quasi-parallel progression in which the skills are naturally acquired in a fixed order, but the “stages” overlap.37 The sequence of acquiring phonological sensitivity skills can be altered by instruction and experience. Additionally, growth in both dimensions of phonological sensitivity occurs simultaneously. Most importantly, children’s rudimentary phonological skills (eg, syllable blending) reflect the same underlying ability and set the stage for more advanced phonological skills like phoneme deletion.37,45,46

The developmental course of phonological sensitivity has significant implications for early instruction and early intervention for children at risk for experiencing reading problems. Specifically, the findings summarized above suggest that activities designed to foster the phonological sensitivity of prereaders, like blending syllables, will ease the learning of higher levels of phonological sensitivity, like deleting phonemes, that are known to play a causal role in reading acquisition. Indeed, phonological sensitivity interventions with preschool and kindergarten children support the acquisition of higher levels of phonological sensitivity, spelling, and decoding.47-52 The mechanisms by which phonological sensitivity aids reading are through facilitating reading by sound-letter correspondences and reading by analogy.53-56

Phonological sensitivity’s course of development has implications for early assessment too. Specifically, phonological sensitivity is indexed best by performance on multiple measures that span the task demands and levels of linguistic complexity that have been mastered to those that have recently emerged.57,58 Unfortunately, many assessment batteries used to study children’s phonological sensitivity have not incorporated this developmental and multidimensional perspective by including items that vary in task demands and linguistic complexity such that they span the entire ability distribution.

**Letter Knowledge**

Knowledge of the alphabet is one of the best predictors of children’s early reading proficiency.36,59 In fact, it is essential for reading, which at the most basic level involves translating printed text into spoken language. Assessment of children’s letter knowledge is straightforward. It simply involves showing children individual uppercase and lowercase letters and asking children to tell you the name of the letter and the sound or noise that the letter makes.

Children generally learn the names of letters before they learn the sounds that correspond to those letters. Learning letter names is easier than learning letters sounds probably because letter names are unique and naming objects is developmentally an easier task than attending to the individual sounds in one’s language.

Interestingly, learning the names of letters does not have a direct effect on learning to read.56 Instead, the effects of letter name knowledge are indirect. Knowing the names of letters facilitates learning the sounds that correspond to the printed characters because many letter sounds are embedded in the name of the letter (eg, /b/ in the letter B). Letter knowledge (ie, knowledge of letter names and sounds) also appears to have an indirect association with reading acquisition through phonological sensitivity. Specifically, it may be that some degree of letter knowledge is necessary before higher levels of phonological sensitivity (eg, phonemic awareness) can be learned.60,61 Alternatively, there is some evidence that letter knowledge and phonological sensitivity may be reciprocally related.62 However, it remains possible that the
“reciprocal relation” may reflect print exposure or the development of other reading related skills.

Concepts of Print
Reading follows a number of conventions that are independent of being able to decode. Some of these print concepts include progressing from the front of the book to the end of the book page by page from left to right, reading words from left to right and top to bottom on a page. Additional print concepts include understanding the boundaries between words and between sentences, which are represented by spaces and punctuation. It has been suggested that children’s knowledge of these print conventions is related to their reading acquisition.\textsuperscript{63,64} There is evidence of a longitudinal relationship between print concepts and reading acquisition.\textsuperscript{65} For example, we have found that preschool and kindergarten children’s knowledge about print conventions was indeed correlated with subsequent emergent literacy skills (ie, oral language, letter knowledge, phonological sensitivity, environmental print) and decoding. However, knowledge about print conventions did not add to the prediction of kindergarten and school-age reading abilities beyond that predicted by letter knowledge and phonological sensitivity.\textsuperscript{29} Additionally, in the Texas Primary Reading Inventory (TPRI),\textsuperscript{66} weak inter-rater reliability among teachers assessing print concepts has resulted in print awareness becoming an unscorable, warm-up activity in the TPRI.\textsuperscript{67} These results suggest that knowledge of print concepts may be best conceptualized as a proxy measure for other emergent literacy skills, reflecting exposure to print and other literacy-related activities\textsuperscript{68} or both.

