

APPENDIX B

Reflections on Research: Alphabetics and Word/Print Recognition

The Alphabetics and Word/Print Recognition substrand specifies that children at around 60 months of age are able to recognize their own name and other common words in print (3.1), to match more than half of uppercase and lowercase letter names to their printed forms (3.2), and to begin to recognize that letters have sounds (3.3). Three examples of child behavior for foundation (3.3) are provided in the foundation document:

- The child makes the correct sound for the first letter in his name.
- The child says the correct letter sound while pointing to the letter in a book.
- The child indicates the correct picture when presented with four pictures—dog barking, car horn honking, letter k, and letter n—and asked, “Which of these make these sounds: bow-wow, honk, “k” (letter sound), “n” (letter sound)?”

The foundations do not describe what children are expected to *understand* when they “begin to recognize letter sounds.” That is, they do not distinguish between children who know some letter-sound associations (i.e., can say the sounds “that letters have”), but lack any realization that these sounds are heard in spoken words, and children who know some letter-sound associations and also realize that these sounds are heard in spoken words. Given the absence of information, a reader could reasonably make any number of assumptions.

Assumption 1: Preschoolers are expected to be able to bring the three areas of skill together, on their own, to develop the understanding.

Assumption 2: In the preschool years, developing phonological awareness, letter name knowledge, and knowledge of some specific associations between letters and isolated sounds (i.e., “The letter B makes the /b/ sound.”), in isolation, is enough.

Assumption 3: Children need to be helped to understand the relationships between letters in printed words and sounds in spoken words, knowing that only preliminary levels of this understanding will be developed in preschool. Fuller understanding will come during kindergarten not during preschool.

Children Can Put the Pieces Together, If They Have a Good Grasp of the Pieces (Assumption 1)

Some kindergarten and preschool children might indeed put these pieces together by themselves. Other kindergarten and preschool children, however, and perhaps most, do not seem to arrive at this insight by themselves. A surer approach to supporting children in understanding the relationship between letters in printed words and sounds in spoken

words requires the intentional use of strategies that link letters directly to their sounds in the context of spoken words.

Research demonstrating the benefit of explicitly linking letters to sounds in words to children's later reading or spelling of words has been conducted at the kindergarten level, not the preschool level.^{1 2 3 4} It would be safe to assume that preschoolers have less power of insight—less ability to put things together on their own—than kindergarten children have. It is also probably safe to assume that kindergarten children typically have higher levels of skill than preschoolers in each of the separate knowledge and skill areas—letter name knowledge, phonological awareness, and letter-sound associations. In fact, in most but not all of the relevant intervention studies,⁵ letters were linked to sounds in words only *after* children had been engaged in games and other exercises through which they developed phonological awareness, letter names, and letter-sound associations at a fairly high level. It is doubtful that children would typically reach similarly high levels in each of these areas during the preschool years.

The question, then, is whether preschool teachers should do anything at all to help children begin to develop very preliminary understandings that letters in printed words are related to—represent—sounds in spoken words—or leave this learning entirely for the kindergarten year or to insight, should a preschool child use it. Another question is whether all of the individual knowledge and skill areas—alphabet letter knowledge, phonological awareness, and some letter-sound associations—must be at a high level of development before it is appropriate to provide heavily scaffolded support to preschoolers in linking letters to sounds in spoken words.

The preschool curriculum framework suggests a few strategies for linking letters to sounds in spoken words, at the preschool level. The assumption is that teachers might do this most appropriately and productively in situations involving individual children who have a high level of individual literacy skill development in the three areas described above. A few other strategies, however, involve appropriately scaffolded situations that include other children in the class who may not be at the same high level of literacy skill development. The purpose of this discussion is to provide a rationale for including these strategies with appropriate support.

Appropriate Expectations and Strategies for Preschoolers (Assumption 2)

