



## *What the Experts Say*

# Reading

*Teri Patrick, Patti Bokony  
University of Arkansas for Medical Sciences*

### **WHY IT IS IMPORTANT**

Approximately 90-million Americans have low or inadequate reading skills. Almost two-thirds of American children read below grade level.<sup>1</sup> Children from economically disadvantaged families are much more likely to be poor readers. Failure to read at grade level can lead to frustration and low self-esteem. Poor reading skills are linked to school drop-out, teen pregnancy, lower paying jobs, and repeating the cycle of financial hardship in the next generation.<sup>1</sup>

Poverty, lack of adults reading aloud in the home, lack of print materials, and fewer words being spoken in the home negatively impact children's ability to learn to read. Sadly, since the 1980s there has been little improvement in the number of children entering kindergarten with the language skills necessary to learn to read. Approximately one-third of children in the US enter kindergarten without the basic language skills needed to learn reading.<sup>2</sup> As a result, children struggle to learn these pre-reading skills in kindergarten through first grade and are often still behind by fourth grade. One of the most important ways children learn to read is by having stories read to them. However, a significant percent of preschool children have never had a story read to them at home – 15% of Hispanic, 7% of black, and 4% of white.<sup>2</sup> Although experts recommend reading to children daily, less than half of children under 5 years old are read to daily by their parents. Factors that reduce the odds of parents reading to their children include: poverty or low-income, minority status, and English as a second language.<sup>2,3</sup>

Despite poorer statistics for low-income and minority families, 44% of white, non-poor parents also do not read to their children daily. These numbers indicate the need for universal strategies to promote parents reading to their children.<sup>3</sup> Children who lack rich language environments at home are slower to learn to read. Language development is a predictor of reading achievement. By four years of age, children from low-income families have heard 20 million fewer words than their higher income peers, placing them at higher risk for not reading on grade level (reading failure). This is evidenced in that the typical middle-class child enters kindergarten able to identify 22 letters compared to the typical low-income child who can identify only 9 letters.<sup>4</sup> With education and encouragement, parents of children who are at high risk for reading failure can be given easily implemented strategies to support their child's reading.

Parents often ask teachers how they can help their preschool child prepare to be successful in school. Parents of any socio-economic, cultural, or ethnic/racial background can improve outcomes for their children when given information, and resources about literacy development, and in particular, encouragement to read to their child. Increasing the number of parents who read daily to their children can positively affect our nation's statistics on school readiness and school success.<sup>2</sup>

### WHAT THE EXPERTS SAY

Reading ability continues to develop throughout a lifetime, but the most important years for literacy development are the first eight years. Parents lay the foundation for children to learn literacy skills long before children begin to formally read and write. All aspects of parenting contribute to a child's success in school including consistent routines, parental warmth and responsiveness, and teaching social-emotional as well as literacy skills.<sup>5</sup> Reading to children is an activity that touches on all of those areas. When parents read aloud to children they are promoting language and literacy development, strengthening the parent-child bond, and enhancing parent-child interaction.<sup>3</sup> Ideally, parents should begin reading to their infants and continue to read even after the child has learned to read independently.

Research provides substantial evidence that early experiences affect brain development and cognitive and social-emotional outcomes. Many factors in children's early lives can be changed to positively impact the path of their learning and school success if parents are provided the knowledge and skills they need. Readiness to learn in school broadly includes physical, cognitive and social-emotional well being as well as specific experience with activities that promote language development such reading, talking, and listening.<sup>6</sup> Parents also help children prepare for school success when they provide emotional security<sup>5,7</sup> and learning activities such as reading books to children. Children who feel safe and loved focus on learning academic skills.

Differences in the development of literacy skills in children from varied socio-economic backgrounds are not simply the result of the parents' occupation or income. The key factor is the presence of or lack of literacy activities, such as shared reading. Early parent involvement in literacy activities predicts later reading success above and beyond other factors such as intelligence, economics, or remedial reading later in elementary school.<sup>8,9</sup> Studies of twins have found that while genetic factors account for some of a child's ability to read, a family environment that promotes reading and includes shared reading has a strong influence on early literacy skills and later reading performance.<sup>10,11</sup>

In addition to daily reading activities, other factors in the home appear to be associated with reading achievement. They include<sup>8,12</sup>:

- The language spoken in the home is the language used in tests that assess the children's reading.
- A large number and variety of reading materials are available in the home (i.e. books, magazines, and newspapers).
- Children receive books as gifts.
- Adults in the home model reading as functional, pleasurable, and enjoyable.