Children’s print awareness may advance through a number of stages before children become literate. For example, it has been suggested that children first view print as a nonlinguistic, logographic representation of objects. Print awareness then supposedly progresses from a view that print codes only certain aspects of oral language (eg, nouns) to an understanding that there is a one-to-one correspondence between text and the language it represents.\textsuperscript{69}

Emergent Reading
Emergent reading consists of children’s pretend reading, their level of awareness that text communicates meaning, and their recognition of environmental print. In general, research has yet to substantiate causal links between children’s emergent reading skills and subsequent reading abilities.\textsuperscript{29,70–72}

Some emergent literacy advocates have suggested that children’s facility with environmental print (eg, recognizing product names from signs and logos) reflects early print awareness through demonstration of an ability to derive meaning from text within context.\textsuperscript{73} Most research does not support a causal link between children’s environmental print “reading” and decoding.\textsuperscript{70–72} For example, in our latent variable longitudinal study,\textsuperscript{29} we found that preschool and kindergarten children’s environmental print reading was associated with concurrent emergent literacy skills (ie, phonological sensitivity and letter knowledge). It was also correlated with kindergarten and school-age reading abilities. However, children’s environmental print reading did not add to the prediction of decoding beyond what was predicted by letter knowledge and phonological sensitivity. These results, which parallel those for print concepts, suggest that emergent reading may be a proxy measure for other emergent literacy skills, reflect exposure to print and other literacy-related activities, or both.

Children’s pretend reading becomes increasingly independent and increasingly sophisticated over the preschool, kindergarten, and early elementary school years.\textsuperscript{74,75} For example, kindergarten children’s pretend reading progresses from taking on an oral language form to taking on a written language form, demonstrating acquisition of the written language register.\textsuperscript{76} Children’s narratives reflect not only oral language abilities (eg, vocabulary, mean length of utterance) but also understanding of episodic structure and story components (eg, setting, character information, temporal order, causal relationships), which may foster later reading comprehension. Although research has not demonstrated a longitudinal relationship between preliterate children’s narrative skills and reading acquisition, research with school-age children indicates that children with reading disabilities produce narratives that are less well formulated.\textsuperscript{77,78}

Emergent Writing
Children’s emergent writing includes a wide range of writing activities, from scribbles intended to convey meaning to phonetic spelling. Qualitative research has illuminated a developmental pattern in children’s emergent writing forms.\textsuperscript{24,69,79,80} The earliest writing forms consist of a few pictures
or scribbles that convey a complete thought. These writings are only understood by the given child. Subsequently, children’s print consists of a limited repertoire of letters, numbers, and letter-like characters. A simple reordering of these characters may represent different words. Accordingly, children’s understanding of the boundaries between words is reflected in their writing, even though only some of the words of the thought are depicted. Also, children’s written words may take on characteristics of their referents. For example, the word for elephant may be bigger than the word for dog. Such writings maintain their meaning to the given child for only a short time, and they may be “read” as something entirely different at a latter time. As children transition into invented spelling, they start to print letters to represent sounds in words. Initially, only certain sounds will be printed, like the first and last sound of a word (e.g., BK for book). Eventually, the words will be coded more completely, but they are still coded phonologically rather than orthographically (e.g., FIT for fight). There is research support for an age-related pattern in emergent writing forms, but children move forward and backward among the stages depending on the writing task. Although early forms of emergent writing have not been empirically linked to literacy acquisition, there is evidence that invented spelling may be a good vehicle for bringing about phonological sensitivity and knowledge of letter-sound correspondences, both of which are directly related to decoding.

Print Motivation

Emergent literacy advocates have suggested that children’s interest in literacy activities plays an important role in reading acquisition, especially once children can affect their own literacy environment. For example, a prereader who is interested in literacy may seek out more learning opportunities than a prereader who is less interested in literacy, such as more frequent shared-reading or asking questions about letter names and letter sounds.

There are few quantitative studies that have examined children’s print motivation. However, the little research that has been done lends some support to a role for children’s interest in literacy. One study found that early readers play with, enjoy, and value reading readiness toys, such as books and alphabet cards, more than young non-readers. Another study found that 2-year-olds’ level of engagement during shared-reading predicted their knowledge of print concepts at age 4½ years.

