BEST PRACTICES IN LITERACY INSTRUCTION

Third Edition

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THE GUILFORD PRESS
New York London

Chapter 5

BEST PRACTICES FOR LITERACY INSTRUCTION FOR ENGLISHLANGUAGE LEARNERS

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This chapter will:

- Provide background information relevant to understanding the demographic and policy context surrounding instruction for English-language learners (ELLs).
- Highlight the differences in learning to read a first versus a second language.
- Highlight the role of oral language proficiency in learning to read and discuss the implications for the teaching of English alphabetics to children not fully in command of the English language.

This chapter focuses on research and theory that can guide the design and delivery of instruction in English alphabetics for English-language learners (ELLs). In writing a review piece of this sort, one risks portraying ELLs as a homogeneous group of learners that stand to benefit uniformly from the instructional practices one happens to review. Such a portrayal of ELLs would be, of course, incorrect. The ELL designation applies to youngsters who vary by age, country of origin, mother tongue, socioeconomic status, degree of access and exposure to formal school-

ing, and so on. Variations among these factors influence the extent to which instructional practices can favorably impact learning to read in a second language. Indeed, strategies that may prove effective with 10-yearold ELLs who have already learned to read in their first language may have little applicability for teaching 15-year-old ELLs who have been denied access to formal schooling prior to entering the United States. Such vast differences in the social and educational conditions and learner attributes characterizing ELLs should not be taken as an indication that reading instruction for this population cannot follow a principled and systematic process. Rather, it should indicate that a first step in a principled approach to ELL reading instruction involves identifying the various ways in which ELLs differ from one another and from native English speakers. It should also indicate the need to examine the role that these differences may play in determining the success of an instructional intervention. Thus, a goal throughout this chapter will be to direct attention to the sources of differences in ELL reading development that may dictate the need to radically alter instruction or (more likely) to adapt instruction in English alphabetics to accommodate students' literacy needs better.

The influence of the report of the National Reading Panel (NRP; 2000) on the delivery of reading instruction to schoolchildren in the United States has prompted questions about the extent to which the findings of the NRP are applicable to children who are learning to read in a language that they do not speak natively. In this chapter the discussion is limited to highlighting ELL factors that are relevant to instruction in alphabetics (one of the three areas of concern to the NRP), with a particular focus on the interplay between oral language development and the development of knowledge of alphabetics.

This discussion on best practices for ELLs begins with a description of the demographic shifts in the U.S. school population and a brief discussion of the policy context surrounding ELL instruction in the United States. The focus on demographic and policy changes serves to highlight the fact that both are creating increased demand for expertise in ELL reading instruction from all literacy practitioners.

THE DEMOGRAPHIC AND EDUCATIONAL POLICY CONTEXT

The most recent estimates available from the National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs (NCELA; 2006) indicate that there are approximately 4.7 million students who meet the criteria for ELL designation in US schools. This number represents a 95% increase in the ELL population since 1991,

compared to 12% growth in the overall K–12 population in the United States. In as many as 16 states the growth in ELL population has exceeded 200% (NCELA, 2006). Across the United States, ELLs constitute approximately 19% of enrollments, but as many as 10 states have enrollments upward of 20% (Capps et al., 2005).

According to estimates available as of the year 2000, the majority of ELLs—about 79% or so—are Spanish-speaking. Vietnamese, Hmong, and Cantonese speakers are the next three largest groups, accounting for 1.95, 1.55, and 1.02% of the ELL population. The rest represent as many as 380 different language groups (Hopstock & Stephenson, 2003).

At the same time that the number of ELLs is increasing, the availability of varied pedagogical models for serving this population is decreasing despite the fact that every study that has compared English-only and bilingual models has failed to find evidence suggesting that bilingual programs are detrimental to ELL academic learning (August & Shanahan, 2006).

The passage of ballot initiatives in California, Arizona, and Massachusetts has resulted in the elimination or has limited the availability of instructional models that are based on bilingual instruction. In some cases this has also limited the availability of English as a second language (ESL) instruction for ELLs. In California, for example, Proposition 227 prescribes that "children who are English learners shall be educated through sheltered English immersion during a temporary transition period not normally intended to exceed one year" (Unz & Tuchman, 1998).

The demographic trends, coupled with reports of a disappointing level of success toward closing the educational achievement gap for ELLs (August & Shanahan, 2006), accentuate the urgent need for instructional approaches that attend to the linguistic and instructional needs of ELLs. The causes of the educational achievement gap are complex, and the solutions surely do not reside exclusively in the realm of literacy education. But, increasing the effectiveness of our efforts in literacy development for ELLs is an important part of the solution.

LEARNING TO READ IN A SECOND LANGUAGE

One way to gain appreciation of the challenges children encounter when learning to read a language they do not fully command is to reassess what a native English-speaking child knows about the English language when he or she begins formal instruction in reading and after at least 5 years of sustained exposure to the language. During this time, a child has acquired the ability to perceive (although not necessarily to isolate and manipulate) pretty much all the sounds of his or her language (Menn & Stoel-Gammon, 2000). He or she is able to recognize changes in the meanings of words in

relation to changes in sound—for example, recognizing that the addition of a single sound /s/ to cat significantly alters its meaning. Not only does he or she understand how the phoneme /s/ works in cat, but also he or she implicitly knows its function as an inflectional morpheme that when added to other words signals "more than one" (Tager-Flusberg, 2000).

At the time a child begins formal reading instruction, his or her vocabulary will consist of several thousand words, and he or she will have command over most of the grammar used (Tager-Flusberg, 2000). In fact, in terms of the simplest grammatical forms, the child's usage will be comparable to that of adult native speakers (Tager-Flusberg, 2000). Additionally, the child will have acquired some fairly sophisticated knowledge of language pragmatics. It will be possible to understand, for example, that if mom asks whether it is time to do homework, mom is not really asking for a time check. The difference between intended meanings and stated meanings is in some cases already apparent (Bryant, 2000).