## Emergent Literacy

Emergent literacy is the term used to describe young children's developing literacy skills prior to formal schooling. These emerging skills are precursors to actual reading and writing. Emergent literacy is a process that develops over time and is fueled by the child's natural curiosity and need to communicate and understand the world. Children learn two types of emergent literacy skills on their way to becoming a reader: **language comprehension skills** and **word recognition skills**.<sup>9,13-15</sup>

Language Comprehension Skills	Word Recognition Skills
Oral language skills	Print concepts
Receptive language	Letter recognition
Story comprehension	Writing – scribbling; letter-like marks; invented spelling

When parents read to their child they engage in many activities that promote emergent literacy skills. Language comprehension skills are enhanced during parent-child shared book reading. Reading aloud is the best activity to meld enjoyment, vocabulary gains, and increased book and print knowledge.

Word recognition skills include phonological awareness (awareness of sounds) and letter/word awareness. Parents increase phonological awareness when they recite nursery rhymes, read poems, sing songs, and play finger games. The earlier parents begin reading to their children, the more quickly the children develop phonemic awareness (understanding letter sounds). Parents teach letter awareness by pointing out letters and words in books and in the environment, helping the child write his name, reading alphabet books, and playing together with alphabet blocks and puzzles. Parents increase children's word recognition skills when they encourage children's writing either by commenting on the child's pretend writing or by modeling writing (i.e. child's name, grocery list, letter to teacher). When the same book is read over and over, children often begin noticing the words. This is especially true when parents point out letters, words, and multiple occurrences of the same word.<sup>9</sup>

## Strategies to Promote Emergent Literacy

The single most important activity for building literacy skills is reading aloud to children.<sup>2,4-6,12,16,17</sup> Children who are read to from an early age learn to enjoy books and reading, have larger vocabularies, and more easily acquire reading skills when they reach school age than peers who are not read to.<sup>2,3</sup> Reading aloud to children increases expressive language (speaking) and receptive (understanding) language in toddlers and to improve reading scores and verbal performance in elementary students.<sup>1</sup> The following paragraphs define a variety of strategies to promote early literacy.

**Adult Modeling.** Adult reading material around the house or classroom enhances children's literacy skills. When children see their parents, teachers, and other important adults in their life reading for enjoyment or information, they are more likely to become readers themselves. Children get the message that reading has pleasure and rewards.<sup>12</sup> Children learn to value reading when they see adults reading books, magazines, recipes, writing grocery lists, checking sales and prices in the newspaper, and reading instructions for putting things together. Getting the child involved in these day-to-day reading and writing tasks is powerful. Creating a time when the TV is off and everyone (both parents and children) is quietly looking at, reading, or writing, a material of their choice demonstrates to children that parents value reading.

**Shared Reading.** Shared reading is the term used for an interactive adult-child activity that promotes both literacy and social-emotional development.<sup>3,18</sup> Shared reading is more than simply reading through a book from cover to cover. It includes both reading aloud and conversation about the words, pictures, and story. The conversation may include questions and comments from either party including predictions about what might happen next, thoughts and feelings the book invokes, and how the characters or story relates to the child or adult. Talking about the book and the pictures in addition to simply reading the book enhances children's language development.<sup>17</sup> Shared book reading during toddlerhood increases knowledge of print concepts and book knowledge by age four, oral language at age five, and reading comprehension at age seven.<sup>16</sup> Shared book reading requires cooperation and conversation between reader and child. Adults not familiar with shared reading techniques may incorrectly believe that each reading session with a child must consist of reading the book word for word and cover to cover. Since that is what mature readers do, elements of shared reading may seem counter-intuitive to adults. Shared reading encourages children to be active rather than passive participants in story time. Some elements of shared book reading include:

- **Reading the same book over and over.** When children hear a story again and again they are better able to understand relationships of characters and sequence of events. They eventually memorize the book and pretend to read it.
- **Stopping in the middle of a book to look back or talk.** When the child turns back to an earlier page to make a comment or ask a question, it creates an opportunity to expand the conversation.
- **Encouraging the child's comments and questions.** Both parties share their personal reaction to a story.
- **Asking questions specific to the story or pictures.** Ask questions to encourage engagement, such as, "Where's the bunny?"
- **Asking open-ended questions.** Ask questions, such as "What do you think about that?" or "What do you think happens next?"
- **Encouraging the child to make predictions and relate their own experiences and feelings to the story.**<sup>19</sup>
- **Describing and labeling pictures** – Some research suggests this technique is associated with the greatest increases in vocabulary and print awareness for younger children or children with smaller vocabularies.<sup>15</sup>

Shared book reading is highly correlated to receptive vocabulary because it exposes children to more complex and varied language than they hear in play, routine care giving, or television.<sup>10</sup> Words heard on television or movies do not have the same impact as words heard during book reading.<sup>4</sup> There is some evidence that children who show high interest in books and reading watch less than 2 hours of television daily and have parents who enforce TV viewing rules.<sup>15</sup>

Although talking together is also an important means of increasing children's vocabulary, sharing a book is a very different type of adult-child language interaction because the story and the book are **decontextualized**. That is, they are removed from immediate time and place.<sup>13</sup> This removal from the concrete "here and now" requires the child to practice higher level brain functions of imagination and abstract thinking. During shared book reading, children are exposed to narratives, vocabulary, sentence structure, story structure, and basic print concepts not normally used in day-to-day conversation. More frequent shared reading is related to increased receptive vocabulary, verbal maturity, and knowledge of print concepts.<sup>13</sup> Books expose children to advanced language forms and new words and words they do not hear in daily conversation. Having heard a 'big' word in the past makes it easier for the child to decode it when he comes across it during later formal reading instruction. As children gain knowledge, skills, and experience through shared reading with a caring adult, they move from just looking at the pictures to being interested in and looking at the print. Shared reading provides opportunities for the adult to monitor how well the child is learning concepts and vocabulary through questions and interactive dialogue.<sup>8</sup>

**Dialogic Reading.** Dialogic reading is a dialogue or conversation between an adult and child during shared book reading. With this type of reading, the child becomes the storyteller and the adult is an active listener who asks questions, adds information, and prompts increasingly sophisticated descriptions from the child. Adults promote children's active involvement in reading when they use dialogic reading. As the child becomes more skillful in storytelling, the adult moves from simple labeling to open-ended questions described above.<sup>20</sup> Adults who encourage children to take an active rather than passive role during shared reading improve both language and emergent literacy skills. As the adult expands on the child's dialogue, the child uses more mature words and sentences. The child improves in use of vocabulary, syntax, semantics, pragmatics, and in the social skills of language such as turn taking in a conversation.<sup>8</sup>

Teachers and parents can be trained in dialogic reading. In middle-class and low-income families, children make the greatest gains when parents and teachers are trained in this method and use it at home and school.<sup>20-22</sup> This was best demonstrated in a study of low-income, 3-year-old children, their day care teachers, and parents. They were divided into 3 groups. Group 1 teachers engaged daily in small group dialogic reading sessions. Group 2 children had dialogic reading sessions with both their teachers and parents. Group 3 children (control group) had small group play sessions while the others were involved in the dialogic reading sessions. Not surprisingly, after six weeks of the intervention, children in Group 2 made the most gains in emergent literacy skills. Children in this group whose parents and teachers both used dialogic reading with them. Following are the techniques taught to parents and teachers to engage children in dialogic reading.<sup>20</sup>

Label nouns	Encourage multi-word expressions
Label attributes and functions	Describe story and picture structure
Take turns	Ask open-ended questions
Ask who, what, and when questions (avoid yes-no or where questions)	Expand what the child says Repeat what the child says
Follow answers by the child with questions	Help the child with answers as needed
Follow the child's interests	Praise and encourage Have fun

Dialogic reading has also been shown to increase emergent literacy skills in children even when the sessions were done with unfamiliar researchers. When researchers used this approach in one-on-one sessions with low-income children, the children in the intervention group made significantly higher gains in both standardized language assessments and in children’s spontaneous language when looking at books compared to children who did not receive the intervention.<sup>23</sup> When adults practice dialogic reading techniques that elicit active responses from children, they can significantly enhance language development.