Major gaps in this research area include a lack of longitudinal methods as well as a lack of consensus regarding how to operationalize child’s interest in literacy. Measurement techniques have ranged from observational coding of engagement during shared reading, children’s acceptance and promotion of longer shared-reading sessions, parent report of child toy preferences, parent report of how much a child likes shared reading, and diary methods noting children’s bids for shared reading and bids for continued shared reading. Our preliminary work with 65 two-year-olds has found a moderate amount of correspondence between the various methods of measuring children’s print motivation.

Another major gap in this research area is that it is unknown how children develop an interest in literacy-related activities. Our preliminary research found that the print motivation of two-year-olds was most closely related to the age that children were first read to by their parents ($r = -.64$). These results suggest that children with more experience with shared reading display a greater interest in literacy-related activities. Other aspects of the home literacy environment (e.g., number of books in the home, frequency of library visits, parents reading habits) and demographic variables were less related to children’s print motivation. Additional research is needed (1) to refine the construct and measurement of children’s interest in literacy, (2) to describe what variables lead to greater or lesser amounts of print motivation, and (3) to substantiate a causal role of print motivation in learning to read.

PRESCHOOL ACTIVITIES THAT PROMOTE EMERGENT LITERACY

Preschool settings that promote emergent literacy are situated in caring communities of literate adults. The quality of attachments between teachers and children and Baumrind’s authoritative rather than authoritarian orientation of teachers are important affective variables that underlie children’s motivation to read. Also, when teachers value what children have to say and hold high expectations for their literacy development, the teachers are more likely to listen to children and to expand on the topic at hand. The literacy level of the teachers themselves will be relevant to their
vocabulary usage and to their ability to engage children in reflections about language or about the social and physical world. These extensions of discourse into the decontextualized register of academic language are what predict literacy success into middle school, controlling for home variables. These relations between preschool oral language and middle-school reading comprehension are clearly mediated by decoding instruction in the primary grades. But the point is that language intervention that builds vocabulary and decontextualized language structures needs to occur before decoding instruction rather than later.

**Oral Language and Vocabulary Activities**

Opportunities to develop oral language exist throughout the preschool day. Mealtime and free play provide occasions for teachers to listen to individual children and to extend the conversation with information about past or present events, to ask challenging questions, and to introduce novel words on a topic that relates to the children personally. As described earlier, Dickinson found that preschool teachers’ rare word use impacted children’s language and literacy outcomes in kindergarten. However, the occurrence of such intentional vocabulary instruction was itself relatively rare among preschool teachers. Many teachers were never observed introducing new vocabulary, but of those that did, as much as 9% of mealtime and 13% of free play were devoted to introducing new vocabulary. The potential of building preschoolers’ vocabulary through the introduction of novel words and their integration into daily activities clearly merits attention.

The most common way to learn decontextualized language and to build vocabulary is through shared reading. A positive relationship between shared reading and early literacy and language has been noted in research, but the causal mechanism is unclear. Two causal mechanisms are offered by researchers. The first mechanism—a sociocognitive one—is by far the most popular explanation and has to do with the adult’s ability to extend the conversation beyond the explicit message of the story. The second mechanism is one of phonological mediation, that is, that listening to the literate language of books draws attention to the segmental nature of language. We will consider the second mechanism first.

Many researchers have concluded that shared book reading does not promote phonological sensitivity. After all, why should it if the focus is on meaning and not on sublexical phonological units? But an interesting possibility is that listening to stories in a diglossic situation may draw attention to the segmental features of the literate language, thereby promoting acquisition of a second register. Such was the case in a study conducted by Feitelson et al with 307 Arabic kindergarteners who spoke a local vernacular and came from low-literacy households. In first grade, these children would begin reading instruction in Arabic. To improve reading success rates, the researchers asked teachers in the experimental group to read aloud to kindergarteners for 15 to 20 minutes every day for 5 months. Teachers were trained to introduce no more than three key words before reading and to use the vernacular to explain any standard Arabic terms they thought the children might find difficult while reading. Teachers in the control group followed a state curriculum focused on expressive language skills. In the posttest, children in the experimental classes outperformed controls in picture-storytelling with respect to type/token ratio, proportion of clauses, expression of causal connections, and use of story endings. Interestingly, the speech of children in the experimental group demonstrated phonological and grammatical features of literary Arabic. This is similar to the effects Strickland found for a program for kindergarteners who spoke African-American vernacular English.

