Parents and educators alike are concerned when young English language learners (ELLs) experience difficulty learning to read. Although we have strong evidence to guide our understanding of how children learn to read and which interventions are effective, the apprehension that arises from not knowing whether the difficulty is due to a disability or is simply the result of learning to read in a second language (L2) often adds to the unease associated with the identification process. Although much of the research on beginning reading is based on monolingual children, there is a growing body of research that has examined the literacy development of bilingual children. Researchers have identified processes that predict successful acquisition of reading skills within and across languages. These insights into biliteracy and L2 literacy development have helped inform assessment and instruction for bilingual children. However, these practices often focus on students’ development in each language separately; they often fail to take into account the interrelatedness of literacy skill development or to document learning trajectories for children learning in an L2 leaving ELLs vulnerable to identification for special education, particularly reading disabilities, while they are in the process of acquiring literacy in an L2. Conversely, ELLs who are unidentified often fall further behind if they do not receive appropriate instruction in a timely manner. Identifying appropriate assessment procedures is an important first step to ensuring appropriate placement and instruction.

How can we distinguish between ELLs with low level linguistic proficiency and those with more general reading and learning difficulties?

Dyslexia is a specific learning disability that is neurological in origin and characterized by difficulties with accurate and/or fluent word recognition and poor spelling and decoding abilities (International Dyslexia Association, 2002). It is manifested in every language; however, the incidence, the proportion, the severity of the various deficit types, and the sources of the impairment vary by language (Jiménez, 2012). For example, the prevalence of dyslexia is higher in languages with less consistent letter and sound correspondences like English (Landerl, Wimmer, & Frith, 1997; Paulesi et al., 2001; Ziegler & Goswami, 2005). English has 26 letters but 44 sounds, so several letters such as the vowels and the letter c have more than one sound, and some sounds are represented by more than one letter. Another difference is in the deficit types that are most common. Deficits in decoding and phonology are more common in opaque orthographies (Wimmer, 1993; Wimmer & Mayringer, 2001), while deficits in reading rate and processing speed are more common in transparent orthographies in which most letters have only one sound each associated with them (Holopainen, Ahonen, & Lyytinen, 2001; Jiménez, 2012; Tressoldi, Stella, & Faggella, 2001) and in Chinese, a logographic language, one in which a symbol represents a word (Ho, Chan, Tsang, & Lee, 2002). These distinctions are important when planning assessment and instruction for children whose initial reading instruction was in their first language (L1).

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Cummins’ (1979) linguistic interdependence hypothesis posits that knowledge in one’s L1 will transfer to the L2 regardless of the structure of the language provided that L1 language skills are well developed. In the same manner, a deficit in the L1 will be evident in the L2. Thus, a common approach when English language learners are experiencing difficulty learning to read is to assess their literacy skills in their L1 to determine if deficits are present. For example, in a study with children who spoke Tagalog and English, English phonological awareness tests did not discriminate between children who had dyslexia and those who did not because both were in the process of learning English. However, differences on phonological short-term memory tasks in which children were asked to repeat sequences of familiar nouns and rapid naming of objects were apparent in Tagalog, the children’s L1 (Everatt, Smythe, Ocampo, & Gyarmathy, 2004). Using results from assessments in the L1 allows teachers to appropriately identify children who are having difficulty if they have received literacy instruction in their L1. If children have not received instruction in their L1, phonological awareness tasks and cognitive tasks such as rapid naming will provide reliable results but more specific literacy tasks such as word reading may not.

An opposing hypothesis, the script-dependent hypothesis (Lindgren, DeRenzl, & Richman, 1985), proposes that language abilities and reading difficulties are influenced by the specific characteristics of the orthographic system of that language. For example, children learning to read in languages with consistent letter and sound correspondences tend to progress faster in literacy development and to develop phonological awareness.
more quickly (Goswami, 2000). As noted above, the deficits associated with dyslexia vary by language, so it is therefore possible that a child whose L1 has a transparent orthography may not exhibit a difficulty in that language if assessed only with phonological awareness tasks but may exhibit difficulties when he or she begins to read in English and is assessed on those tasks in English (Jiménez & O’Shanahan, 2012). This does not mean that measures in the L1 are not helpful, only that the appropriate measures for the language should be used. In this case, the addition of a rapid naming task may provide the data needed for accurate identification. The exact nature of what should be measured (e.g., awareness, access, or storage) and the relative importance of the unit (e.g., phoneme, syllable, or rime) is language dependent (Everatt, Smythe, Ocampo, & Gyarmathy, 2004; Jiménez, 2012; Share, 2008); therefore, educators should employ an assessment framework that takes into consideration the range of languages and alphabets and the appropriate assessments for each.