One goal for parents is to become more sensitive to their child’s developing abilities. For example, they know to wait until their child can label a picture and have sufficient vocabulary before asking higher level questions that require descriptive statements from the child. Middle-class parents tend to engage in dialogic reading type activities more often and their children are more likely to engage in talking during book reading than low-income families.<sup>21</sup> Training low-income parents in dialogic reading techniques might be a factor in closing this gap.

**Supportive Adult Behaviors.** Various adult behaviors for reading to children have been identified and studied in recent decades to determine the best ways children gain emergent literacy skills. Following is a description of adult behaviors that support children’s emergent literacy.<sup>16,21</sup>

Adult behavior	Description	Example
<b>Label</b>	Naming an object or action in the picture	“There’s the duck.”
<b>Comment</b>	General talk about the picture or story	“She is going in the house”
<b>Expansion</b>	Elaborates on what child said	Child: “Doggie” Parent: “That’s a red dog.”
<b>Pointing request</b>	Expected response is pointing to something.	“Show me the monkey.”
<b>Yes/no question</b>	Has one answer; requires yes/no or head nod.	“Do you see her milk?”

<b>Simple what/who questions</b>	Can be answered with noun/label.	“Who is that?”
<b>Directive</b>	Giving directions to the child	“Turn the page.”
<b>Imitative directive</b>	Labeling followed with a request for child to imitate	“That’s a giraffe. Say, giraffe.”
<b>Attention- getting</b>	Using specific words to gain the child’s attention	Saying the child’s name “Look at this.”
<b>Feedback</b>	Praising or correcting child’s response	“You’re right. He is the Daddy.” “No, that’s not a kitty. It’s a cow.”
<b>Animating</b>	Using voice inflections to pretend with the story; making the pictures talk	“Someone’s been eating my porridge” in a squeaky baby bear voice.
<b>Imitating</b>	Repeating what the child said	“Yes, a ball.”
<b>Relating</b>	Connecting a picture or story line with the child’s experience.	“Remember when you went swimming?”
<b>Function or attribute question</b>	Expected answer is an attribute or action.	“What is she doing?”
<b>Open-ended question</b>	Non-specific request for description, information, or about the child’s feelings.	“Tell me more.” “How would you feel if that happened to you?”
<b>Reading the book</b>	Response not required. Child listens while adult reads.	

**Reading Styles.** There are three styles of parent reading<sup>13</sup>:

- **Describer.** Similar to the lower levels (eg. Labeling nouns or attributes) of the dialogic reading techniques, the adult describes and labels pictures, words, or letters.
- **Comprehender.** Similar to the higher level dialogic reading techniques, the adult focuses on the story meaning and encourages the child to make inferences and predications as they read.
- **Performance-Oriented.** The story is read uninterrupted with discussion before and after.

Different styles of adult reading may be more or less appropriate for children with different abilities. In one study, parents were trained to use one of the three styles while they read with their preschool child for 6 weeks. Children who initially had lower vocabulary skills made more gains in both vocabulary and print skills when the describer style was used. Children who started with higher level vocabulary skills made more gains when the performance-oriented style was used. The describer style appeared to provide the most overall gains in both vocabulary and print skills for children.<sup>13</sup>

Researchers found that mothers and fathers use similar styles in reading to their children. Both mothers and fathers varied their style based on child's age but not on gender. Both used more labeling, animation, directing, and attention getting with toddlers and more questioning, feedback, and imitating with preschool-age children. For the older group, questioning, feedback, and imitating adult behaviors were associated with higher language scores in the children while simple labeling was not. Parents were not likely to use the technique of relating the story to the child's own experience, missing out on an important method to increase children's language comprehension.<sup>16</sup> This suggests children would benefit when teachers explain specific shared reading techniques with parents. Parents could be encouraged not only to read to their children frequently, but also to use an appropriate reading style depending on their child's developmental level.