The books the native speaker will use to learn to read have been designed with his or her language abilities in mind. The words that appear in the books are words that he or she can use and that others in his or her linguistic community use on a daily basis. The child is learning that print is talk written down, and fortunately the books contain examples of how others in his or her world talk.

In this light, the challenges associated with learning to read in a language one does not speak or understand become more obvious. Learning to read builds on a child's capacity to communicate orally. Learning to read in a language one does not command orally can present multiple challenges for a child. A very basic example of such challenges involves recognizing what constitutes a word in the new language, something we assume most native speakers have mastered in relation to oral language when they are ready to learn to read. Yet, at the very early stages of learning, second-language learners must confront the challenge of figuring out a reliable way of recognizing boundaries for words in the new language (Saffran, Senghas, & Trueswell, 2001). Natural speech is a continuous blend of words; so, word boundaries are not clearly identifiable. The pauses one hears between words are not really present in the acoustic signal. In developing their first language, children are aided by multiple linguistic and social scaffolds that gradually build their skill to recognize the boundaries for words in speech.

The challenges are not confined to the emergent stages of secondlanguage (L2) learning. Equally challenging is the task of constructing meaning from text when a high proportion of the words in the text are unknown or when the complexity in the grammatical structure of sentences in the texts surpasses the grammatical proficiency of the reader.

In issuing their recommendations about optimal conditions for

learning to read in a second language, the experts on the National Research Council's Committee on Preventing Reading Difficulties in Young Children recognized the fundamental relationship between oral language proficiency and early reading achievement (Snow, Burns, & Griffin, 1998). They recommended that

if language-minority children arrive at school with no proficiency in English but speaking a language for which there are instructional guides, learning materials, and locally available proficient teachers, these children should be taught how to read in their native language while acquiring proficiency in spoken English and then subsequently taught to extend their skills to reading in English.

If language-minority children arrive at school with no proficiency in English but speak a language for which the above conditions cannot be met and for which there are insufficient numbers of children to justify the development of the local capacity to meet such conditions, the instructional priority should be to develop the children's proficiency in spoken English. Although print materials may be used to develop understanding of English speech sounds, vocabulary, and syntax, the postponement of formal reading instruction is appropriate until an adequate level of proficiency in spoken English has been achieved. (p. 11)

State educational policies have resulted in high-stakes testing affecting all children. Therefore, delaying reading instruction for ELLs, especially given the little guidance offered by the research community in answering questions related to either the appropriate lengths of such delays or effective methods for promoting and/or accelerating the acquisition of oral language skills for ELLs, is not a reasonable proposition for many if not most school districts. But, the theoretical and empirical evidence that points to the critical role of oral language in first-language literacy development, coupled with pressures for accountability in student literacy outcomes, demands that we think creatively about ways of designing reading instruction that explicitly attends to weaknesses in oral proficiency so that ELLs can benefit from the reading instruction they will receive. Properly scaffolded reading instruction can become an additional source of language input, and well-chosen print materials can, by virtue of the modality, afford opportunities to revisit, reexamine, and contrast that input in a manner that is conducive to language learning.

INSTRUCTION IN ALPHABETICS

Like all children, ELLs will benefit from opportunities to learn in an environment that is affirming of their individual and social identity and

from instruction that builds upon their strengths and recognizes their instructional needs. The following sections review literature that can help inform decisions about how to adapt early reading instruction so that it builds on learners' strengths and addresses their language needs and their literacy needs in the areas of phonological awareness, alphabet knowledge, and phonics knowledge. As suggested by the National Reading Panel (2000) and the NRC (Snow et al., 1998) report, all three skills are foundational components for learning to read in English.

Phonological Awareness

Phonological awareness is often defined as awareness that words are made of smaller units of sound that can be manipulated and changed (Moats, 2000; Snow et al., 1998). This awareness is fundamental to learning to read in languages that employ an alphabetic writing system. The ability to isolate sounds and correlate them to the orthographic system is essential for grasping the alphabetic principle and is an essential step toward developing the ability to effortlessly retrieve the meaning of printed words from the oral lexicon.

In order to learn to read in English, ELLs, like native speakers, need to develop phonological awareness (PA). The review by the National Literacy Panel (August & Shanahan, 2006) on the development of reading readiness skills among ELLs concluded that there was a great deal of variation in the level of attainment of PA among ELLs and that this variation in levels of attainment was related to factors such as age, level of L2 proficiency, language and literacy experiences as well as the degree of mastery of each language relative to the other (Lesaux & Geva, 2006). However, the NLP also concluded that difficulties in PA are not placing ELLs at risk for reading difficulties at a higher rate than native speakers (Lesaux & Geva, 2006). The NLP also points out that achievement in PA does not appear to function in a purely language-specific manner. Rather, the evidence suggests that PA skills developed in the native language may be instrumental to the development of second-language PA, as evidenced by the fact that assessments of PA in the first language are predictive of reading outcomes in the L2 (Lesaux & Geva, 2006).

Given the variation in PA attainment among ELLs, it is important to understand the possible sources of variation. In particular, it is worth considering how differences in oral language proficiency might affect the development of PA in a second language.

