

Clinical Exchange

Print Referencing: An Emergent Literacy Enhancement Strategy and its Clinical Applications

Laura M. Justice

University of Virginia, Charlottesville

Helen K. Ezell

University of Pittsburgh, PA

Speech-language pathologists (SLPs) have been encouraged to broaden their intervention approaches when working with children and adolescents to include an increased emphasis on addressing children's difficulties with emergent, early, and conventional literacy skills (American Speech-Language-Hearing Association [ASHA], 2001). The terms *emergent*, *early*, and *conventional literacy* approximate the developmental

ABSTRACT: Print referencing is an evidence-based strategy that may be used by speech-language pathologists and other early childhood specialists to enhance the emergent literacy skills of young children. Print referencing is a strategy implemented within the context of adult-child shared storybook reading interactions, and specifically refers to the use of verbal and nonverbal cues to encourage children's attention to and interactions with print. Print referencing increases the metalinguistic focus of storybook reading interactions. When print referencing is delivered within the children's zone of proximal development, clinicians can foster children's movement from dependent to independent mastery of key emergent literacy concepts. This clinical exchange provides suggestions for using print referencing as a clinical tool, including a theoretical overview of this approach and descriptions of clinical targets.

KEY WORDS: emergent literacy, intervention, preschool, storybook reading, print referencing

continuum of literacy achievement transcending preschool through later elementary years (Snow, Burns, & Griffin, 1998).

Emergent literacy describes children's earliest attainments in literacy, and the emergent literacy period encompasses birth to about the end of preschool. In the emergent literacy period, children are rapidly developing important precursory skills in written language awareness, including print concepts, concept of word, and alphabet knowledge. During this period, children begin to distinguish among an array of written language forms and functions (print concepts), show a developing sensitivity to words as units of both print and sound (concept of word), and have emerging knowledge of the distinctive features and names of individual alphabet letters (alphabet knowledge). Written language awareness and phonological awareness, the latter referring to children's sensitivity to the sound segments comprising running speech, comprise two interrelated domains of the emergent literacy foundation (Justice & Ezell, 2001). Children's successful transition from emergent to early literacy is highly dependent on the achievement of sophisticated levels of both written language and phonological awareness (see Badian, 2000).

This article describes one strategy—that of *print referencing*—that may be used by SLPs to help children acquire written language awareness during the emergent literacy years. This strategy can be used with children who are at risk for early literacy learning delays for a variety of reasons, such as children who have developmental

disabilities impacting language and literacy achievement and children who come from homes where book and print experiences are infrequent. This strategy is also likely to be beneficial for children with language impairment (LI), who are at increased risk for experiencing difficulties during the emergent period of literacy development (Bird, Bishop, & Freeman, 1995; Bishop & Adams, 1990; Boudreau & Hedberg, 1999; Catts, 1993; Catts, Fey, Zhang, & Tomblin, 2001; Magnusson & Naucler, 1993). Given that children with LI exhibit particular problems in acquiring receptive and/or expressive language skills, SLPs typically focus on remediating these problems first rather than on building an emergent literacy foundation. Consequently, the focus of intervention may involve oral language alone, with little regard for its written form. If storybook reading is incorporated, emphasis is typically placed on using this context to promote language comprehension and production. However, with print referencing, emergent literacy skills may be developed simultaneously using the same materials with a minimum of time and effort.

The rationale for this clinical exchange is to translate and synthesize findings reported in several recent data-based manuscripts concerning the value of print referencing (Ezell & Justice, 2000; Ezell, Justice, & Parsons, 2000; Justice & Ezell, 2000, 2002; Justice, Mattingly, Ezell, & Bakeman, 2002). In doing so, the present paper is designed specifically to bridge research and practice by presenting a clinically oriented description of print referencing (including a theoretical rationale) and providing specific recommendations regarding clinical implementation.

PRINT REFERENCING: DEFINITION, THEORETICAL RATIONALE, AND TARGETS

Definition and Purpose

Print referencing refers to an adult's use of nonverbal and verbal cues to direct a child's attention to the forms, features, and functions of written language. These cues are embedded into the shared storybook reading interactions of adults (parents, clinicians, or teachers) and young children. The term *cue* describes an adult behavior that implicitly or explicitly directs the child's focus toward the cue referent, and in the case of print referencing, the referent is some feature of written language. Print-referencing cues can be nonverbal, such as pointing to print or tracking the print when reading, or verbal, such as asking questions about print, making comments about print, or posing requests about print. The five key types of print-referencing cues are presented in Table 1. An example of a parent's use of these various cues within the context of an adult-child shared storybook reading interaction is presented in Table 2.

The purpose of using these cues during shared storybook reading routines is to increase the metalinguistic focus of this activity. Literacy is inherently the metalinguistic correlate of oral language, and as early as 1 year of age, some children begin to realize that oral language can be represented by print. The earliest metalinguistic milestone

Table 1. References to print.