**Adapting to children's developmental level.** Knowing children's level of emergent literacy skills and adjusting how they read to the child accordingly is important for adults. This is based on Vygotsky's concept of **zone of proximal development**, which is the gap between what a child does with assistance and what they do independently. Knowing where a child is in his reading ability, then supporting him to take steps toward the next level using one of the methods described above will be most effective for a child. Reading to children may be most effective when adults understand the child's level of development and uses a reading technique that supports and challenges the child at their level or zone of proximal development.<sup>13</sup>

**Environmental Print.** Environmental print is the term to describe print found in children's immediate environment. It includes logos and signs, food packages, labels, billboards, street signs, and product marketing materials. Children often begin to "read" environmental print of their favorite cereal or fast food restaurant long before they recognize letters or are able to read. Environmental print teaches children pre-reading skills, the joy and function of reading, and about the world around them.<sup>24,25</sup> Parents and teachers encourage development of literacy skills when they use environmental print. When parents notice their child's interest in environmental print and point out labels, signs, or logos, they are teaching essential elements of reading.<sup>25</sup> Noticing and learning from environmental print can easily be incorporated into daily routines<sup>24</sup>:

- Pointing out and talking about logos, signs, and labels seen during the course of each day.
- Playing guessing games while walking or in the car (e.g. parent says, "I see a sign that's red and white and starts with an 'S.' What is it?").
- Counting the types or colors of cars and trucks seen.
- Cutting out coupons of favorite foods together and allowing the children to help find them in the grocery store.

**Indirect Instruction.** Indirect instruction, child-directed center time, promotes emergent literacy skills. In kindergarten classes, researchers found that children moved from simply recognizing a logo to being able to read the word in a sentence when teachers provided indirect instruction. That is, they provided literacy props in a learning center (i.e. coupons for food, pretend food, money, and cash register, and writing materials, etc. in the housekeeping center), but not direct instruction on how to use the materials. The teachers asked the children to bring the coupons from home and talked about some ways people use them, but did not provide activities or instruction directly related to the coupons. In the center, the children used their imagination and the props to create grocery shopping and other play scenarios. Children who used the environmental print in center activities made gains through natural and enjoyable learning because they actively constructed their own knowledge in an engaging activity.<sup>25</sup> Results of the use of indirect instruction was compared with classrooms in which teachers provided direct instruction on environmental print or teachers neither used direct instruction nor provided environmental print materials in centers. Children in the comparison classrooms did not achieve the gains made by the children in the indirect instruction group. In fact, children receiving direct instruction on environmental print from their teachers made no more gains than the children receiving no instruction or materials at all.<sup>25</sup> This study emphasizes how important it is for teachers themselves to understand and then share with parents that young children learn more when they have materials to construct knowledge and time to explore them.

**Home-School Literacy Connection.** Clearly, the interaction between home and school is an important component for preschool children to acquire literacy skills. Young children's literacy develops in the context of their experiences. With home and childcare being the largest part of most children's time each day, both must be supportive of habits, activities, and beliefs that promote emergent literacy.<sup>26</sup> Schools and teachers positively impact child outcomes when they encourage parents to read to their children. Teachers recognize the importance of their students being read to at home and are in a position to make a difference in both quality and quantity of home reading by providing information, support, and regular communication about literacy to parents. Literacy skills can be improved when schools participate in a home involvement program. One such program for kindergarten and first grade students and their families is called Fast Start. The Fast Start program improved reading skills for students, with parents and children reporting greater frequency and enjoyment of the home reading time. Teacher interaction with parents was the critical element in the success of the program. Teacher activities included<sup>27</sup>:

- Inviting parents to observe shared reading in the classroom.
- Sending home newsletters about literacy.
- Making frequent personal contact with parents.
- Providing reading logs, books, songs, and poems to families.
- Providing specific instructions regarding reading at home and encouraged parents to read with, talk to, and listen to children.
- Emphasizing a simple and informal home reading time of 10 to 15 minutes in the family daily schedule.