Those who study the development of PA among native speakers often point to two properties of natural speech that make it difficult for children to grasp on their own the concept that words are made of smaller units of sound (Moats, 2000). In natural speech phonemes are unsegmented and

coarticulated (Moats, 2000). That is, words are not uttered one sound at a time; rather, sounds blend into one another. Additionally phonemes are influenced by the phonemes that precede and follow them. To develop PA children need to be able to ignore what is most salient to them in a word, namely its meaning, and create discrete units out of a speech signal that is seamless (Moats, 2000). To complicate matters further, those discrete sounds that are extracted from speech are never identical to the sounds as they occur within a word. This is because in making the sounds discrete one strips them of the qualities they achieve when pronounced in a coarticulated manner in natural speech (Moats, 2000). Thus, when one asks a child to decide if the sound /p/ appears in the word plant, one is not exactly asking the child to compare two identical entities.

Now consider an additional characteristic of speech perception—the categorical perception of phonemes—that can differentially impact secondlanguage speakers and native speakers (Bialystok & Hakuta, 1994). Even though phonemes are articulated as a continuous acoustic signal, the perception of phonemes is categorical. A classic illustration of this exists in the acoustic feature that allows one to contrast the phonemes /b/ and /p/; namely, voice-onset timing (VOT). These two phonemes differ in the time lapsing between the output of air on the lips and the vibration of the vocal cords. Technically speaking, /b/ fades into /p/ as VOT increases, but perceptually and thus experientially /b/ changes to /p/ at a particular time point in VOT (Bialystok & Hakuta, 1994; Moats, 2000). The time point at which this drastic change in perception occurs varies by language. Spanish speakers perceive the switch earlier than English speakers, for example (Bialystok & Hakuta, 1994). What is relevant to the present analysis is the fact that the boundaries for the perception of phonemes are set very early in development. Moreover, the boundaries that are set in one's first language are the same ones that apply when processing phonemes in a second language, at least during the initial stages of second-language development (Bialystok & Hakuta, 1994). Over time, and with exposure to the second language, the boundaries shift closer to those applied by native speakers, but they never quite correspond exactly to the boundaries of native speakers (Bialystok & Hakuta, 1994).

When applied to the previously described task of deciding whether the sound /p/ appears in plant, the second-language speaker is confronted with the following challenge. Just like the native speaker, he or she must compare the discrete phoneme /p/ articulated by the examiner to the coarticulated /p/ in plant. Unlike the native speaker, the second-language speaker must further analyze the sounds using the phonemic categories set by his or her first language.

The good news, as was reported earlier, is that ELLs are capable of mastering this seemingly complicated task. How they come to master it

is not fully understood, and neither are the reasons why they fail to master it when they do. One might speculate that those who succeed are aided by the metalinguistic skills—including PA skills—they have developed in their first language, as evidence suggests that systematic exposure to more than one language can in fact enhance metalinguistic abilities in bilingual children (Bialystok, 1997). Additionally, one would expect that systematic instruction in PA also aids the process. Nevertheless, it is important to understand the complexity of the process in order to make instructional decisions that address differences in the rate of attainment of this skill among ELLs.

As one considers the effects of limited English proficiency on the acquisition of phonological awareness, it would seem appropriate to draw attention to the distinction between speech production and speech perception, partially because the presence of accented speech is often mistaken for PA difficulties. While speech perception and production are undeniably related to each other, they are by no means synonymous. The presence of accented speech, as evidenced for example in some Spanish speakers' highly similar pronunciation of fit and feet, does not necessarily indicate an inability to perceive the shift in meaning signaled by the vowel difference in these two words during speech perception. The development of phonological awareness is very much a process that hinges on the perception of sound differences and the ability to manipulate those sounds in one's head. If we are concerned about ELLs' phonological awareness development, we need to directly assess their ability to perceive and manipulate sounds. A reliance on samples of continuous natural speech production will not provide an accurate assessment of PA.

How should one train a child who is an emergent English learner to perceive the sounds of English? While it may appear that giving ELL students practice with sound discrimination activities may be one fruitful way to encourage the development of phonemic perception abilities, two arguments are offered against doing so or at least against doing so at the expense of opportunities for exposure to meaningful communication. The report on *Preventing Reading Difficulties in Young Children* (Snow et al., 1998) reviews evidence that links phonological awareness development to language proficiency among native speakers of English (see also Goswami, 2000). The report states, for example, that

performance on phonological awareness tasks by preschoolers was highly correlated with general language ability. Moreover, it was measures of semantic and syntactic skills, rather than speech discrimination and articulation, that predicted phonological awareness differences. Correlations between metalinguistic and more basic language abilities have similarly been reported by others (e.g., Bryant, MacLean, Bradley, & Crossland, 1990;

Bryant, 1974; Smith & Tager-Flusberg, 1982). These findings indicate that the development of phonological awareness (and other metalinguistic skills) is closely intertwined with growth in basic language proficiency during the preschool years. (p. 53)

If language proficiency differences among native speakers can impact the development of PA, it stands to reason that any investments in developing the language proficiency of ELLs could also have an effect on their ability to discriminate phonemes in the second language, and further down the line, when coupled with phonological awareness instruction, on their ability to reflect upon and manipulate phonemes in English (Rolla-San Francisco, Carlo, August, & Snow, 2006).

On theoretical grounds, it is also worth noting that, while phonemes are not in and of themselves a unit of meaning, they are the smallest unit of sound that makes a difference in meaning. The differences in meaning that are signaled by phoneme changes may, possibly, provide a stronger motivation to attend to the changes in sound than might be afforded by discrimination tasks in which semantic contrasts are reduced.

Learning the Alphabet

For many second-language learners, learning to read in a second language also involves learning a new script. The literature on children learning to read in their native language points to the importance of learning to discriminate among the letters in the alphabet in a rapid and reliable manner (Adams, 1990). Most children learn to differentiate these graphic symbols after many years of exposure to them, through language games, books, and access to print-rich environments (Adams, 1990). Research has shown that children's knowledge of the letters of the alphabet is a strong predictor of future reading achievement (Adams, 1990).