Let's consider some contexts in a preschool setting where a teacher can make a decision about whether to link letters in printed words to sounds in spoken words. For example, let's suppose that a child mentions to the teacher that both his name and a classmate's begin with the same letter. The teacher might say, "Yes, you are right about that," and stop at that. Or, the teacher might say: "Yes, your name and Brian's both start with the letter B, because **B**rian and **B**randon both start with the /b/ sound." Similarly, when sharing an alphabet book with children, a preschool teacher might only name the alphabet letter that is featured on a page, and identify and discuss with children the items pictured on the page (e.g., broccoli, banana, beet on the B page). Or, after doing these things, a teacher might say, "All of these things—**b**roccoli, **b**anana, **b**eet—begin with the /b/ sound. When we write the /b/ sound, we use the letter B. That's why all of these foods on are the B page of our book." A teacher also has some choices when a

child making a birthday card at the writing center says, “How do you make Mommy? I need it for my card.” A teacher might answer simply by dictating the letters needed or by writing the word out for the child to copy. Or, the teacher might go beyond simply dictating or writing out the letters to explain why some of the letters are selected. For example, to start, the teacher might say, “Mommy starts with the /m/ sound—**M**ommy—and we use the letter M to write that sound.” The teacher might dictate the rest of the letters without linking any to a sound in the word, Mommy, or might dictate all but the final Y, and then link the last sound in the word to this final letter.

In all of these instances, the teacher adds the information about the relationship between letters in printed words and sounds in spoken words, as an explanation. The first explanation is about *why* different words begin with the same letter (e.g., Brian and Brandon). The second explanation is first about *how* the pictured items on a page of an alphabet book all go together—have the same first sound --and then *why* they are grouped with a specific alphabet letter—it’s the one used to write this sound. The third instance is about *why* the teacher is dictating *this* specific letter and not some other letter as the first and last letters needed to write Mommy.

Preschool Teachers Offer Explanations; Preschoolers Begin to Understand (Assumption 3)

In each instance described for linking letters to sounds in words, the more extensive teacher behavior might well be provided as a consequence of a teacher’s general habit of explaining the world to preschool children. Situations calling out for an explanation arise frequently in the preschool setting. For example, a child asks why lids must be put on the paint cups at the end of each day. The teacher explains: “We put lids on our paint cups because the paints would dry out if we left the cups open. The water in the paint would evaporate into the air. Would you like to put a little paint in a small cup and leave it uncovered overnight, to see what happens?” Or, a child on the playground notices his shadow and announces it. The teacher comments and explains: “Yes, I see your shadow, and I see that the sun is up above and behind you. I’m going to stand over here and have you turn around to face me. Do you see your shadow in front of you now? Where is it?” “Yes, it’s behind you now. Your body is blocking the sun’s light from reaching the ground, and that’s what makes a shadow.” Or, a child playing with a magnet and some paperclips inside a closed, plastic jar, says, “Look! Look! It works from out here.” The teacher comments and explains: “Yes, I see that your magnet is attracting the paperclips that you put inside the plastic bottle, even though it’s not touching them. Magnets have a force that goes through things. Do you feel the force pulling on the paperclips?”

Of course, a wise teacher knows that a preschool child would not understand fully the explanations provided in a single instance, or even after two or three or even ten. The wise teacher also knows that a preschool child would likely not provide a very good explanation, if any at all, to someone else, if asked for one. Even after multiple experiences in the physical contexts described, all of which allow the child “to see” what happens, we would not expect a child to have full understanding. An important question, though, is whether the child might develop *any* understanding from such explanations and whether these preliminary, incomplete, and vague notions might serve as important

first steps in the long journey toward their full development. Another question, apart from any particular understanding that a child might develop from adult explanations, even at preliminary levels, is whether there might be a general benefit to children from adult explanations. For example, might this kind of adult behavior convey a general idea to the child that things are as the child finds them, *for a reason*? Might knowing this affect the child's later learning of specifics?

Definitive answers to these questions are not easy to find, although a wide variety of research suggests that providing explanations to children is beneficial, assuming of course that they are calibrated to a child's level of understanding. For example, in one study⁶ of mothers' language to 20- and 30-month-old children, the researchers suggest that some of a mother's comments, for example, about animals, might serve to guide children to global understandings, such as the fact that some things that don't look very much alike on the surface often have something in common. In quite a different study, this time with 5-year-olds, researchers found that higher levels of support (i.e., semantic and physical explanations) provided by parents for the rare words they used were associated with higher levels of vocabulary development.⁷ Other researchers have found that parental use of science process talk (i.e., "discussions of the how's and whys of what was happening"), in conjunction with their child's magnet play, was more strongly related to kindergarten literacy measures than were other kinds of parental talk that did not include explanations (i.e., process level talk).⁸

Additional examples could be cited, but these are sufficient to make the basic point: It appears that explanations provided about a range of things in the young child's physical and social worlds are reasonably beneficial to young children's learning, not harmful. It is also fairly obvious that adults often do not (and should not) expect immediate and specific results from these explanations. It's simply a way that some adults interact with children, a way that, if responsive to the child's interests and level of understanding, appears to be beneficial.