In a similar study, teachers reached out to hard-to-reach parents to promote family literacy by inviting them to become more involved and by listening to parent suggestions.<sup>28</sup> Once again, teacher involvement was a key factor in promoting family literacy with hard-to-reach or low-income parents. Teacher-school activities included demonstration of shared reading, a lending library, a reading tip sheet, inviting parents into the classroom to observe, and home visits. Because teachers often come from different neighborhoods and cultural backgrounds than their students, the personal contact during home visits resulted in improved understanding of families. Teachers gained awareness of the child's home environment and used that information to tailor the home literacy information and instructions based on each family's strengths and needs. Teachers were more sensitive with families and avoided making negative assumptions about hard-to-reach or low-income families.<sup>28</sup> Teachers understood such families also have high expectations for their children. Teacher persistence and creativity were also important to increase family literacy for this group.

**Library Use.** Recent research indicates that not only families, but communities and in particular, libraries, contribute to children's success in school. Families are more likely to promote literacy in the home if they understand emergent literacy and are given guidance on reading to their children. Libraries play an important role by providing a variety of reading programs, hosting educational events, and making books available to families.<sup>29</sup> The National Center for Educational Statistics, looking at the link between libraries and children's fourth-grade reading skills, found a strong, positive correlation between the children's reading scores and libraries' circulation and between attendance at library reading programs and fourth-grade reading skills.<sup>30</sup> In looking at children's library book circulation state by state, those states with higher circulation (more books borrowed) were also the states with higher reading scores for fourth-grade children. Conversely, four out of five states with lowest reading scores for fourth graders also ranked in the bottom half on children's library book circulation.<sup>30</sup> This evidence suggests that local libraries can be an important resource for families.

**Reach Out and Read.** The American Academy of Pediatrics (AAP) has increased its focus on early literacy in recent years. Reach Out and Read (ROR) is a non-profit children's literacy organization founded by pediatricians and early childhood educators to make literacy promotion a standard part of pediatric well child care visits. Doctors and nurses are trained to provide parents with advice on reading aloud and to give age and culturally appropriate books to each infant and preschoolers at routine checkups.<sup>2,4</sup> Studies have shown ROR to be evidenced-based and cost effective. Parents who received ROR were significantly more likely to read to their children daily and to have books at home. Children who were part of the program increased their vocabulary.<sup>2</sup> This held true even with low-income families with low levels of parental education.<sup>1</sup> ROR is effective because parents tend to trust pediatricians.<sup>2,4</sup> Key components of the program are:

- The program is offered from infancy through 5 years.
- Physicians explicitly link parent reading aloud to child's school success – a goal all parents have for their child.
- The message to parents that reading aloud is important is repeated at each doctor visit.

- Parents get positive feedback from their child as the child enjoys and requests being read to, especially if, by 1 year of age, the child has been read to regularly and there are books around the home.
- The nationwide program purchases books in bulk at a discount to give to pediatricians.
- Reading is promoted for both English and non-English speaking families by providing books in multiple languages.

ROR has been effective with Hispanic immigrants, a population whose literacy rates are lower than other ethnic groups.<sup>2,3</sup> For example, children of Hispanic immigrants are twice as likely to fail fourth-grade reading assessments than White children.<sup>31</sup> ROR was implemented with Hispanic immigrants in which the majority of children (67% ) spoke predominately Spanish in the home, most of the parents (84%) preferred that their children read both English and Spanish, and only 20% of parents reported reading something for themselves (book, magazine, newspaper) at least 3 days per week (indicating a low parental literacy). For this group, Mexican immigrants had lower adult literacy rate, were less likely to speak both English and Spanish in the home, and less likely to share books with their children than immigrants from other Latin American countries.<sup>31</sup> At well-child checkups, the pediatrician wrote a prescription for parents to read to their child 10 minutes per day and a pediatric resident described “dialogic reading” to them and gave the child an age and culturally appropriate book. Results found that ROR was successful in increasing parent-child shared reading in Hispanic immigrant families, particularly Mexican immigrant families who were the most vulnerable.