Despite the demonstrated importance of letter recognition skills to the development of reading ability in monolingual readers, little attention has been directed at understanding the development of these skills in the context of second-language reading, particularly among children whose early literacy experiences, whether via environmental print or formal instruction, involve use of a different script (e.g., Arabic) or even an entirely different writing system (e.g., Japanese).

To date, perhaps the most persuasive data suggesting that acquisition of letter knowledge could be an exacting and prolonged process for English learners lacking familiarity with the Roman alphabet was provided by Brooks (1977) in a study developed to demonstrate the superiority of grapheme-phoneme correspondence strategies over paired-associate learning for word recognition among adults. In this study English-speaking col-

with one of six known sounds. The subjects' fluency in recognizing the new alphabet developed over many trials and required approximately 200 trials before they were able to apply the sound-symbol correspondences efficiently enough to speed the recognition time of the words over what it took to recognize the words learned through paired association. As Brooks reports: "[The] comparisons between the paired-associate and orthographic conditions, however, do not quite get at the feeling of frustration so strongly expressed by many of our subjects. As they tell the story they often would have all the letters translated before they could put together a full word" (p. 167).

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lege students learned a set of six novel characters and learned to pair each

These skilled college readers expended a great deal of effort to learn a very small set of new symbols. It is probably safe to assume that young inexperienced readers attempting to master a larger set of symbols will need a great deal of practice to reliably distinguish letters of the alphabet if their first encounters with this alphabet occur at school. Qualitative differences in early print experiences may call for differentiation in alphabet instruction among ELLs.

Word Identification

In order to read with comprehension ELLs, like native speakers, need to be able to recognize printed words accurately and effortlessly (Birch, 2002; Perfetti, 1992). Research on the development of word recognition among young ELLs has generated some understanding about the degree of success ELLs experience in achieving accurate identification of printed words. In the NLP report Lesaux and Geva (2006) concluded that, as a group, second-language learners do not differ from native speakers in their attainment of the ability to accurately decode and apply graphemephoneme correspondences to words in print and in their spelling. However, caution in interpreting this finding is recommended, because, as Lesaux and Geva point out, the prevalence of differences in the efficiency of word identification skills has not been thoroughly studied. One risk associated with ignoring speed differences in word identification is that one may erroneously reach the conclusion that the well-documented gaps in ELLs' overall reading attainment (August & Shanahan, 2006) must be due to differences in higher-level skills such as knowledge of word meanings, syntactic processing, or background knowledge because they have mastered accurate word identification. While it is to be expected that differences in the attainment of higher-level skills will affect reading outcomes for ELLs, one must also keep in mind potential differences in the efficiency of processing of words because, as we know from research on monolinguals (Gough, 1972; Perfetti, 1992; Stanovich, 1986) these can

significantly disrupt the reading process. Thus, both research on the development of word reading abilities among ELLs and instructional practices in reading must address processing speed issues, as these may in fact be more sensitive to differences in performance between ELLs and monolinguals (Ransdell & Fischler, 1987; Mägiste, 1979).

ELLs, like their native-speaking peers, need to develop what Perfetti (1992) refers to as impenetrable word recognition processes. This means that identification of the word via phonological and orthographic information occurs quickly and that it does so with little demand placed on attentional resources. It also means that the outcome of this process is activation of the word's *meaning* (not just pronunciation) without reliance on contextual or other higher-order information. Accurate word reading that does not result in activation of a word's meaning does not meet the conditions for impenetrability. Word reading that does not lead to automatic access of a word's meaning is likely to lead to the application of what Stanovich (1986) refers to as compensatory strategies when discussing the word reading difficulties of native speakers. If, upon encountering a word and perhaps even after accessing its correct pronunciation, ELLs need to rely on the surrounding context and prior knowledge to generate what would be nothing more than a guess as to what the word might mean, they too will be applying compensatory strategies.

If one aims to develop the autonomous word reading skills displayed by fluent monolingual readers among ELL readers, one must move beyond teaching practices that restrict performance to the achievement of accurate word pronunciation. Word identification instruction must be designed so as to enable students to pronounce the word and access its meaning or meanings. In a recent study of Spanish-speaking ELLs, Proctor, Carlo, August, and Snow (2005) reported evidence that suggests that "given adequate L2 decoding ability, L2 vocabulary knowledge is crucial for improved English reading comprehension outcomes for Spanish-speaking ELLs" (p. 246). For students to be able to access the meanings of words once they have activated the appropriate phonological codes, they need to develop a deep and broad oral vocabulary. With this in mind we turn to a discussion of vocabulary instruction for ELLs.

Vocabulary

The gap in English vocabulary knowledge between ELLs and their native-speaking counterparts is wide (Nation, 2001). Native speakers start school with the advantage of having accumulated several thousand English words in their oral vocabularies. Formal instruction will add words to that base at a rate of about 3,000 words every school year (Nagy, Herman, & Anderson, 1985). ELLs vary greatly from one another in both

the breadth and quality of their vocabulary knowledge (Ordonez, Carlo, Snow, & McLaughlin, 2002), depending on the richness of the English input they have access to, the richness of the native language input they have access to, and among other factors their access to direct and systematic vocabulary instruction and other more general language instruction.

There is a wealth of research and theory that informs vocabulary instruction for native speakers (Beck, McKeown, & Kukan, 2002; Graves, 2005; Hiebert, 2005; Nagy, 1988; Stahl & Nagy, 2006). Direct and systematic vocabulary instruction for ELLs can follow the principles that guide best practices in vocabulary instruction for native speakers. However, in order to fully meet the needs of ELLs, some adjustments and modifications are necessary (Carlo et al., 2004).

