When Karla began first grade, she had no academic individualized education program (IEP) objectives. Instead, her previous IEP team had focused on her need to acquire a system of communication (she was nonverbal), to become consistent in toilet training, to learn to feed herself, and several other important life skill goals. Her teacher, Ms. Ramirez, was convinced that all students should have the opportunity to gain literacy skills. She began with Karla's interest in Disney movies. She found a book of stories based on these movies and began to read it with Karla. Karla showed keen interest in the stories by laughing, clapping, and pointing to the pictures. Ms. Ramirez then developed a picture communication board for the main characters of the story (e.g., Woody, Buzz Lightyear, Seth, Andy). As she read the story, she had Karla point to the picture on her communication board as well as on the page in the book. Next, she decided to ask Karla comprehension questions after reading the story. "Who was Andy's first favorite toy?" Karla pointed to Woody. She then asked, "When did Buzz Lightyear arrive?" Excitedly, Karla began to blow on the picture of the birthday cake as if blowing out the candles. "Yes!" Ms. Ramirez replied. "Buzz Lightyear was Andy's birthday present." In just a few months, Karla had begun to use picture/word symbols to show her understanding of a story. Her mother was delighted when the IEP team met again to discuss how to teach Karla to read.[1]

Often when students such as Karla, who is nonverbal and has many life skill needs, begin to show the ability to learn symbols, the instructional approach is to teach sight words that relate to activities of daily living. These sight words can be an important tool for students, allowing them to become more independent in their home, job, and community environments. Unfortunately, sight-word instruction is sometimes the only reading instruction students with significant cognitive disabilities receive. Like all first graders, Karla needs the opportunity to gain broad literacy skills and to have the opportunity to experience the joy of reading. Older students also can benefit from being exposed to the literature that enriches our culture, such as poetry, plays, short stories, and nonfiction. This chapter provides guidelines for teaching sight words that are useful to daily living, but also provides a broader approach to literacy that can be used to help students participate in diverse reading activities.

THE GOAL OF LITERACY FOR ALL CHILDREN

Before describing the specific guidelines for promoting literacy for students such as Karla, it is important to consider what educators know about how children learn to read. The National Reading Panel (NRP, 2000), in response to a charge from Congress to assess the status of research-based knowledge in teaching children to

read, identified five components of reading: phonemic awareness, phonics, vocabulary, fluency, and comprehension. Although the NRP's findings were the source of some debate (Allington, 2002; Shanahan, 2003), most experts would agree that these focal areas are all important elements in learning to read. How these elements are best taught and learned also has been the source of many debates. Multiple learning models have been outlined to explain how children learn to read (Ruddell, Ruddell, & Singer, 1994). Pearson and Stephens (1994) presented a history of more than 30 years of research in literacy, discussing the shifting focal points and beliefs about how best to teach and learn reading. They define reading as ". . . a complex, orchestrated, constructive process through which individuals make meaning" (p. 35). Amid this complexity, there are linguistic, cognitive, social, and political elements that come into play, causing much debate about how children learn to read.

In this sometimes confusing environment, epitomized by the "great debate" — pitting teaching phonics against meaning-based methodology — practitioners struggle to make decisions about best practices. There is, however, some general agreement about models of learning to read that have been consistently supported by research over the years. For instance, Adams (1990) summarized consistent research documenting that phonics instruction can be integrated easily into more holistic methodologies to foster skilled reading. A more detailed model of the stages of learning to read was proposed by Chall (1996). This model, which outlines developmental reading stages for preschool through adult readers, provides a good background for a general understanding of how reading ability might be developed. Basically, Chall states that there are six stages along a developmental continuum (Heilman, Blair, & Rupley, 2002). According to Chall, stages can overlap and are not fixed by grade level (e.g., a student could be at Phase 0 yet be in high school), although they can be seen as representative of abilities typically manifested within a particular age-level range. Therefore, the age guidelines presented in Table 4.1 are typical indicators rather than strict levels of the development of reading.

Emergent literacy, then, can be defined in broadest terms as the process of becoming literate, beginning at birth and developing throughout a lifetime. How this ability develops and how quickly each reader progresses through each developmental stage can vary considerably. However, because these broad phases are not very helpful in terms of how to best foster this skill in learners, a more focused definition is still needed.

Sulzby and Barnhart (1992) developed a more functional definition of emergent literacy. They stated that emergent literacy involves the reading and writing behaviors of children that precede and then develop into conventional literacy. They agree with Chall that this process is developmental and can be applied to all children. However,

the success of development for any one child is greatly influenced by literacy events in their lives. For instance, some children come to school already knowing how to read. They have experienced rich literacy activities before entering school, provided by parents and other adults who have served as appropriate role models of literate adults. These children are actively involved in reading signs and symbols in grocery stores, on streets, and in the surrounding community. They are actively engaged in art and play activities where they use early forms of writing to label drawings and pictures. They have "read" many books with others, often mimicking adult models, and know the conventions of print — how to hold a book, how to differentiate words from pictures, what terms such as *page* and *word* mean. Other children, however, come from settings where there are few such experiences, and they generally experience more difficulties and delays in learning to read. In fact, a national panel of experts serving on a presidential commission to study reading research in the 1980s (Anderson, Hiebert, Scott, & Wilkinson, 1985) determined that one of the biggest influences on whether a child will become a successful reader was whether they had been consistently read to before entering school.