The second mechanism proposed to explain the positive relation between shared reading and early literacy and language is extended discourse beyond the story message. In a study of 25 Head Start classrooms, Dickinson and Smith refer to this discourse as child-involved analytical discussions. These are discussions of storybooks that incorporate (1) repetitions of low-frequency vocabulary words, (2) clarification of word meanings through definitions, picture clues, sentence context, and story meanings, and (3) deep processing of word meanings. Specifically, Dickinson and Smith found that “the proportion of prompted and responsive analysis, prediction, and vocabulary utterances of both teachers and children during reading” (p. 115) predicted vocabulary scores (adjusted \( R^2 = .51 \)) and to a lesser extent, story understanding (adjusted \( R^2 = .25 \)) at the end of kindergarten. Furthermore, the study of book reading made a difference. Teachers who minimally interrupted the storybook reading and saved extended discus-
visions for before or after reading had children with higher vocabulary scores than teachers who asked children simple recall questions or asked them to chime in during predictable refrains. A classic example of such predictable text is Bill Martin Jr.’s *Brown Bear, Brown Bear,* which repeatedly asks “Brown bear, Brown bear, what do you see?” The question is followed by the refrain “I see a little ___ looking at me,” where a pictures of a brown bear, a redbird, a yellow duck, a blue horse, a green frog, a purple cat, a white dog, a black sheep, a goldfish, a mother, and beautiful children help the child to complete the refrain each time. This is a wonderful text to introduce preschoolers to reading, but it is far too limited in its vocabulary to promote oral language development.

As we contemplate the form that shared reading should take in preschool classrooms, the following findings are important:

- Vocabulary learning from listening to stories is predicted by (1) frequency of the word in the text, (2) depiction of the word in illustrations, and (3) the amount of redundancy of the word in surrounding text.
- A single reading of a storybook is not sufficient to enhance children’s expressive vocabulary.
- Multiple readings of storybooks enhanced expressive and receptive vocabulary acquisition, whereas answering questions during storybook reading promoted expressive rather than receptive vocabulary.
- Storybook reading positively impacts vocabulary when (1) concrete objects are used to represent the words, (2) children have multiple opportunities to use the book-related words, and (3) teachers are trained to ask open-ended questions and to involve children in conversations and activities about the stories.
- The technique of “dialogic reading” through which the child learns to become the storyteller can enhance oral language skills of Head Start children compared with typical picture book reading.

But several fundamental, unresolved questions remain in order for shared book reading to be incorporated into a preschool emergent literacy curriculum: What words and how many words should be targeted in shared reading? What is the source of the words to be targeted? This latter question may seem odd because in all of the studies reviewed teachers have identified words in the story that preschoolers are not likely to know.

However, if our goal is to increase the size of preschoolers’ vocabulary, then we need to know the sequence of acquisition for oral vocabulary and where in the sequence individual children fall so that we can target the right words. One possibility is to use the Dale and O’Rourke’s *Living Word Vocabulary* (LWV), which is composed of 44,000 word meanings and the grade at which 67% to 80% of students in grades 4, 6, 8, 10, 12, college, and adulthood knew the words. Recently, Biemiller and Slonim tested elementary school children from normative and advantaged populations and have found support for the sequence of words in the LWV and for a level 2 known by 67% to 80% of primary grade children. These level 2 words could provide a rough vocabulary sequence for a prekindergarten curriculum.