Word Choice

One cannot provide effective vocabulary instruction for ELLs without thinking carefully about which words to teach. Moreover, the choice of words cannot be guided by the same principles we use to make word selections for native speakers, because their vocabulary needs are different. Indeed, vocabulary needs differ even among ELLs themselves, depending on their level of English proficiency. The most emergent ELLs will need to amass a large number of basic words that are part of the vocabulary of most 5-year-old native speakers. In many cases, the task of teaching these words is simplified by the fact that ELLs will already have the concepts indexed by those basic English words in their native language. Nevertheless, systematic opportunities for children to link their first-language words and concepts to English words need to be provided. Early and systematic introduction of these basic words is important, because they are used frequently in speech and in print, and instruction based on more sophisticated words builds on these more basic concepts (Beck et al., 2002). For example, instruction about the word predicament might rely on more basic words like problem, mess, or even fix. Of course, a word such as *predicament* could and should be taught by reference to synonyms in the child's first language if the language resources to do so are available. But, in the absence of bilingual teachers and/or bilingual materials, knowledge of the more frequent basic English words offers a bridge for teaching more sophisticated words that show up regularly in print.

First-Language Resources

A second modification recommended for ELLs involves making them aware of the resources for vocabulary learning that they already have in their first language. For children who read in their first language, access to a bilingual dictionary can be useful in supporting independent vocabulary learning strategies. Clearly, students need to be instructed on how to use this resource efficiently, emphasizing the importance of combining this resource with other vocabulary strategies such as using context to check the appropriateness of the meaning offered in the dictionary. Children who are not yet readers can also be encouraged to use bilingual dictionaries with the help of an adult speaker of the first language, thus facilitating the goal of legitimizing the language resources available within the family and community.

Another language resource that is available to children who speak languages that have common etymological roots with English are cognates. Cognates are words that have similar spelling and meaning in two languages. Often, cognates also have similar sounding pronunciations. Cognates can contain orthographic patterns that make the relationship between the words in the two languages highly transparent, as is the case with the word doctor in both Spanish and English. Sometimes the orthographic patterns make the relationship somewhat more opaque, as in jardín–garden or frenesí–frenzy. Children who can recognize these similarities in spelling and meaning and who can combine them with context-checking strategies can use cognate-recognition strategies as sources of information about unfamiliar words they encounter in text (Garcia & Nagy, 1993; Jimenez, Garcia, & Pearson, 1996; Nagy, Garcia, Durgunoglu, & Hancin-Bhatt, 1993).

The combination of cognate-recognition strategies with context-checking strategies is important, because some cognates can have multiple meanings. For example, the Spanish cognate for mass (masa) shares the English meaning relating to a quantity of matter but not the meaning relating to the religious ceremony. In Spanish, masa also refers to a type of dough.

The existence of words that share spellings but do not share meanings across the two languages also needs to be noted. These words are known as false cognates. An example of a false cognate is the word *pie*, which in Spanish means *foot*. The ratio of cognates to false cognates varies by language.

Oral Modality

Vocabulary instruction for ELLs needs to provide a way of accessing rich language. This is not easily done, because neither reading texts nor every-day oral language are good sources of rich language. Texts written at young students' reading levels (sensibly) avoid taxing young children's reading abilities with overly complex language (Beck et al., 2002). The language of everyday communication does not contain the sophisticated

language that appears in high-quality children's literature. Thus, vocabulary instruction for ELLs needs to unlock the sophisticated language we want students to learn from most print sources. This can be achieved by seeking opportunities to enrich the language used in the classroom for everyday communication and also by incorporating read-alouds chosen for their rich vocabulary and language.

Frequency and Quality of Exposure

A final modification requires attention to issues of frequency of exposure and quality of the exposure to new words. Not all words require the same level of attention during instruction (Beck et al., 2002). As was noted earlier, ELLs are likely to have acquired many useful concepts in their first language. In those cases in which all that is needed is acquisition of a new label, it is not necessary to provide the more complex instruction that one would use to build new concepts. But, in those cases where the words one is targeting are more complex, then, one needs to ensure that there are repeated exposures to the word and that the experiences with the words are not superficial. This is no different from what one would recommend as exemplary vocabulary instruction for native speakers. However, the manner in which one designs the activities to promote deep processing of the words has to be modified so that information about a word's meaning is not provided only via language. It is important to keep in mind that ELLs are not only working from a smaller vocabulary set but also are working from a weaker grammatical knowledge base and possibly a different set of culturally based assumptions. While it may be sufficient for native speakers to work with linguistically contextualized explanations of word meanings, ELLs may require images and other extralinguistic sources of information about words in order to fully grasp their meaning.

Following this reasoning, it is also important to point out the limited value of context-analysis strategies, especially when used with less proficient ELLs. Students who lack the grammatical knowledge required to analyze the linguistic context surrounding a word may not gain sufficient information from the text to generate plausible hypotheses about a word's meaning. Moreover, if too many words in a passage are unknown, the chances of using context productively are greatly reduced (Carver, 1994).

BEST PRACTICES IN ACTION

Learning to read involves mastering a graphic representational system that must ultimately map onto a system of meanings that support oral comprehension (Gough, 1972). To read with comprehension, ELLs need to

be able to link the phonological representation that has been accessed via decoding of the orthographic pattern to syntactic and semantic information about words reliably and efficiently. The explicit and systematic teaching of language to ELLs is a goal that extends beyond the realm of early reading instruction. But, early reading instruction can be designed in ways that maximize understanding of word meanings and grammatical functions and at the same time support the equally legitimate goal of helping students unlock the code. Highlighted here are three fairly simple activities and strategies that incorporate language scaffolds aimed at increasing the chances that ELLs will gain access to word meanings when reading.

