Hakuta, Butler and Witt (2000) argue that oral proficiency in English takes three to five years to develop, and academic English proficiency (the ability to use English in academic contexts) may take four to seven years. In their view, a year is not a realistic time period for children to acquire English. However, Rossell and Baker (1996a) point out that children can benefit from instruction in English well before they have attained full proficiency in English. These latter authors agree that some bilingual programs in which children learn to read and write in the native language first, especially those in which children are rapidly transitioned to English, are just as effective in promoting English literacy as is English-only instruction. Nevertheless, they contend that, with native-language instruction, there is a risk that children will be kept in the native language too long and will not catch up to other children.

Evaluations of the research literature on bilingual education are difficult because bilingual education programs vary greatly in their approach to instruction and because many of the studies on bilingual education are methodologically flawed. In a meta-analysis of research on the effectiveness of bilingual education, Greene (1998) concludes that children who are taught using at least some of their native language perform significantly better on standardized reading tests (in English) than do comparable children taught only in English. However, other studies (e.g., Genesee, Holobow, Lambert & Chartrand, 1989; Gersten, 1985) have found structured immersion to be more effective in promoting second-language literacy than is teaching in the native language first.

Despite these controversies, readers should keep in mind the points of agreement outlined earlier in this section.

Children Who Speak English Dialects

Many children can speak English, but use a dialect that differs from the standard English of formal schooling. A dialect is a variant of a language characterized by differences in pronunciation, grammar or vocabulary relative to the standard form of the language. There are numerous dialects of English, each associated with a wide range of features (see, e.g., Delpit, 1995 and Heath, 1983). Bilingual specialists, ESL (English as a Second Language) specialists, and speech and language specialists can serve as useful resources in this area.

In order to help these youngsters learn to read and write standard English, teachers must understand the nature of dialect (e.g., that dialects are rule-governed but involve a system of rules different from the standard form of a language). A teacher who is not aware of the linguistic features of a given dialect may think that a child is language deficient, may misinterpret a dialect pronunciation as a word-decoding error (Delpit, 1995), or

Teachers of English-language learners need knowledge about how to develop the reading-related competencies important to all readers, including word-identification and comprehension competencies.

may inadvertently choose confusing examples of words for classroom instruction (National Research Council, 1998). Conversely, a teacher who is knowledgeable about the structure of a given dialect can use that knowledge to help a child acquire the standard English form. Suppose, for example, that a child says, "I walk to the store," and the teacher knows that the child speaks a dialect in which the inflectional ending <u>-ed</u> is frequently omitted. The teacher can ask the child if this action happened in the past and, if so, can explain that in school we say "walked" (or "jumped," "looked," etc.) to indicate a past action. This kind of instruction must be done in a way that does not convey criticism or disrespect of a child's cultural or linguistic background.

It is important for all children to learn to read and write standard English. Nothing will quash classroom discussion more quickly than constant correction of children's grammar.

Also, although it is important for all children to learn to read and write standard English, the teacher should use good judgment about when it is appropriate to address dialect. For example, nothing will quash class-room discussion more quickly than constant correction of children's grammar. However, writing activities which lend themselves to reflection and editing may be a particularly opportune time to teach children about the conventions of standard English (Delpit, 1995).

Children With Disabilities

Children with disabilities that affect oral-language development, such as those with hearing impairment, fluctuating hearing loss (e.g., from recurrent ear infections), or language disorders, are at greatly added risk of reading difficulties. Studies suggest that approximately 40 to 75 percent of preschoolers with specific early-language impairments develop later reading problems, with the risk highest for preschoolers who have particularly severe or persistent impairments (Scarborough, 1998). However, even preschoolers who have had milder language impairments and whose language appears to have caught up to age norms by the onset of formal schooling are at greater risk of reading problems than are other children. Therefore, children who have a history of preschool language difficulties need to be monitored carefully for signs of reading difficulties.

Emergent Literacy

Young children, especially those who have been read to and exposed to other literacy activities (such as writing) in the preschool years, have learned a great deal about reading before they even begin formal schooling. These literacy-related behaviors characteristic of young children are sometimes termed "emergent literacy" (Clay, 1991; Holdaway, 1979; Strickland & Morrow, 1989; Teale & Sulzby, 1986). Typical characteristics of emergent literacy include a strong interest in books and in being

read to, emergent reading (e.g., the child "reads" a familiar book from memory, but does not read in the conventional sense), and emergent writing (e.g., the child "writes" a message using scribbles, pictures or letter-like forms, but does not write in the conventional sense). Many basic print concepts, such as how to orient a book, the idea that print conveys meaning or the idea that printed words are separated by spaces, also may be acquired. Although emergent literacy does not involve conventional reading and writing, the behaviors and knowledge involved in emergent literacy form a very important foundation for later literacy learning.