<i>Cue</i>	<i>Examples</i>
Nonverbal references	
Pointing to print	Adult points to narrative print or print embedded in illustrations.
Tracking print	Adult tracks the print while reading the narrative text.
Verbal references	
Questions about print	Do you know this letter? What do you think this says?
Comments about print	That's an A. This says "Get out!"
Requests about print	Show me where the O is. Help me read these words.

is that of *print interest*, which serves as the cornerstone of all subsequent literacy achievements (Whitehurst & Lonigan, 2001). With print interest, children come to view written language as an object distinctly worthy of attention (see Figure 1). By increasingly attending to print, children become cognizant of the functionality of print, or *print functions*, as well as *print conventions*, or that print is organized in specific ways. Children thus begin to attend to *print forms*, or to realize that print units can be differentiated and named, and finally, *print part-to-whole relationships*, or the combinatorial properties of specific print units. Although the initial achievements in each area appear to bootstrap on the achievements of the previous area (e.g., awareness of print functions hinges on achieving print interest), the metalinguistic milestones should not be viewed as a stage model. Within the context of each milestone, specific skills are acquired within each written language dimension: print concepts, concept of word, and alphabet knowledge.

Even very young children, as participants in a highly literate society, can benefit from and enjoy the challenges of thinking and talking about print. Obviously, these conversations need to be highly sensitive to where the child is developmentally and to the child's literacy interests. Importantly, children experiencing delays in oral language attainment develop metalinguistic skills more slowly than do children without such delays (e.g., Gillam & Johnston, 1985); as a result, parents or clinicians may view meta-focused conversations as too difficult for the child. However, even children with significant literacy delays or oral language challenges can benefit from early, ongoing, and sensitive exposure to meta-focused interactions. Providing these within the framework of meaningful and contextualized storybook reading interactions provides a concrete anchor for children's metalinguistic explorations and for the timely success of important emergent literacy fundamentals (e.g., Justice & Ezell, 2002).

Theoretical Rationale

The theoretical premise providing both a rationale for clinical implementation and an explanation for print

Table 2. Example of parental use of print-referencing cues during shared storybook reading.

<i>Speaker</i>	<i>Book reading transcript</i>	<i>Print-referencing cue</i>
Mother	The name of this book is <i>Nine Ducks Nine</i> (mother tracks her finger under the title).	Tracking print
Child	That says <i>Nine Ducks Nine</i> (child points to title).	
Mother	You're right! Which word do you think says <i>nine</i> ?	Question about print
Child	That one (points to <i>ducks</i>).	
Mother	That's a good try. But that says <i>ducks</i> (points to <i>ducks</i>). This word says <i>nine</i> (points to <i>nine</i>).	Comment about print, points to print
Child	What's this one say (points to words <i>Sarah Hayes</i>)?	
Mother	That says <i>Sarah Hayes</i> (points to author name). She's the author of this book.	Comment about print, points to print
Mother	Point with me to the two words – <i>Sarah Hayes</i> .	Request about print
Child	Goes like this – one, two (points to each word).	
Mother	That's great, Jonathan. You're right. There's two words – one, two (points to each word).	Comment about print, points to print
Mother	Well, let's see what this book is about. This looks like a great story.	

Note. Mother-child dyad is reading the storybook *Nine Ducks Nine* (Hayes, 1990).

referencing effectiveness is that children's emergent literacy is developed through meta-focused social interactions. During these interactions, children's knowledge, concepts, skills, and interests in print are scaffolded through mediated assistance provided by more capable peers (e.g., parents, clinicians, teachers). This perspective draws heavily on the work of Lev Vygotsky, a Russian psychologist whose theoretical arguments concerning the role of social processes in children's development have received considerable interest in the last two decades. The critical elements of Vygotsky's précis can be found in two volumes, namely *Mind in Society* (1978) and *Thought and Language* (1986), to which interested readers are referred.

Justice and Ezell (1999) recently delineated Vygotsky's critical premise whereby developmental processes follow a two-stage sequence of acquisition, in which processes move from a social/external/interactive plane to a psychological/internal plane: "The first stage represents the introduction and use of a concept between two interactive social partners, whereas the second stage represents the movement of the concept from outward social use to inner psychological ownership by the child" (p. 112). This transition of skills and concepts from the social and external plane to the inner and psychological plane is achieved through adult mediation within the child's zone of proximal development.