Picture Walks

Illustrations play a very important role in scaffolding the reading experiences of beginning readers. Well-designed early readers often contain illustrations that carry the plot of a story accompanied by simple text denotive of concepts evident in the illustrations. The correlation between the text and the illustration supports students in noticing initial sounds and letters in words, common orthographic patterns across words that rhyme, etc. These scaffolds are very useful to native speakers who can easily access the words in English upon seeing the illustration and can then combine their knowledge of the word's sound with their knowledge of letter sounds. However, if the pictures do not serve to activate the English word because the object's label is not part of the child's oral vocabulary in English, then the pictures do little to support the acquisition and application of letter—sound correspondences.

In a research collaboration that includes the University of Houston, the Center for Applied Linguistics, and the University of Miami, first-grade teachers are modifying the picture walks they do at the beginning of their guided reading lessons to provide the language the children will need to build associations among the pictures, the words in oral language, and the printed words in the text. In addition to helping the students build a narrative from the pictures, as is customarily done with picture walks, the teachers point to and provide the names in English for objects and actions depicted in the illustrations. This simple modification has the potential to increase the instructional value of illustrations contained in the early readers for the ELLs, because, in the absence of the image-to-language link, the desired language-to-print link cannot be easily established.

^{1.} Optimizing Educational Outcomes for English Language Learners. Research grant awarded by the Institute for Educational Science to David Francis, Principal Investigator, University of Houston.

Teaching Sight Words and Orthographic Patterns with Picture Aids

The use of images for teaching word identification skills can be counterproductive if one allows students to use the image as a crutch for identifying the word instead of teaching them to use the word's orthography. But, it is equally counterproductive to teach ELLs to pronounce words for which they do not know the meaning. As stated earlier, the product of fluent word identification is activation of the correct lexical item. The following activity was adapted by Yania Aleman and Beatriz Iglesias, teachers in Miami-Dade County public schools, and tutors in a graduate course on clinical teaching taught by the author at the University of Miami. This activity using picture cards and words was designed to assist 8- to 10-yearold tutees who were ELLs and were experiencing difficulties in learning to read. The ELL adaptation consists of extending the use of the images beyond the use it is typically given with native speakers. The image is not used only to remind students of the orthographic contrast they are practicing, as is typically done with native speakers. Rather, it is used to remind ELLs of the meaning of every single word they work with during sight word practice and during instruction on orthographic patterns. The image does not need to represent the word perfectly. It only needs to serve as a reminder of the meaning that is discussed and agreed upon between the teacher and the student. Also, once the work with the orthographic pattern begins, the use of the image is restricted to trials in which the child is showing signs of giving up and only after having attempted to apply knowledge of the orthographic pattern. Ms. Alemán described the activity as follows.

"Preparations: After introducing the blend/digraph, I used clip art to represent the words containing the pattern [see Figure 5.1 for /st/ and /sl/]. I tried to incorporate pictures that relate to the words' meaning. If the word was in the reading, I used a picture that relates to the story. I printed the picture and words on computer paper and cut them into individual word cards that can be easily folded."

"Introduction: Once I introduced and taught the digraph/blend for the week, I presented each picture word card to the student. The student was able to see the word and the picture together. We practiced reading each word, using the pictures at least twice. Then I removed the illustration by folding the word card in half so that only the printed word is showing. If the student came across a word he had difficulty decoding he was able to flip the card and use the illustration to help him identify the word. The student practiced reading the words through sorting activities."

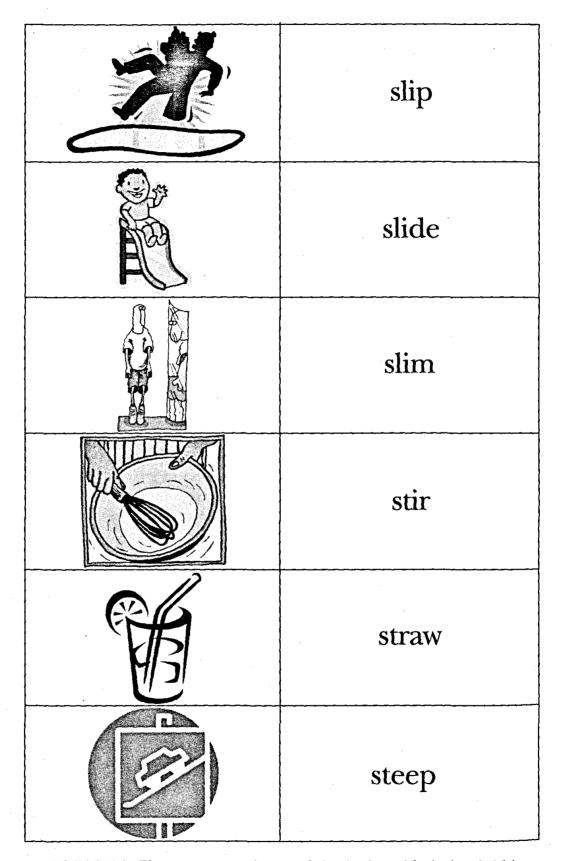


FIGURE 5.1. Picture representing words beginning with /st/ and /sl/.

Cognates

The following activity is intended for ELLs who are readers and speakers of Spanish. It formed part of a curriculum developed to increase ELLs' awareness of cognates in Spanish and English. The effectiveness of this curriculum is being tested in a joint study by researchers at the Center for Applied Linguistics and the University of Miami.² This particular activity was designed to increase learners' awareness of the variation in degree of orthographic and phonological similarity in Spanish–English cognates. It aims to encourage learners to look deeply into an English word's orthography to find similarities to words they may know in Spanish.