**Reading and Special Populations.** Activities, experiences, and opportunities that promote emergent literacy skills are important for all children.<sup>32</sup> Whether challenges exist due to language, culture, or special needs, providers can work with parents to promote reading strategies and activities individualized to family and child needs. When parents read to their children, the interactions should be pleasurable and at the child’s developmental level. When the parent is sensitive to child’s developmental level and adjusts reading accordingly, the child is more likely to have fun and less likely to be bored or frustrated.<sup>9</sup>

**English as a Second Language.** Parents are more likely to use their native language when reading to children.<sup>2</sup> Children who are learning English as a second language more easily learn English reading and writing if they are already familiar with the joy of reading, vocabulary, and literacy concepts in their primary language. Mastery of home language is a predictor of literacy for bilingual children.<sup>8,12</sup>

**Children with Special Health Care Needs.** Children with special health care needs (CSHCN) are often delayed in gaining emergent literacy skills, especially in low-income families. Parents of CSHCN are less likely to engage in frequent shared book reading because medical activities consume much family time, parents may think the child does not enjoy having a story read to them, and parents are unsure how to share a book with their child with special health care needs. The last reason most often predicts less parent-child reading. Practitioners can help parents by providing information on shared book reading techniques and even teaching parents to incorporate shared book reading into routine medical activities. Pediatricians and other providers working with parents can discuss reading and promote literacy activities specific to the child's needs in more complicated medical cases.<sup>18</sup>

**Children with Developmental Delays.** Children with language delays are less likely to listen to stories being read, engage in commenting and questioning about the book, and have adults point out words or letters to them.<sup>8</sup> However, children with language delays need experience in practicing the same emergent literacy skills, but often need more support from both teachers and parents.<sup>32</sup> Incorporating shared reading can also benefit parents by helping them address sleep problems often experienced by children with developmental delays and other special needs. Providers can help reduce parental stress and simultaneously increase parent-child literacy time by letting parents know that bedtime routines that include a bedtime story reduce in-bed crying and the length of time it takes to fall asleep as well as increase cooperation at bedtime.<sup>33</sup>

### WHAT YOU CAN DO

- Get to know families and build on their strengths to promote their children's literacy development.
- Provide information on parent's role in developing children's emergent literacy skills.
- Provide specific instructions on shared/dialogic reading, using environmental print, children's development of vocabulary and print awareness. Individualize the information.
- Invite parents to observe "Shared Reading". Explain the techniques used such as talking about the pictures, re-reading, predicting, and pointing out letters and words.
- Provide information on and encourage use of their local library.
- Encourage parents to read in child's home language. Help parents find picture books in their native language.
- Provide a variety of reading materials through a lending library or share books and materials they can keep.
- Provide copies of books, songs, or poems that are specifically selected for child's individual interests.
- Explain importance of following child's lead, being aware of child's level of development, and keeping it fun when reading at home.

## RESOURCES

Reach Out and Read (ROR) National Center

[www.reachoutandread.org](http://www.reachoutandread.org)

Provide parents with information on your local library and school library.

## REFERENCES

1. Weitzman CC, Roy L, Walls T, Tomlin R. More evidence for reach out and read: A home-based study. *Pediatrics*. 2004;113:1248-1253.
2. Russ S, Perez V, Garro N, et al. *Reading Across the Nation: A Chartbook*. Boston, MA: Reach Out and Read National Center; 2007.
3. Kuo, A.A., M.D. M.Ed., Franke TM, Ph.D., Regalado M, M.D., Halfon, N., M.D. M.P.H. Parent report of reading to young children. *Pediatrics*. 2004;113:1944-1951.
4. The Policy Case for Reach Out and Read: Doctors Promoting Literacy Since 1989. Available at: <http://reachoutandread.org/FileRepository/PolicyCaseForROR.pdf>. Accessed 11/14/08, 2008.
5. Bus AG, van IJzendoorn M, Pellegrini A. Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Rev Educat Res*. 1995;65:1-21.
6. High PC. School readiness. *Pediatrics* [serial online]. 2008;121:e1008-e1015. Available from: <http://aappolicy.aappublications.org/cgi/reprint/pediatrics;121/4/e1008.pdf>. Accessed 11/14/08.
7. Bus AG, van IJzendoorn MH. Mothers reading to their 3-year-olds: The role of mother-child attachment security in becoming literate. *Read Res Quarterl*. 1995;30:998-1015.
8. Hay I, Fielding-Barnsley R. Facilitating children's emergent literacy using shared reading: A comparison of two models. *Australian Journal of Language & Literacy*. 2007;30:191-202.
9. Evans MA, Shaw D. Home grown for reading: Parental contributions to young children's emergent literacy and word recognition. *Canadian Psychology/Psychologie Canadienne*. 2008;49:89-95.
10. Weizman ZO, Snow CE. Lexical output as related to children's vocabulary acquisition: Effects of sophisticated exposure and support for meaning. *Dev Psychol*. 2001;37:265-279.
11. Harlaar N, Thomas ME, Dale PS, Plomin R. Why do preschool language abilities correlate with later reading? A twin study. *JSLHR J Speech Lang Hear Res*. 2008;51:688-705.
12. Neuman SB, Copple C, Bredekamp S, National Association for the Education of Young Children. *Learning to Read and Write: Developmentally Appropriate Practices for Young Children*. Washington D.C.: National Association for the Education of Young Children; 2000.