The premise concerning the developmental transition of knowledge from interactive to internal achievement, and the importance of adult mediation to children's learning, provides a framework for understanding *how* and *why* print referencing works, and the importance of meta-focused conversations. Namely, children acquire their concepts, skills, knowledge, and interests concerning emergent literacy through their mediated interactions with adults, particularly their parents (see Kaderavek & Sulzby, 1998; Snow & Ninio, 1986; Watkins & Bunce, 1996). Within the

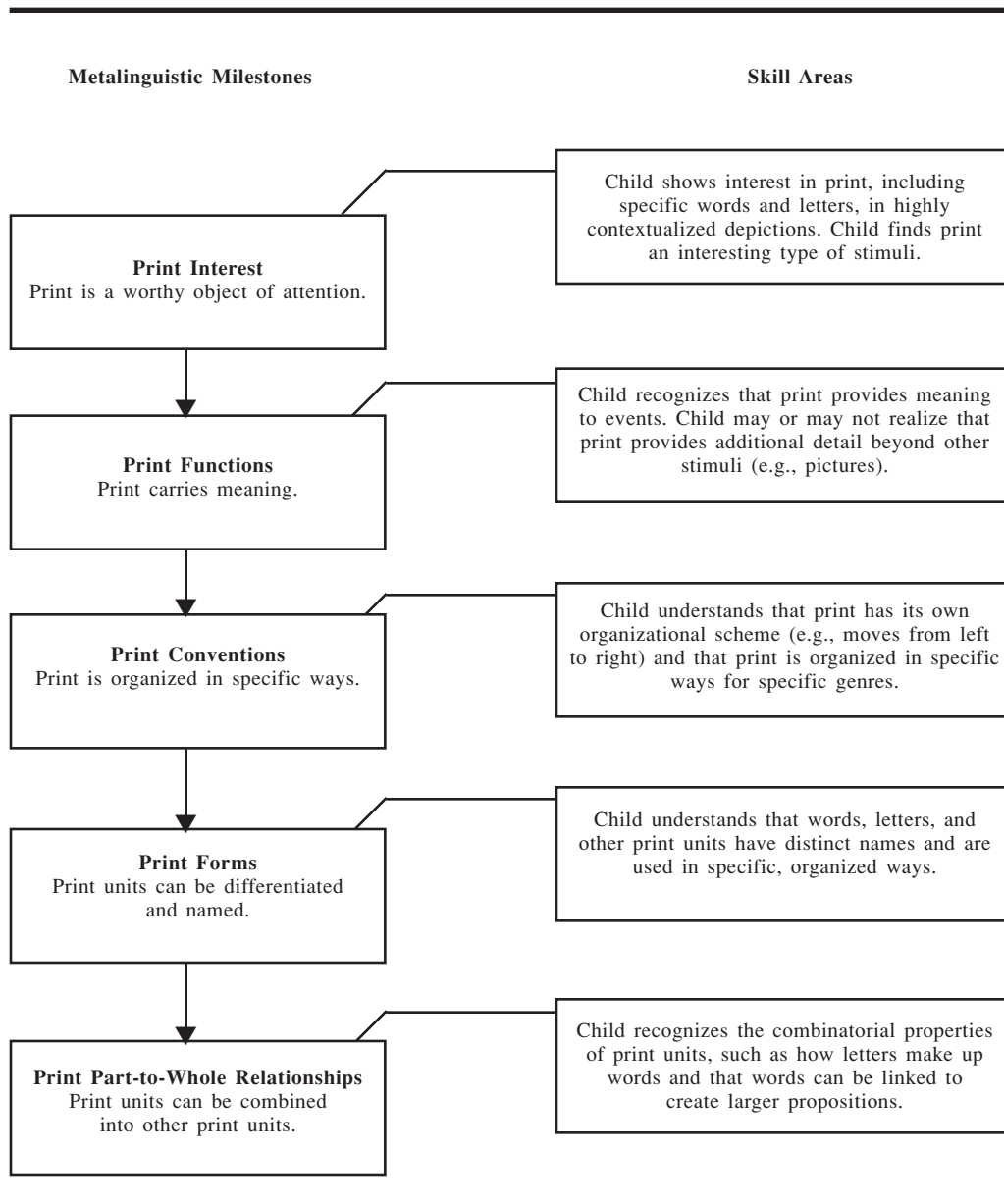
context of these supportive interactions, children are guided toward gradual mastery of important literacy concepts. Internalization and eventual mastery of a particular concept is achieved through the child's ongoing exposure to that concept with the help of an adult facilitator, who provides sensitive assistance on the basis of the child's developmental level and his or her level of independence toward the concept. When the child's understanding of a concept reflects a primitive level, the adult provides maximal assistance; this assistance is gradually withdrawn as the child's knowledge matures to more sophisticated and internalized skill levels.

A particularly important point of Vygotskian theory is that children's development requires exposure to concepts that are slightly beyond their current independent capabilities. For development to proceed, children must be helped to perform tasks dependently (with assistance from another) that they are unable to perform independently. In fostering emergent literacy achievements, adults can use print-referencing cues to focus the child's attention on concepts *yet to be mastered*. Initially, the adult provides a high level of support when the child is in the earliest stages of conceptual attainment; eventually, assistance is withdrawn in sensitive response to the child's gradual achievement of concept mastery (i.e., internalization).