When using assessments in the home language is not an option, assessment in underlying cognitive or linguistic processes in English can be used to distinguish ELLs with dyslexia from those who are learning to read in an additional language (Durgunoglu, 2002; Everatt, Smythe, Ocampo, & Gyarmathy, 2004; Geva, Yaghoub Zadeh, & Schuster 2000). Information about the students’ exposure to English and the structure of their home language can help teachers identify the correct assessments. The following sample questions can be used to obtain this information:

- When did the student learn English?
- When did the student learn to read and write in English?
- Did he or she receive reading and writing instruction in their L1?
- What are the differences and similarities between the syntactic structures of the L1 and English?
- What is the alphabetic structure of the L1?
- How consistent is the orthography of the L1?
- Is there any overlap in vocabulary? Are there cognates? (Siegel, 2002).

Another source of potential information when assessing children in English is to examine students’ writing. In an exploratory study of second graders’ writing, there were qualitative and quantitative differences in the writing samples produced by ELLs who had low language proficiency in English and Spanish and ELLs identified with dyslexia (Linan-Thompson & McFarland, 2014). At the beginning of the year, students from both groups relied on Spanish phonology to write English words when responding to a picture prompt, but students in the dyslexia group were less consistent in their use of spelling sound correspondences. For example, one student used three different spellings to represent the word she (ji, yi, jy) in a 32-word passage. By the end of the year, the students without dyslexia were using English phonology more consistently but still produced writing in which the majority of words were spelled incorrectly. This finding may have been due to lack of phonics instruction in English. Although the ELLs were relying on English phonology to write individual words, students in both groups used correct English and Spanish syntax indicating that they understood that word order differs between the two languages. The differences between the groups were in the number of words they wrote and the quality of their compositions. At the beginning of the year, the mean number of words used by both groups of students was similar but the mean number of words used by students with dyslexia increased by 3 compared to a 32-word increase by students with low language proficiency in English. Further, the quality of the stories produced by ELLs without dyslexia was better. Their story plots were better developed in terms of cohesion and the presence of a variety of sentence types and the use of precise vocabulary. For example, a student used the pronoun they instead of the noun bunnies in the first sentence or box instead of cage.

Cross-linguistic transfer is assisted or impeded by the degree of similarity in the writing systems of the two languages (Odlin, 1989). The greater the similarity in the writing systems of the two languages, the greater the degree of transfer, thus reducing instructional time and difficulties involved in learning to read and write the L2. Durgunoglu (2002) suggests that using information from cross-linguistic transfer can support assessment and distinguish students who are in the process of normal language development in an L2 from those who may have learning disabilities.

**Which literacy skills transfer across languages?**

A number of skills transfer across languages. Teachers can plan more effective interventions if they understand which metalinguistic skills, such as word awareness and phonological awareness, transfer from L1 to L2.

Strong evidence supports the hypothesis that phonological awareness skills transfer from one language to another and predict word identification skills (August, Calderon, & Carlo, 2001; Cisero & Royer, 1995; Comeau, Cormier, Grandmaison, & Lacroix, 1999; Durgunoglu, Nagy, & Hancin-Bhatt, 1993; Lindsey, Manis, & Bailey, 2003). However, because this task is problematic for children with dyslexia, they are likely to need phonological awareness training to develop word reading skills in English. English language learners who have difficulty
distinguishing and isolating sounds in a language they speak will experience the same challenge in an L2. In particular, they may find sounds that do not exist in their L1 and sounds that are similar in English (e.g., sheep and ship) challenging. Several practices can be implemented to help students distinguish and pronounce difficult phonemes. To help children distinguish sounds, emphasize the pronunciation of each sound asking children to attend to the target sound or pair the word with a photo or illustration to help them associate the word to a concept. To help children pronounce the word, show them how to position the tongue and teeth and provide mirrors so they can monitor themselves as they practice (Linan-Thompson & Hickman-Davis, 2002).

**Syntactic awareness**, the ability to reflect on the grammatical structure of a language, also transfers from L1 to L2. Children with well-developed syntactic awareness are able to attend to and distinguish differences in the word order in sentences. Whether in their L1 or L2, syntactic awareness helps students predict the type of words and sequence that would be found within a sentence (Durgunoglu, 2002). This practice, in turn, increases their fluency if they have developed adequate decoding skills.