Family literacy programs are important, especially for children who may come from homes with low levels of literacy (see, e.g., Neuman, 1996). All families should be provided with information that will help them to support their children's literacy learning and should be made aware of expectations for children's performance, not only in the preschool years (Connecticut State Board of Education, 1999b), but also during the course of formal schooling.

The Nature Of Written English

Phonological Awareness, Phonemic Awareness And The Alphabetic Principle

English uses an alphabetic writing system; that is, English letters correspond roughly to sounds in spoken English. Alphabets require beginning readers to have at least a rudimentary sensitivity to sounds in spoken words (phonological awareness). Young children's phonological awareness may include the ability to rhyme words ("cat" rhymes with "bat"), to clap out syllables in words (three claps for "butterfly"), or to recognize similar sounds at the beginnings of words ("Matthew" starts with the same sound as "Molly"). Phonemic awareness, a more advanced form of phonological awareness, is the understanding that spoken words can be broken down into sounds or phonemes (e.g., the spoken word "bath" has three phonemes in it: /b/, /a/, /th/).

Phonological and phonemic awareness are **oral language** competencies; they are **not** the same as knowledge of letter sounds or the ability to decode printed words. Phonological and phonemic awareness are essential prerequisites for learning to read and write in an alphabetic system. A child who lacks sensitivity to sounds in spoken words will have difficulty grasping the alphabetic principle, that is, the idea that the letters in printed words represent the sounds in the spoken words (e.g., in the spoken word "bath," the first phoneme is represented by the letter \underline{b} , the second by the letter \underline{a} and the third by the letters \underline{th}). Research suggests that many preschoolers, especially those exposed to literacy activities at home, de-

Phonological and phonemic awareness are essential prerequisits for learning to read and write in an alphabetic system. Phonological awareness is a strong predictor of beginning reading achievement.

velop phonological awareness spontaneously, but phonemic awareness usually requires more explicit instruction (National Research Council, 1998). Phonological awareness is a strong predictor of beginning reading achievement, and explicit teaching of phonological and phonemic awareness to children who lack these abilities improves both reading and spelling achievement (National Research Council, 1998; National Reading Panel, 2000).

The National Reading Panel (2000) concluded that phonemic awareness instruction benefits a variety of children, including beginning readers in general, at risk children, children from a range of socioeconomic status (SES) levels, older (second through sixth grade) children with reading disabilities, and children learning to read in other alphabetic languages as well as in English. Phonemic awareness instruction is especially effective when combined with instruction in letter names and sounds and, in most cases, should not require large amounts of instructional time; effective programs lasted less than 20 hours in total. Although phonemic awareness instruction benefits almost all kindergartners, the National Reading Panel suggested that, beyond kindergarten, children should be assessed before being provided with phonemic awareness training. The panel also cautioned that phonemic awareness is not acquired for its own sake, but rather for its role in helping children understand the alphabetic principle in reading and spelling words.

The Complexity Of English Spelling

Compared to many other alphabetic languages, English has a relatively complex spelling system. Consider, for example, Spanish, another alphabetic writing system. In the written Spanish word <u>adios</u>, each letter represents one sound—there are five phonemes, and five letters. This is often (though not always) the case with Spanish words. Furthermore, in Spanish, a given letter usually represents the same sound; for example, the letter <u>a</u> is associated with the same sound in most words: <u>adios</u>, <u>hola</u>, <u>manana</u>, <u>tamale</u>, <u>abuela</u>, etc.

By contrast, in English, some letters, especially vowels, often have varying sounds depending upon their position in words and surrounding letters in the word. For example, the letter <u>a</u> can have a short vowel sound as in <u>cat</u>, a long vowel sound as in <u>cake</u>, an /aw/ sound if it is followed by a <u>w</u> or a <u>u</u> as in <u>saw</u> or <u>cause</u>, a schwa sound (an unaccented vowel sound) if it is a prefix as in <u>ago</u>, <u>along</u> and <u>above</u>, and so on. Furthermore, groups of letters often represent a single sound, for example, <u>ph</u> for /f/ or <u>igh</u> for /i/. And even entire syllables can have distinctive spellings, for example, common suffixes (e.g., tion for /shun/).