**Phonological and Alphabetic Activities**

Several curricula exist for use in developing phonological sensitivity: *Phonemic Awareness in Young Children,* *Sound Foundations,* and a computer program called *DaisyQuest.* All three programs significantly improve four- and five-year-olds’ phonological sensitivity. For four-year-olds, curricular activities typically progress from listening games (eg, listening for certain animal sounds on a taperecording of animal sounds), to clapping words in spoken sentences (eg, by using Lego blocks to build the sentence), to blending words into compounds (eg, sun → shine = sunshine), to clapping and blending syllables (eg, using the children’s names) to alliteration and rhyme. Reciting nursery rhymes is an appropriate activity for preschoolers of all ages. Generating original rhymes is an excellent activity for four-year-olds. On the other hand, rhyme detection quickly becomes memory-intensive when there are more than two spoken words to compare. Schatschneider et al found that the rhyme detection task of pointing out the odd word in a series of three words (eg, hat, sat, dog) had little informational value at any point in the ability distribution of phonological sensitivity for children in grades K-2. Alliteration activities typically involve isolation and comparison of initial sounds. Teachers might ask children to signal thumbs up if they hear a word that begins with a particular sound, or they might show two objects and ask if their names start with the same sound. At this point, children are becoming sensitive to initial phonemes.

Simultaneous to the introduction of auditory
activities involving syllables, alliteration, and rhyming are activities that build recognition of alphabetic letters. A curriculum such as the Land of the Letter People\(^{107}\) uses blown up letters with memorable names (e.g., Mr. M Munching Mouth) to teach letter names and sounds in an engaging manner. As Byrne and Fielding-Barnsley\(^{54}\) point out, once children can identify that the /m/ in “mat” and the /m/ in “moon” are the same, and can link /m/ with the letter m, then the child is ready to read and write. Preschoolers with good fine motor skills may move into this alphabetic phase on their own through the invented spellings of the words they write.\(^{108}\) Others may move into this phase in the guided practice of the sandpaper letters of the Montessori approach or the letter tiles of the “say it and move it” approaches.\(^{52,103}\)

In summary, emergent literacy curricula should include activities fostering sensitivity to large phonological units (words, syllables, and onset-rimes) that include phoneme identity. Simultaneously, activities that build recognition of letter shapes and names can be introduced. However, activities that focus on letter-sound correspondence rules, sound-blending strategies, and flexing techniques are part of the phonics instruction more typically begun in kindergarten and first grade. These should be considered extension activities for the individual preschoolers eager to move into formal reading. It is also important to point out that it is not phonological sensitivity per se that stimulates alphabetic understanding. Rather, what seems to matter are activities where phonemes are segmented and blended in speech, then connected explicitly and systematically to graphemes in print through phonics instruction.\(^{109,111}\) What we aim to accomplish in preschool, then, is apprehension of speech segments leading up to and including initial phonemes—word, syllable, and onset-rime—so that understanding of letter-sound mappings in kindergarten and first grade develops successfully for all children. Such attention to the segmental nature of language in preschool may be particularly important in diglossic situations, as discussed above.\(^{53,94}\)

CONCLUSION

With recent federal legislation in the United States encouraging prekindergarten literacy, it is important to consider curricular goals within a developmental framework rather than present four-year-olds with watered down primary grade activities. We emphasize the importance of language development as the foundation of an emergent literacy curriculum. Because language also underlies social and emotional development, this emphasis is consistent with current approaches to the care of young children. Likewise, a continued emphasis on motor development is critical to the eye-hand coordination necessary for handwriting skill, which in turn, is a tool basic to emergent writing. What we are suggesting is a curriculum that also builds decontextualized, or literate, language skill. This skill develops through phonological and alphabetic activities that heighten sensitivity to the segmental nature of speech at lexical and sublexical levels and their representations in written language. This skill also develops through explicit vocabulary instruction that transforms shared reading into “child-involved analytic discussions” that extend the meanings of words fundamental to increasing the size of preschoolers’ vocabulary. By extending the use of the targeted, novel words beyond multiple shared readings of a book into center time, mealtime, and free play, the teacher can provide the additional exposures needed for root words and their derivations to be learned. Thus, an emergent literacy curriculum becomes an opportunity for lexical restructuring, both at the phonological level so as to promote the development of word-level decoding, but also at the semantic level so as to increase vocabulary size. Therefore, we advocate that phonological sensitivity and letter-knowledge be taught in developmentally appropriate ways within the context of a language-rich preschool environment that specifically targets vocabulary enrichment.

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