Sample Items: Identification of Letter Differences

Instructions to students: On the left-hand side, we have listed the Spanish cognates of the words from the passage. Write the English cognate for each Spanish cognate given. Once the English cognate has been written, indicate which letters are different between the cognates by circling the letters.

Spanish cognate

English cognate

astronaut momento planeta fotografía

Sample Items: Identification of Sound Differences

Instructions to teacher. Show students the following Likert scale on the overhead projector. Explain that some of the cognates sound more alike than others. On the overhead projector, direct students to identify how alike or not alike the sets of cognates sound on a scale of 1 to 4. There are no right or wrong answers.

edifice / edificio					
Sounds completely	Sounds slightly		Sounds exactly		
different	different	Sounds similar	alike		
1	2	3	4		

^{2.} Transfer of Reading Skills in Bilingual Children. Research grant awarded by the National Institute of Child Health and Human Development and the Institute for Educational Sciences to Diane August, Principal Investigator, Center for Applied Linguistics, as part of the program project entitled Acquiring Literacy in English Crosslinguistic, Intralinguistic, and Developmental Factors.

	mass / 1	nasa	
Sounds completely	Sounds slightly		Sounds exactly
different	different	Sounds similar	alike
1	2	3	4
	infirm / eı	afermo	
Sounds completely	Sounds slightly		Sounds exactly
different	different	Sounds similar	alike
1	2	3	4
	jocose / j	ocóso	,
Sounds completely	Sounds slightly		Sounds exactly
different	different	Sounds similar	alike
1	9	3	4

REFLECTIONS AND FUTURE DIRECTIONS

In recent years we have witnessed the enormous effort involved in trying to ensure that every primary grade teacher develops the knowledge, skills, and disposition that are required to provide excellent reading instruction to young children. For these efforts to benefit ELLs, they must include appropriate attention to the role of language in the development of reading.

Teaching ELLs to read in English also requires a commitment to teaching English. To the extent that efforts toward preparing reading teachers have ignored the teaching of language, they have failed to address one of the greatest challenges ELLs face in becoming highly skilled readers of English. The NLP review (Lesaux & Geva, 2006) suggests that ELLs catch up to their native-speaking peers on low-level components of the reading process such as PA and word reading (at least with respect to word-reading accuracy). The NLP review also suggests that ELLs don't catch up to their native-speaking peers on aspects of text processing that make demands on syntactic and semantic language processes.

Closing the gap in reading comprehension of ELLs does not require abandoning the progress that has been achieved in improving the teaching of foundational reading skills to ELLs. Rather, it requires that the teaching of foundational skills such as PA and word identification be linked to an equally comprehensive, explicit, and systematic model for teaching oral English to ELLs.

CONCLUDING COMMENTS

Throughout this chapter research and theory on first-language reading development has been combined with research and theory on second-

language learning to stress the importance of attending to the language—literacy link in designing reading instruction for ELLs. Research and theory speak directly to the involvement of oral language proficiency in the development of skills considered to be foundational to reading even among children who speak English natively. The language needs of ELLs cannot be comprehensively addressed through reading instruction alone. However, it is possible to capitalize on the many opportunities for language development that present themselves in the context of the reading lesson. The success of early reading instruction with native speakers of English depends in part on helping children establish a bridge between the orthography they need to learn and the language they already know. A step toward greater success in ELL reading instruction requires awareness of the fact that ELLs need to be supported as they build a bridge between the orthography they need to learn and a language they are still learning.

ENGAGEMENT ACTIVITIES

- 1. Find pictures depicting places or activities that one encounters routinely at home and places and activities one encounters routinely at school or in the larger community. Assess your ELL students by asking them to point to an object you name. Compare their identification of items (receptive vocabulary) to their production of the names of items you point to (productive vocabulary). Are there differences in their knowledge of English labels for the "at-home" words and the "out-of-home" words? If so, what might explain such differences?
- 2. Find a piece of expository text and a narrative text of roughly the same difficulty. Circle words that you believe would be most challenging to Spanish-speaking ELLs. Look them up in a Spanish-English dictionary, and note how many of the words in each text are cognates in Spanish. Are there differences in the prevalence of cognates across the two genres? If so, what might explain such differences?

REFERENCES

- Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT Press.
- August, D., & Shanahan, T. (2006). Developing literacy in second-language learners. Mahwah, NJ: Erlbaum.
- Beck, I. L., McKeown, M. G., & Kukan, L. (2002). Bringing words to life: Robust vocabulary instruction. New York: Guilford Press.
- Bialystok, E. (1997). Effects of bilingualism and biliteracy on children's emerging concepts of print. *Developmental Psychology*, 33, 429-440.