Knowledge of writing conventions and reading comprehension strategies also transfer across languages. ELLs who have developed these skills will be able to apply them in English. However, they will need to develop vocabulary and spelling skills to spell words accurately and to produce texts that demonstrate their writing ability. Their ability to use reading comprehension strategies is also dependent on their vocabulary knowledge. Children must understand the meaning of 90–95% of the words in a text in order to comprehend what is read (Nagy & Scott, 2000). Once children understand that to decode one must convert the letters in the word to sounds, they are able to apply this skill to another language, especially if the languages share a script. However, while they are learning the sounds of English letters and spelling rules, they may use the letter sound correspondences from their L1 to read and spell. During the initial stages of English acquisition ELLs are likely to depend on the decoding and encoding strategies they developed in their L1. Therefore, even though many skills transfer, English language development is necessary before children can leverage those skills.

Finally, some of the skills that we expect children to transfer, such as phonological awareness, are the most difficult for students with dyslexia to develop, thereby limiting the benefit they may have derived from developing those skills in their L1 (Jiménez, 2012).

**What type of reading instruction is effective for ELLs with dyslexia or reading disabilities?**

English language learners with and without disabilities often have difficulty with decoding and spelling, especially if they have not received explicit phonics instruction. However, unlike children with dyslexia, those who do not have a disability are responsive to comprehensive, explicit instruction in English that includes phonological awareness training and phonics, as well as fluency building, and instruction in vocabulary and comprehension strategies (Vaughn, Linan-Thompson, Hickman-Davis, 2003). They also need instruction that builds their English language skills. ELLs with dyslexia need more intensive instruction to ensure they develop the necessary language and literacy skills.

Phonological awareness is necessary for word recognition and spelling. To help ELLs with dyslexia develop phonological awareness, provide activities that require counting, segmenting and blending syllables, segmenting and blending words, comparing and matching sounds, identifying sounds with visual cues, and matching sounds (Shaywitz, 2003). It is also helpful, after the phonological awareness lesson, to teach the meaning of the words used in these activities to build their vocabulary (Linan-Thompson & Hickman-Davis, 2002).

Because word recognition and spelling are often the area where students exhibit the greatest difficulty (Geva & Wang, 2001), teach all letters and sounds systematically but emphasize the English sounds that do not exist in their home language and letters that have a different sound in the students’ home language and English and highlight those that are similar. ELLs may also need to develop new decoding strategies. Students learn and use spelling-sound correspondences that are most effective in their home language. For example, the use of systematic spelling-sound correspondences is an effective strategy in Spanish but less reliable in English for irregular words such as said and have, which do not follow the rules. ELLs need to learn decoding strategies that are effective in English and to memorize these irregular words. They also need practice reading words to build visual representations of words in their long-term memory. This practice will contribute to fluent reading and comprehension.

Spelling that develops concurrently with word-level reading is critical in the initial stages of learning to read. Daily spelling instruction provides ELLs additional practice needed to develop an understanding of English spelling patterns.

Morphology instruction is an effective means for teaching ELLs with dyslexia about the structure of English and it improves students’ reading, spelling, and vocabulary as well as their phonological and morphological awareness. Among the practices that have been found to be effective are teaching common suffixes and prefixes and using them in speeded drills and word building exercises (Goodwin & Ahn, 2010). Word sorts, an activity in which students categorize words according to a target criterion, are also effective. Word sorts can be used to help students discriminate words based on morphological features such as re in the word recall, in which it is a prefix versus red- den, in which re is part of the base word (Goodwin & Ahn, 2010; Siegel, 2008).

Children with dyslexia tend to have strong oral language comprehension skills supported by good vocabulary, general knowledge, critical thinking skills, and concept formation. However, ELLs lose the access to those skills if they are learning in an L2 that is not well developed. Because they have likely learned to depend on their oral language skills in their L1, they may experience higher levels of frustration when they are not able to demonstrate their knowledge through oral language, the one area in which they are competent. Therefore, building their oral language is critical. Structured discussions and read-alouds around topics of high interest to the student provide opportunities for building language and learning new content.
Conclusion
When ELLs are experiencing difficulty learning to read, ensuring they receive instructional support is critically important. However, it is also important that the instruction they receive is appropriate. Therefore, the first step is to assess the student. If the student has developed literacy skills in the L1, assess the student in that language using assessment tasks that discriminate between good and poor readers in that language. If assessments and assessors are not available, assess the child in English but collect additional demographic information as well as any classroom evidence that demonstrates students’ rate of growth on language and literacy tasks (Geva & Wiener, in press). Even if the child does not have a disability, he or she may benefit from supplemental instruction in phonological awareness, decoding, and spelling. ELLs with dyslexia need intensive instruction in those same areas but need additional time to master the literacy skills as they are learning English.

References

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