Koppenhaver (1993) noted that students with disabilities often have had fewer opportunities to engage in literacy activities. Sometimes children with physical, cognitive, and sensory challenges have not had these early literacy experiences because of both the challenge of making materials accessible and prior low expectations about students with significant cognitive disabilities learning to read. Sometimes they have had these experiences in early childhood programs but are then shifted into a nonacademic setting for their school program. Although students may not learn to read per se, they may benefit from acquiring emergent literacy skills. For example, students who are able to interpret meaning from pictures and key words can enjoy and gain information from magazines. Students who can use pictures to retell a familiar story may gain important communication skills.

EMERGENT LITERACY AND FUNCTIONAL READING: COMPATIBLE GOALS?

Whereas the goals of emergent literacy are to promote experiences with book and print that provide a foundation for learning to reading, functional reading involves being able to recognize specific sight words and use them in daily routines. Browder (2001) defined the characteristics of functional reading as 1) the acquisition of specific sight words that have immediate functional use, 2) an alternative way to learn reading skills when literacy is not being achieved, and 3)a way to gain quick success in reading that may encourage the future pursuit of literacy. Numerous studies demonstrate that students with moderate and significant mental retardation can learn sight words (Browder & Xin, 1998). Intervention studies have illustrated how students can use sight words to perform daily living skills such as cooking (Collins, Branson,

& Hall, 1995) and to read product warning labels (Collins & Griffen, 1996). Individuals with mental retardation have also used sight words for self-instruction on the job (Browder & Minarovic, 2000).

In contrast, a sight-word-only approach has several important limitations. First, students can learn to name sight words with little to no comprehension of the functional use of this skill. Browder and Xin (1998) noted that most studies on sight words have not measured comprehension or functional use. Both Conners (1992) and Katims (2000) also noted that reading instruction in general education focuses on gaining meaning from print versus simply identifying individual words. Thus, a second limitation of a sight-word-only approach is that it does not teach words in a larger language context. Joseph and Seery (2004) noted that a functional reading approach uses a whole-word approach without phonetic analysis. In contrast, Groff, Lapp, and Flood (1998) noted the need for explicit phonics instruction for students who struggle with literacy. In a review of the literature, Joseph and Seery (2004) found that students with mental retardation have the potential to learn phonics skills, but research studies have rarely focused on this critical component of learning to read.

Given these limitations, should functional reading no longer be an appropriate goal? It would be unfortunate to disregard the success students have had in learning sight words and their usefulness to tasks of daily living. The authors take the perspective that it is possible to embed sight-word instruction within a broader approach to literacy. There are three possible options for synthesizing sight words with literacy instruction. The first is to provide two concurrent forms of reading instruction — one that focuses on promoting literacy and the other on the systematic instruction of sight words in the context of daily living as a "safeguard" for having some functional reading if the student does not learn to read. A second option is to provide extensive literacy instruction in the elementary grades and transition to a functional reading approach if progress is not made by late middle school or high school. A third option is to make sight-word instruction part of the literacy program.

Sight-word instruction can be integrated with an emergent literacy program if used to promote the *concept of word.* The concept of word is an important early phonemic awareness skill for beginning readers that involves recognizing words as distinct elements within a text. Specifically, it is the ability to match spoken sounds with words in text (Bear & Barone, 1989). For example, Morris(1993) had students read a sentence until they had it memorized. Then students were asked to read the sentence and point to each word as it was read, to assess how well they were matching their verbal utterances to the printed symbols. Students can also demonstrate the concept of word by filling in a word in a repeated story line or "writing" what they hear through lines and spaces to indicate the number of words. Gately (2004) recommended several

strategies for teaching the concept of word that could be used concurrently with sight-word instruction.

One is to teach picture-word matching and then to embed these pictures into a written text. For example, the student might learn to match words such as *cookies*, *pizza*, and *popcorn* to pictures and then learn to read sentences such as, "I like cookies" and "I like pizza." In a study on sight-word instruction, Browder and Shear (1996) taught students weather-related sight words using a massed-trial format with known words interspersed. Students then learned to read the words in "story starters" such as, "It is cold," and "It is windy." Although they did not use pictures, their research illustrates that students can generalize from flash cards to embedding the words in text.

Gately (2004) also described the use of symbol-reading books that teachers can generate with software such as Writing with Symbols 2000 (http://www.widgit.com) or Boardmaker (http://www.mayer-johnson.com). Teachers might use a sight-word instruction strategy to help students master a set of high frequency symbols concurrent with providing instruction in reading symbol sentences. A third option is language experience stories in which students compose a story with the teacher based on a shared experience. These stories can often highlight target sight words. For example, a story about going to the symphony might contain the following underlined sight words: *We went to the symphony. We rode a bus. Both the girls and boys went. We had to enter quietly. The music was excellent.*

As these examples illustrate, it is not necessary to choose between a functional reading and a literacy-based approach to reading. Students can benefit from having sight-word instruction that is blended with literacy activities. It is also important to promote broader emergent literacy concepts, as shown in Table 4.2.

[1] We express our appreciation to Ms. Bree Jimenez, teacher, Charlotte-Mecklenburg Schools, Charlotte, NC; and doctoral student, Special Education Program, UNC Charlotte, for sharing this reading exercise that was used in her class.

Excerpted from Chapter 4 of **Teaching Language Arts, Math, and Science to Students with Significant Cognitive Disabilities,** edited by Diane M. Browder, Ph.D., & Fred Spooner, Ph.D.