- Bialystok, E., & Hakuta, K. (1994). In other words: The science and psychology of second language acquisition. New York: Basic Books.
- Birch, B. (2002). English L2 reading: Getting to the bottom. Hillsdale, NJ: Erlbaum.
 Brooks, L. (1977). Visual pattern in fluent word identification. In A. S. Reber & D. L. Scarborough (Eds.), Toward a psychology of reading. New York: Erlbaum.
- Bryant J. B. (2000) Language in social contexts: Communicative competence in the preschool years. In J. B. Gleason (Ed.), *The development of language* (5th ed.). Needham Heights, MA: Allyn & Bacon.
- Bryant, P. (1974). Perception and understanding in young children: An experimental approach. New York: Basic Books.
- Bryant, P. E., MacLean, M., Bradley, L. L., & Crossland, J. (1990). Rhyme and alliteration, phoneme detection, and learning to read. *Developmental Psychology*, 26(3), 429–438.
- Capps, R., Fix, M. E., Murray, J., Ost, J., Passel J. S., & Herwantoro S. (2005). The new demography of America's schools: Immigration and the No Child Left Behind Act. Retrieved May 1, 2006, from the National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs, www.ncela.gwu.edu/stats/2_nation.htm.
- Carlo, M., August, D., McLaughlin, B., Snow, C. E., Dressier, C., Lippman, D. N., Lively, T. J., & White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly*, 39, 188–215.
- Carver, R. P. (1994). Percentage of unknown vocabulary words in text as a function of the relative difficulty of the text: Implications for instruction. *Journal of Reading Behavior*, 26, 413–437.
- Garcia, G. E., & Nagy, W. E. (1993). Latino students' concept of cognates. In D. J. Leu & C. K. Kinzer (Eds.), *Examining central issues in literacy research, theory, and practice.* Chicago: National Reading Conference.
- Goswami, U. (2000). Phonological and lexical processes. In M. Kamil, P. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (vol. 3, pp. 251–267). Mahwah, NJ: Erlbaum.
- Gough, P. (1972). One second of reading. In J. Kavanagh & I. Mattingly (Eds.), Language by ear and by eye. Cambridge, MA: MIT Press.
- Graves, M. F. (2005). The vocabulary book: Learning and instruction. New York: Teachers College Press.
- Hiebert, E. (2005). In pursuit of an effective, efficient vocabulary curriculum for elementary students. In E. Hiebert, H. Elfrieda, & M. Kamil. *Teaching and learning vocabulary: Bringing research to practice* (pp. 243–263). Mahwah, NJ: Erlbaum.
- Hopstock P. J., & Stephenson T. G. (2003). Descriptive Study of Services to LEP Students and LEP Students with Disabilities. Special Topic Report #1: Native languages of LEP students. Retrieved May 1, 2006, from the National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs, www.ncela.gwu.edu/stats/2_nation.htm.
- Jimenez, R., Garcia, G. E., & Pearson, P. D. (1996). The reading strategies of bilingual Latina/o students who are successful English readers: Opportunities and obstacles. *Reading Research Quarterly*, 31, 90–112.

- Lesaux, N., & Geva, E. (2006). Synthesis: Development of literacy in languageminority students. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners*. Mahwah, NJ: Erlbaum.
- Mägiste, E. (1979). The competing language systems of the multilingual: A developmental study of decoding and encoding processes. *Journal of Verbal Learning and Verbal Behavior*, 18, 79–89.
- Menn, L., & Stoel-Gammon, C. (2000). Phonological development: Learning sounds and sound patterns. In J. B. Gleason (Ed.), *The development of language* (5th ed.). Needham Heights, MA: Allyn & Bacon.
- Moats, L. C. (2000). Speech to print: Language essentials for teachers. Baltimore, MD: Brookes.
- Nagy, W. E. (1988). Teaching vocabulary to improve reading comprehension. Newark, DE: International Reading Association.
- Nagy, W. E., Garcia, G. E., Durgunoglu, A., & Hancin-Bhatt, B. (1993). Spanish— English bilingual students' use of cognates in English reading. *Journal of Reading Behavior*, 25, 241–259.
- Nagy, W., Herman, P., & Anderson, R. C. (1985). Learning words from context. Reading Research Quarterly, 20(2), 233–253.
- Nation, I. S. P. (2001). Learning vocabulary in another language. Cambridge, UK: Cambridge University Press.
- National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs. (2006). National and Regional Numbers & Statistics. Retrieved May 1, 2006, from www.ncela.gwu.edu/stats/2_nation.htm.
- National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups (NIH Publication No. 00-4754). Washington, DC: National Institute of Child Health and Human Development.
- Ordonez, C. L., Carlo, M. S., Snow, C. E., & McLaughlin, B. (2002). Depth and breadth of vocabulary in two languages: Which vocabulary skills transfer? *Journal of Educational Psychology*, 94(4), 719–728.
- Perfetti, C. (1992). The representation problem in reading acquisition. In P. Gough, L. Ehri, & R. Treiman (Eds.), Reading acquisition (pp. 145-174). Hillsdale, NJ: Erlbaum.
- Proctor, C. P., Carlo, M. S., August, D., & Snow, C. E. (2005). Native Spanish-speaking children reading in English: Toward a model of comprehension. *Journal of Educational Psychology*, 97, 246–256.
- Ransdell, S. E., & Fischler, I. (1987). Memory in a monolingual mode: When are bilinguals at a disadvantage? *Journal of Memory and Language*, 26, 392–405.
- Rolla-San Francisco, A., Carlo, M., August, D., & Snow, C. (2006). The role of language of literacy instruction and vocabulary in the English phonological awareness of Spanish-English bilingual children. *Applied Psycholinguistics*, 27(2), 229–246.
- Saffran, J. R., Senghas, A., & Trueswell, J. C. (2001). The acquisition of language by children. *Proceedings of the National Academy of Sciences*, 98(23), 12874–12875.
- Smith, C. L., & Tager-Flusberg, H. (1982). Metalinguistic awareness and language development. *Journal of Experimental Child Psychology* 34(3), 449–468.

- Snow, C., Burns, S., & Griffin, P. (1998). Preventing reading difficulties in young children. Washington, DC: National Academy Press.
- Stahl, S., & Nagy, W. E. (2006). *Teaching word meanings*. Mahwah, NJ: Erlbaum. Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 301–406.
- Tager-Flusberg, H. (2000). Putting words together: Morphology and syntax in the preschool years. In J. B. Gleason (Ed.), *The development of language* (5th ed.), Needham Heights, MA: Allyn & Bacon.
- Unz, R. K., & Tuchman, G. M. (1998). Proposition 227: English language education for children in public schools. Retrieved May 1, 2006, from James Crawford's Language Policy Web Site & Emporium, www.humnet.ucla.edu/humnet/linguistics/people/grads/macswan/unztext.htm.