It is not that most English words are "irregular" and can't be decoded or spelled in predictable ways. For example, letter patterns such as <u>igh</u> and <u>tion</u> are consistently associated with the same sounds across a wide variety of English words (<u>sigh</u>, <u>sight</u>, <u>bright</u>, <u>might</u>; <u>nation</u>, <u>station</u>, <u>fraction</u>, <u>caption</u>). Rather, many English words cannot be decoded **in a letter-by-letter fashion**, but instead require attention to letter **patterns** within words. For example, the child who tries to decode <u>nation</u> in a letter-by-letter fashion is likely to come up with something that sounds like "nay-tie-on" instead of the correct word, whereas the child who recognizes <u>tion</u> as a unit, and knows the sound it makes, will probably decode the word successfully. That is why word recognition and spelling instruction must extend beyond teaching individual letter-sound correspondences to teaching larger spelling-sound patterns and conventions.

Furthermore, because some sounds can be spelled in multiple ways, competencies such as phonemic awareness, knowledge of letter-sound correspondences and knowledge of spelling patterns are necessary, but not sufficient, to spell many English words correctly; some familiarity with the printed word also is often required. For example, to spell the word boat correctly, children need to be able to segment the word into phonemes and attach the correct letters to each phoneme. However, the long "o" can be spelled in a number of different ways: oa, but also ow (as in bowl), oe (as in hope), and so on. There is no rule to tell the speller which spelling of the long of to use; he or she needs to have some familiarity with the printed word boat to recognize that bote and bowt just don't "look right." Thus, extensive exposure to books and print is important to spelling as well as reading achievement.

These complexities of written English may help to explain the consistent finding that beginning readers in general, and at-risk readers in particular, benefit from explicit, systematic instruction in word decoding and spelling, popularly termed "phonics instruction" (Adams, 1990; National Reading Panel, 2000; National Research Council, 1998). As will be explained further in the next section, this kind of instruction is very important in teaching reading at the K-3 level, but should always be part of a much more comprehensive program of reading instruction.

The Reading-Writing Connection

Writing reinforces the links between spoken and written language. Writing activities focus children's attention on the details of print and are extremely helpful in developing a variety of reading-related competencies, such as word decoding, knowledge about grammar, knowledge about text structure and spelling. Invented or temporary spelling, in which children use their knowledge of letter-sound correspondences to write unknown words, is typical of children at the beginning stages of learning to read

Writing reinforces the links between spoken and written language.

(i.e., kindergarten and first grade). Invented spelling allows children at very early levels of reading and spelling development to write much more than they would if they had to be preoccupied with spelling every word correctly. In addition, invented spelling may not only reinforce lettersound knowledge, but also promote phonemic awareness and understanding of the alphabetic principle.

Children's invented spellings provide a valuable information source for teachers to use in ongoing assessment. For example, a child struggling to write the word leader, who comes up with the invented spelling leder, has demonstrated good phonemic awareness and understanding of the alphabetic principle, even though he or she has not spelled the word in the conventional way. This child needs to learn vowel spellings, specifically, that the vowel sound /e/ can be represented by the letters ea. A different child, who produces ldr for the same word, still needs work on phonemic awareness, especially on attending to vowels and syllables within words. The second child might be encouraged to say and "stretch" the word, then try to transcribe the sounds in the middle of the word.

However, systematic teaching of conventional spelling is essential. In all grades, including kindergarten, children should be learning the correct (conventional) spellings of some common words, and the emphasis on conventional spelling should quickly increase as children progress in reading. Children also should edit their writing for correct spelling. As in the case of word decoding, learning conventional spelling should not be left to chance, but must be explicitly taught (National Research Council, 1998).

Writing is critically important in developing other reading competencies, such as reading comprehension and vocabulary.

Writing is critically important in developing other reading competencies, such as reading comprehension and vocabulary. Excellent models of good writing come from children's literature and nonfiction books, including the use of descriptive words and sentences, effective beginnings and endings, and various ways to organize a piece of writing. As children gain skill in writing, they can respond to what they have read with more lengthy pieces of work, as well as compose original stories and write down personal thoughts and experiences for others to read. The more children think about what they want to say, and struggle with how to say it in a way others will understand, the more they draw on their reading for new vocabulary and ideas. As children progress in writing, they can develop greater powers of comprehension and critical thinking that translate back to reading. Skillful feedback and coaching from the teacher is essential at all stages of writing.

Thus, writing reinforces and develops reading in multiple ways. Writing should be an integral part of reading instruction from children's earliest years in school.