Written Language Awareness Targets

Empirical evidence has shown print referencing to be particularly amenable to facilitating children's development in all three key areas of written language awareness: print concepts, concept of word, and alphabet knowledge (Ezell et al., 2000; Justice & Ezell, 2000, 2002). Within each of these areas, children acquire knowledge of function, conventions, forms, and part-to-whole relationships. These

Figure 1. Hypothetical sequence of written language awareness achievements with print-referencing targets.



elements of emergent literacy are critically important to children's subsequent mastery of the alphabetic principle and eventual achievement of fluent skilled reading (see Scarborough, 1998, for a review). These elements also reflect areas in which children with LI tend to exhibit difficulties relative to their peers (Boudreau & Hedberg, 1999).

In using print referencing to support these attainments, the use of print-salient storybooks is critical. Print-salient books are books that explicitly emphasize print, typically through the use of design features such as large and bolded print, as well as print embedded within illustrations (Smolkin, Conlon, & Yaden, 1988; Smolkin, Yaden, Brown, & Hofius, 1992). Print-salient books, although of a

narrative genre, are similar to alphabet books in that written language is emphasized throughout the book. The Appendix includes a list of print-salient storybooks.

Print concepts. Print concepts refer to children's knowledge of the myriad forms, features, and functions of print (Clay, 1979; Justice & Ezell, 2001). Such concepts include, for instance, the way in which print moves from left to right and top to bottom of a page, the ways in which books are handled and organized, the names of different written language units (e.g., question mark, letter, writing, sentence) and the relationships among these units (e.g., that a question mark can end a sentence), and the role of print in carrying meaning (Goodman, 1986; Lomax & McGee, 1987; Mason, 1980). Children's development of

print concepts is an important aspect of emergent literacy development, and the extent to which children demonstrate print concepts has been associated with later reading skills (Badian, 2000; Lomax & McGee, 1987; Stuart, 1995). Print referencing provides an ideal way to introduce children to early, but critical, concepts associated with print forms, functions, and features, as illustrated in the following interaction between an SLP and a child while reading *Nine Ducks Nine* (Hayes, 1990):

- SLP: And this little duck says *I'm hungry*.
Tisha: *I'm hungry*.
SLP: Where do you think it says that?
Tisha: There.
SLP: Yeah, right there. *I'm hungry*. That tells us what the duck is saying. Those words tell us he's hungry. Let's look at this next page and see if the fox gets them.
SLP: Do you remember where I start reading on this page? Where would you read if you were telling me the story?
Tisha: There (points to the page on the child's right).
SLP: Well, I could start to read there, but then I would read backwards. I am going to read here (points to top of left page), and then I'll go this way (sweeps to the right with his finger). It says *Seven ducks seven took off together...* (runs his finger along the print while reading).
Tisha: Seven ducks seven.
SLP: Yes, Seven ducks seven. That's a lot of ducks! That's more than we have. Can you show me where it says *seven ducks*?
Tisha: (points to top of left page).
SLP: Excellent, Tisha. You're right. *Seven ducks seven*. It says it right there. You are really paying attention!

Here, the SLP is observed to use a number of print referencing techniques to introduce Tisha to concepts, such as the function of print (i.e., that print carries meaning, *That tells us what the duck is saying*), the movement of print across the page (*and then I'll go this way*), and the way in which print is arranged in a book (*I am going to read here*). The SLP uses a number of nonverbal strategies (pointing and tracking the print) that do not explicitly recruit the child's verbal participation; nonetheless, he implicitly encourages Tisha's attention to print by embedding comments about print (e.g., *I could start to read there, but then I would read backwards*) to facilitate her early achievements in literacy. It is particularly important to recognize that within the context of this supportive, highly contextualized, and meaningful activity that encompasses rich demonstration and verbal guidance, Tisha is able to demonstrate knowledge of important print concepts that are well beyond her independent capabilities.

Concept of word. Another important aspect of emergent literacy is coming to understand that words are discrete units of both oral and written language. For typically developing children, this discovery usually occurs around 4 to 5 years of age, and provides a pivotal achievement in understanding the manner in which print is organized and how speech to print is fundamentally linked at the level of the word (Roberts, 1992). This discovery eventually helps children make broader connections concerning speech and

print correspondences that underlie the alphabetic principle. A clinician's use of print referencing can support children's early discoveries about words as units of oral and written language, as depicted in this transcript of an SLP reading *The Gigantic Turnip* (Tolstoy & Sharkey, 1998) with a 4-year-old child:

- Logan: Read those (points to illustration of three cats, each of which is holding a sign).
SLP: That says *three*. That says *black*. That says *cats*. *Three black cats*. That's funny how the cats are holding the signs.
Logan: Why are they holding signs?
SLP: Well, I guess they want to say that they are three black cats. Each cat is holding a word. See, that cat's sign has just one word, *three*. That's one word, *black*. And that's one word, *cats*. And we put them all together and get *three black cats*.
Logan: *Three*. Is that just one word?
SLP: *Three* is just one word. Like *black*. That's just one word. And *cats*. That's just one word. Look: one word, one word, one word (points to the word on each sign).
Logan: One word, one word, one word (points to the word on each sign).
SLP: That's perfect. Good job. One word, one word, one word. *Three black cats*.