13. Reese E, Cox A. Quality of adult book reading affects children's emergent literacy. *Dev Psychol.* 1999;35:20-28.
14. Weitzman CC, Roy L, Walls T, Tomlin R. More evidence for reach out and read: A home-based study. *Pediatrics.* 2004;113:1248-1253.
15. Bennett KK, Weigel DJ, Martin SS. Children's acquisition of early literacy skills: Examining family contributions. *Early Childhood Research Quarterly.* 2002;17:295-317.
16. Blake J, Macdonald S, Bayrami L, Agosta V, Milian A. Book reading styles in dual-parent and single-mother families. *Br J Educ Psychol.* 2006;76:501-515.
17. Schickedanz JA. *Much More than the ABCs: The Early Stages of Reading and Writing.* Washington D.C.: National Association for the Education of Young Children; 1999.
18. Zaslow T, Dorey F, Limbos M. Literacy-related activities among children with special healthcare needs. *Infants Young Child.* 2008;21:221-229.
19. Strickland DS, Morrow LM. Family literacy: Sharing good books (emerging readers and writers). *Reading Teacher.* 1990;43:518-519.
20. Whitehurst GJ, Arnold DS. A picture book reading intervention in day care and home for children from low-income families. *Dev Psychol.* 1994;30:679.
21. Whitehurst GJ, Falco FL, Lonigan CJ, et al. Accelerating language development through picture book reading. *Dev Psychol.* 1988;24:552-559.
22. Whitehurst, G.J., et al. Outcomes of an emergent literacy intervention in head start. *J Educa Psychology.* 1994;86:542-555.
23. Valdez-Menchaca MC, Whitehurst GJ. Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Dev Psychol.* 1992;28:1106-1114.
24. Fingon JC. The words that surround us. *Teaching Pre K-8.* 2005;35:54-55.
25. Kuby P, Aldridge J. The impact of environmental print instruction on early reading ability. *Journal of Instructional Psychology.* 2004;31:106-114.
26. Weigel DJ, Martin SS, Bennett KK. Ecological influences of the home and the child-care center on preschool-age children's literacy development. *Read Res Quarterl.* 2005;40:204-233.
27. Padak N, Rasinski T. Home-school partnerships in literacy education: From rhetoric to reality. *The Reading Teacher.* 2006;60:292-296.
28. Waldbart A, Meyers B, Meyers J. Invitations to families in an early literacy support program. *Reading Teacher.* 2006;59:774-785.
29. Martinez G. Public libraries--community organizations making outreach efforts to help young children succeed in school. *School Community Journal.* 2008;18:93-104.
30. Lance KC, Marks RB. Off the charts. *School Library Journal.* 2008;54:44-47.

31. Sanders LM, Gershon TD, Huffman LC, Mendoza FS. Prescribing books to immigrant children: A pilot study to promote emergent literacy among children of Hispanic immigrants. *Arch Pediatr Adolesc Med.* 2000;154:771-777.
32. Johnston SS, McDonnell AP, Hawken LS. Enhancing outcomes in early literacy for young children with disabilities: Strategies for success. *Intervention in School and Clinic.* 2008;43:210-217.
33. Christodulu KV, Durand VM. Reducing bedtime disturbance and night time waking using positive bedtime routines and sleep restriction. *Focus Autism and other Dev Disabl.* 2004;19:130-139