Rationale for Including Strategies in the Preschool Curriculum Framework that Link Letters in Printed Words to Sounds in Spoken Words

Although young children may only partially understand teachers' explanations, it seemed unwise to avoid addressing in the *California Preschool Curriculum Framework, Volume 1* how letters in printed words are related to sounds in spoken words. Rather, strategies that offer explanations of the links between printed words and spoken words were included to show how preschool teachers can foster a beginning understanding without expecting immediate and specific results.

The majority of the strategies in the Alphabets and Word/Print Recognition substrand focus on supporting children in learning to recognize and name alphabet, letters and to recognize their names and other common words. Many different strategies, spanning a wide range of contexts, are provided for these two foundations (3.1 and 3.2). In addition to these strategies, however, a relatively few strategies are provided in the preschool curriculum framework to support foundation 3.3, in ways that might lead a child to begin to "recognize that letters have sounds" and also to develop a very preliminary understanding of what we mean when we say that "letters have sounds."

The strategies for supporting foundation 3.3 are embedded in broad contexts, such as in the reading of an alphabet book (p. 44), in helping children transition from one activity to the next (p. 42), or in situations in which children are writing (p. 59). In many instances, the description and or the discussion of the strategy makes clear that the teacher's decision to explain the relationship between letters and sounds in words is prompted by a child's behavior and, further, that the explanation itself is adapted to the child's level of understanding.

There is always a risk, of course, that a teacher might misunderstand the intent of including these strategies, and assume, incorrectly, that the expectation is for all children to leave preschool with some understanding of why we tell children that "letters have sounds." The intent, however, was not to suggest that any understanding is expected to accompany children's displays of behavior indicating that they have "begun to recognize that letters have sounds." It seems perfectly reasonable to assume that children *will* develop this understanding in kindergarten, or that they *should*. On the other hand, it also seems reasonable to assume that some children between the ages of 48 and 60 months can be supported in gaining some very preliminary understanding of how letters are related to sounds in spoken words. It also seems reasonable to suggest to teachers, who are inclined to explain the world to preschool children, that they can extend this inclination to the world of print, if they use appropriate strategies. Doing so might be of benefit to children's learning, and there isn't a good reason to believe that the strategies suggested will do any harm.

Endnotes

¹ E. W. Ball, and B. A. Blachman, 1991, "Does Phoneme Awareness Training in Kindergarten Make a Difference in Early Word Recognition and Developmental Spelling?" *Reading Research Quarterly*, Vol. 26, No. 1, 49-66.

² L. Bradley, and P. Bryant, 1985, *Rhyme and Reason in Reading and Spelling*. Ann Arbor, MI: University of Michigan Press.

³ L. C. Ehri, and L. S. Wilce, 1987, "Does Learning to Spell Help Beginners to Learn Words?" *Reading Research Quarterly*, Vol. 22, No. 1, 47-65.

⁴ S. A. Craig, 2006, "The Effects of an Adapted Interactive Writing Intervention on Kindergarten Children's Phonological Awareness, Spelling, and Early Reading Development: A Contextualized Approach to Instruction," *Journal of Educational Psychology*, Vol. 98, No. 4, 714-731.

⁵ S. A. Craig, 2006, "The Effects of an Adapted Interactive Writing Intervention on Kindergarten Children's Phonological Awareness, Spelling, and Early Reading Development: A Contextualized Approach to Instruction," *Journal of Educational Psychology*, Vol. 98, No. 4, 714-731.

⁶ S. A. Gelman and others, 1998, "Beyond Labeling: The Role of Maternal Input in the Acquisition of Richly Structured Categories," *Monographs of the Society for Research in Child Development*, Serial No. 253, Vol. 63, No. 1, 1998.

⁷ Z. O. Weizman, and C. E. Snow, 2001, "Lexical Input as Related to Children's Vocabulary Acquisition: Effects of Sophisticated Exposure and Support for Meaning," *Developmental Psychology*, Vol. 37, No. 2, 265-279.

⁸ P. O. Tabors, K. A. Roach, and S. Catherine, 2001, "Home Language and Literacy Environment," in *Building Literacy with Language*. Edited by D. K. Dickinson and P. O. Tabors. Baltimore: Brookes, pp. 111-138.