This SLP uses the contextualized print on this page of the storybook as a teaching opportunity to help Logan begin to understand words as distinct units of written language. He uses rich nonverbal cues by pointing repeatedly to the three different words, and combines this with liberal use of questions, requests, and comments about print to support Logan's emergent understanding. With the SLP's guidance and support, Logan is able to exhibit knowledge of concepts that he likely does not yet have independent of this assistance. With adult support provided via nonverbal and verbal print referencing, Logan's skill exhibition is consistent with a Vygotskian perspective of development whereby skills move from social and dependent performance to psychological and independent performance. Of course, what is critical to this emergent literacy interpretation of Vygotskian theory is that children be given ample opportunity for mediated print-focused experiences. Through these experiences, children will gradually acquire independent use of those emergent literacy skills, ensuring a successful transition to early and conventional levels of attainment.

Alphabet knowledge. Alphabet knowledge refers to children's receptive and expressive knowledge of letter names; preschool children's knowledge of letter names is one of the most robust predictors of later reading achievement (see Badian, 2000). Helping children internalize the features and names of individual letters should be an important goal of emergent literacy intervention (ASHA, 2001). Print referencing can be used to implicitly and explicitly guide children's attention to the distinctive features of letters and the names of individual letters during the shared reading experience. The following transcript, which involves the storybook *Spot Bakes a Cake* (Hill, 1994), demonstrates an SLP's use of many varied print-referencing cues for stimulating skill development within the social context:

SLP: This book is called *Spot Bakes a Cake*. Hey, I see a letter in my name in the title! *S*. *S* is in my name. *S* for Sandy. There it is.

Tommy: That's an *S*.

SLP: You're right. There it is. *S*. I see a letter you might know. That's a *t*. A little *t*. *S* goes like this (traces *S*) and *t* goes like this (traces *t*). Have you seen the letter *t* before?

Tommy: That's a *t*.

SLP: Yes, it is a *t*. Let's put our finger on the *t*. See how it goes down like this and then there is this little line that goes across? Good job. You traced the *t*. *T* is in your name. Tommy.

Tommy: *T*'s in my name. Tommy.

SLP: Yes, *T* for Tommy. Good job, Tommy. This is *Spot Bakes a Cake*. Let's see what happens to Spot. Do you remember from last time?

As can be seen in this shared reading transcript, the SLP is using storybook reading as an opportunity to introduce Tommy to critical concepts associated with alphabet knowledge. She uses a variety of print-referencing cues to promote Tommy's attention to distinctive features of individual letters (e.g., *See how it goes down like this*), to the differences between letters (*S goes like this and t goes like this*), to the names of letters (*yes, it is a t*), and to the connection between letters and words (*S for Sandy*). For children in the earliest stages of alphabet knowledge, focusing attention on letters associated with one's own name is an important way to stimulate skill development (Treiman & Broderick, 1998). The SLP encourages a focus on the letters comprising Tommy's name as a way to foster early skills. Overall, this SLP uses a rich array of supportive strategies to guide Tommy's early exposure to these concepts by pointing to print, questioning about print, making requests about print, and using frequent comments to encourage Tommy's attention to salient forms and functions of alphabet letters.

IMPLEMENTATION SUGGESTIONS AND RECOMMENDATIONS

Implementation Suggestions

As with all language and literacy facilitation techniques, print referencing must be tailored to be sensitive to and responsive to a child's skills and interests. To this end, adult use of print-referencing cues should be instructional (within a child's zone of proximal development) and should contribute to making adult-child shared reading interactions a positive experience. As long as these criteria are met, print-referencing cues may be incorporated into nearly every clinician-child reading interaction. When thinking about how best to tailor print referencing in a way to be sensitive to children's skills and interests, the following are important considerations: emergent literacy skill, oral language ability, and cultural background.

Emergent literacy skill. For print referencing to be effective, it must target skills that children are able to perform with assistance but that have not yet matured to

independence. This is the zone of proximal development. The developmental achievements presented in Figure 1 may be helpful in this regard. Whether targeting print concepts, concept of word, or alphabet knowledge, print referencing should first be used to promote children's print interest. When this is firmly established, meta-focused conversations can be used to focus on print, word, and alphabetic attainments in function, convention, form, and part-to-whole relationships.

Oral language ability. There is a great deal of flexibility when considering children's current language abilities, as intervention must always be adapted to and sensitive of children's individual skill levels. Even children with considerable language difficulties can participate in meta-focused conversations when adult support is provided. The key is using print referencing at a level that is sensitive to where a child is developmentally (see Figure 1). For children with significant language challenges, print referencing can be an important means for promoting print interest and early attainments in print functions, conventions, and forms. Adults can track the print when reading and make comments about print to expose children to key literacy concepts and to increase awareness of print. These print references may help children learn that meta-focused discussions are a natural part of the book reading process. Print referencing should not, however, be used to engage children in print-focused conversations that are well beyond their zone of proximal development, nor is it likely to be useful for children who do not attend to book reading or who have limited interest in print. For these children, a focus on developing social-interactive precursors will be needed (Kaderavek & Rabidoux, In press).

Cultural background. A number of studies have shown parents to be highly sensitive to the skills and interests that their children bring to reading interactions (e.g., Evans, Moretti, Shaw, & Fox, 2003), and that cultural beliefs and practices are associated with variations in parent-child reading patterns (e.g., Anderson-Yockel & Haynes, 1994). For instance, Anderson-Yockel and Haynes found African American mothers to use fewer questions during storybook reading relative to White mothers, and African American children to spontaneously verbalize more frequently than White children. As described in Kaderavek and Justice (2002), the discourse patterns that occur between parents and their children during book sharing routines tend to reflect the socialization processes of the families' cultural background.

Kaderavek and Justice (2002) encouraged clinicians using storybook reading to achieve clinical objectives to determine (a) children's familiarity with books and book sharing routines and (b) the type of adult input most familiar to children during book reading experiences. These recommendations are applicable to the clinical use of print referencing as well. Clinicians want to use books and book reading styles that are familiar to children and that are responsive to their cultural expectations. For instance, for children for whom question-answer routines are atypical routines during book reading, using extensive questions about print may be counterproductive. Rather, pointing to print and making comments about print may be more effective and culturally responsive. Print referencing should

be a positive component of the shared book reading experience; as with all clinical techniques, when use seems counterproductive, other strategies should be explored.

Print Referencing in Clinical Practice: Four Recommendations

Strive for balance. One of the most important factors to remember when using print-referencing strategies is to seek balance in the amount provided. Story time for young children should be fun and relaxing. It is a time for children and adults to share their ideas and feelings. Therefore, when using print-referencing strategies, strive for limited, but regular, use with young children. As a guide, presenting three to five instances of print-referencing tasks is sufficient during the reading of a single storybook. Presenting more than this may interrupt the flow of the reading and reduce enjoyment of the activity for both adults and children. However, regularity of use is helpful for children to acquire emergent literacy skills, so at least some print referencing should occur during every storybook activity. Such references may be comments about print that do not require children to respond (e.g., *These are Spot's words. He says "Let's bake a cake!"*) and nonverbal cues, such as pointing to print in pictures or tracking print.

Keep targets within the child's zone of proximal development. To be effective, it is important to identify a child's zone of proximal development so that instructional efforts may be targeted correctly. This is the point at which a child cannot complete a task unless a little assistance is provided (Vygotsky, 1978, 1986). When a task is just slightly beyond a child's ability to complete independently, and assistance is provided, learning moves to a higher level. If a task is too far beyond the child's current abilities, learning will be too difficult; if the task is too easy, learning will not be taken to a higher level. Consequently, the most effective strategy is to target skills for which the child needs some, but not a lot, of assistance in order to complete.

Involve parents. Helping parents to engage their children in meta-focused conversations can promote the generalizability of emergent literacy goals addressed in intervention and heighten parental awareness of the importance of early literacy achievements. Helping parents to use print referencing is one strategy for doing so. Two recommendations are suggested. First, provide parents with instruction on what strategies to use and how often to use them. Showing them first and having them practice while you watch will help them learn these techniques. Also, supply a written summary of the strategy for them to take home as a reminder of what to do. If this level of instruction is not possible, then providing instruction with clear examples via audiotape or in writing, followed by a telephone call for further explanation, may be effective. Second, keep the print-referencing strategies simple to follow. Making the process complicated will be a disincentive for parents, so keep the procedure easy to implement.

Beware of the panacea. When developing children's emergent literacy skills, it is important to recognize that

considerable time and effort will be required. Children need to acquire a wealth of information about written language before reading. For instance, they need to understand how books work, learn the alphabet, recognize word boundaries, and know the relationship between letters and sounds. Although print referencing will be effective in helping children acquire such skills, it cannot do the job alone. Skills must be targeted in a variety of contexts in order for children to acquire flexible, generalized, and widespread knowledge. Likewise, emergent literacy interventions may be needed to improve children's skills in other areas that are not directly targeted by print referencing, such as phonological awareness. Therefore, print referencing should be considered only one of many possible techniques for developing emergent literacy rather than a panacea for teaching children everything they need to know.

REFERENCES

- American Speech-Language-Hearing Association.** (2001). Roles and responsibilities of speech-language pathologists with respect to reading and writing in children and adolescents (position statement, executive summary of guidelines, technical report). *ASHA Supplement, 21*, 17–27.
- Anderson-Yockel, J., & Haynes, W. O.** (1994). Joint book-reading strategies in working-class African American and White mother-toddler dyads. *Journal of Speech and Hearing Research, 37*, 583–593.
- Badian, N. A.** (2000). Do preschool orthographic skills contribute to prediction of reading? In N. Badian (Ed.), *Prediction and prevention of reading failure* (pp. 31–56). Timonium, MD: York Press.
- Bird, J., Bishop, D. V. M., & Freeman, N. H.** (1995). Phonological awareness and literacy development in children with expressive phonological impairments. *Journal of Speech and Hearing Research, 38*, 446–462.
- Bishop, D., & Adams, C.** (1990). A prospective study of the relationship between specific language impairment, phonological disorders, and reading retardation. *Journal of Child Psychology and Psychiatry, 21*, 1027–1050.
- Boudreau, D. M., & Hedberg, N. L.** (1999). A comparison of early literacy skills in children with specific language impairment and their typically developing peers. *American Journal of Speech-Language Pathology, 8*, 249–260.
- Catts, H. W.** (1993). The relationship between speech-language impairments and reading disabilities. *Journal of Speech and Hearing Research, 36*, 948–958.
- Catts, H. W., Fey, M. E., Zhang, X., & Tomblin, J. B.** (2001). Estimating the risk of future reading difficulties in kindergarten children: A research-based model and its clinical implications. *Language, Speech, and Hearing Services in Schools, 32*, 38–50.
- Clay, M. M.** (1979). *The early detection of reading difficulties: A diagnostic survey with recovery procedures*. Exeter, NH: Heinemann.
- Evans, M. A., Moretti, S., Shaw, D., & Fox, M.** (2003). Parent scaffolding in children's oral reading. *Early Education and Development, 14*, 363–388.
- Ezell, H. K., & Justice, L. M.** (2000). Increasing the print focus of adult-child shared book reading through observational

- learning. *American Journal of Speech-Language Pathology*, 9, 36–47.
- Ezell, H. K., Justice, L. M., & Parsons, D.** (2000). Enhancing the emergent literacy skills of preschoolers with communication disorders: A pilot investigation. *Child Language Teaching and Therapy*, 16, 121–140.
- Gillam, R. B., & Johnston, J. R.** (1985). Development of print awareness in language-disordered preschoolers. *Journal of Speech and Hearing Research*, 28, 521–526.
- Goodman, Y. M.** (1986). Children coming to know literacy. In W. Teale & E. Sulzby (Eds.), *Emergent literacy* (pp. 1–14). Norwood, NJ: Ablex.
- Hayes, S.** (1990). *Nine ducks nine*. Cambridge, MA: Candlewick Press.
- Hill, E.** (1994). *Spot bakes a cake*. New York: Puffin Books.
- Justice, L. M., & Ezell, H. K.** (1999). Vygotskian theory and its application to assessment: An overview for speech-language pathologists. *Contemporary Issues in Communication Science and Disorders*, 26, 111–118.
- Justice, L. M., & Ezell, H. K.** (2000). Enhancing children's print and word awareness through home-based parent intervention. *American Journal of Speech-Language Pathology*, 9, 257–269.
- Justice, L. M., & Ezell, H. K.** (2001). Written language awareness in preschool children from low-income households: A descriptive analysis. *Communication Disorders Quarterly*, 22, 123–134.
- Justice, L. M., & Ezell, H. K.** (2002). Use of storybook reading to increase print awareness in at-risk children. *American Journal of Speech-Language Pathology*, 11, 17–29.
- Justice, L. M., Mattingly, S., Ezell, H. K., & Bakeman, R.** (2002). A sequential analysis of children's responsiveness to parental references to print during shared storybook reading. *American Journal of Speech-Language Pathology*, 11, 30–40.
- Kaderavek, J., & Justice, L. M.** (2002). Shared storybook reading as an intervention context: Practices and potential pitfalls. *American Journal of Speech-Language Pathology*, 11, 395–406.
- Kaderavek, J. N., & Rabidoux, P.** (in press). Interactive to independent literacy: A model for designing literacy goals for children with atypical communication. *Reading and Writing Quarterly*.
- Kaderavek, J., & Sulzby, E.** (1998). Parent-child joint book reading: An observational protocol for young children. *American Journal of Speech-Language Pathology*, 7, 33–47.
- Lomax, R. G., & McGee, L. M.** (1987). Young children's concepts about print and reading: Toward a model of word reading acquisition. *Reading Research Quarterly*, 22, 237–256.
- Magnusson, E., & Naucler, K.** (1993). The development of linguistic awareness in language-disordered children. *First Language*, 13, 93–111.
- Mason, J. M.** (1980). When do children begin to read: An exploration of four year old children's letter and word reading competencies. *Reading Research Quarterly*, 15, 203–227.
- Roberts, B.** (1992). The evolution of the young child's concept of word as a unit of spoken and written language. *Reading Research Quarterly*, 27, 125–137.
- Scarborough, H. S.** (1998). Early identification of children at risk for reading difficulties: Phonological awareness and some other promising predictors. In B. K. Shapiro, P. J. Accardo, & A. J. Capute (Eds.), *Specific reading disability: A view of the spectrum* (pp. 75–99). Timonium, MD: York Press.
- Smolkin, L. B., Conlon, A., & Yaden, D. B.** (1988). Print salient illustrations in children's picture books: The emergence of written language awareness. In J. E. Readance & R. S. Baldwin (Eds.), *Dialogues in literacy research. Thirty-Seventh Yearbook of the National Reading Conference* (pp. 59–68). Chicago: National Reading Conference.
- Smolkin, L. B., Yaden, D. B., Brown, L., & Hofius, B.** (1992). The effects of genre, visual design choices, and discourse structure on preschoolers' responses to picture books during parent-child read-alouds. In C. K. Kinzer & D. J. Leu (Eds.), *Literacy research, theory and practice: Views from many perspectives. Forty-First Yearbook of the National Reading Conference* (pp. 291–301). Chicago: National Reading Conference.
- Snow, C., Burns, M. S., & Griffin, P.** (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Snow, C. E., & Ninio, A.** (1986). The contracts of literacy: What children learn from learning to read books. In W. H. Teale & E. Sulzby (Eds.), *Emergent literacy: Reading and writing* (pp. 116–137). Norwood, NJ: Ablex.
- Stuart, M.** (1995). Prediction and qualitative assessment of five- and six-year old children's reading: A longitudinal study. *British Journal of Educational Psychology*, 65, 287–296.
- Tolstoy, A., & Sharkey, N.** (1998). *The gigantic turnip*. New York: Barefoot Books.
- Treiman, R., & Broderick, V.** (1998). What's in a name: Children's knowledge about the letters in their own names. *Journal of Experimental Child Psychology*, 70, 97–116.
- Vygotsky, L.** (1978). *Mind in society*. (A. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press. (Original work published 1930).
- Vygotsky, L.** (1986). *Thought and language*. (A. Kozulin, Ed.). Cambridge, MA: MIT Press. (Original work published 1934).
- Watkins, R. V., & Bunce, B. H.** (1996). Natural literacy: Theory and practice for preschool intervention programs. *Topics in Early Childhood Special Education*, 16, 191–212.
- Whitehurst, G., & Lonigan, C.** (2001). Emergent literacy: Development from prereaders to readers. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 11–29). New York: Guilford Press.

Received August 5, 2003

Accepted October 10, 2003

DOI: 10.1044/0161-1461(2004/018)

Contact author: Laura M. Justice, 242 Ruffner Hall, Curry School of Education, University of Virginia, Charlottesville, VA 22904. E-mail: lmj2t@virginia.edu

APPENDIX. PRINT-SALIENT CHILDREN'S STORYBOOKS

- Alborough, J. (1994). *It's the bear!* Cambridge, MA: Candlewick Press.
- Boynton, S. (1987). *A is for angry*. New York: Workman.
- Burton, V. L. (1965). *Choo choo*. New York: Houghton Mifflin.
- Cox, P. R. (1999). *Big pig on a dig*. London, England: Usborne.
- Crews, D. (1984). *School bus*. New York: Greenwillow Books.
- Crews, D. (1985). *Freight train*. New York: Mulberry Paperback.
- Ehlert, L. (1990). *Feathers for lunch*. Orlando, FL: Harcourt Brace.
- Fowler, R. (1983). *Ted and Dolly's magic carpet ride*. Tulsa, OK: EDC.
- Hayes, S. (1990). *Nine ducks nine*. Cambridge, MA: Candlewick Press.
- Hayes, S. (1991). *This is the bear and the scary night*. Cambridge, MA: Candlewick Press.
- Hennessy, B. G. (1990). *School days*. New York: Puffin Books.
- Hill, E. (1992). *Spot goes to a party*. New York: Puffin Books.
- Hill, E. (1994). *Spot bakes a cake*. New York: Puffin Books.
- Hill, E. (1994). *Spot's first walk*. New York: Puffin Books.
- Jones, C. (1990). *This old man*. New York: Houghton Mifflin.
- Kellogg, S. (1979). *Pinkerton, Behave!* New York: Dial Books.
- Numeroff, L. J. (1985). *If you give a mouse a cookie*. New York: HarperCollins.
- Tolstoy, A., & Sharkey, N. (1998). *The gigantic turnip*. New York: Barefoot Books.
- Ungerer, T. (1983). *Cricter*. New York: HarperTrophy.