# Brick by Brick: Landmark Studies on Reading Development, Assessment, and Instruction for Students Who Are English Learners

by Isabel Vargas, Colby Hall, and Emily Solari

Inglish learners (ELs) are the fastest growing population of students in the United States. There are over 4.8 million ELs enrolled in K-12 schools (U.S. Department of Education, 2017). The U.S. Census Bureau estimates that by 2030, EL students will compose 40% of the schoolage population (U.S. Department of Education, 2003). As the student population continues to become more culturally and linguistically diverse, educators are faced with the challenging task of ensuring that all students receive effective instruction and acquire English literacy. How can teachers help students with little or no exposure to English become proficient readers in a language different from the one spoken in their homes? What do we know about the reading development of EL students compared to that of English monolingual (EM) students? Most of the research investigating reading development has been conducted with EM students. However, over the past few decades, there have been a series of landmark studies showing how reading development for ELs is not all that different from reading development for EM students. This article will highlight some of these studies, which have provided us with three key findings:

- 1. The simple view of reading also applies to ELs.
- 2. The same early indicators of reading risk status predict later reading performance for ELs and EM students.
- 3. Early intervention research shows that ELs can achieve the same level in word reading as their EM peers when they receive evidence-based instruction that is aligned with the science of reading.

# The Simple View of Reading: Similarities Between ELs and EM Students

The simple view of reading (SVR; Gough & Tunmer, 1986) is a theoretical framework that sees reading comprehension as the product of word reading (e.g., phonological awareness [PA], decoding) and linguistic comprehension (e.g., vocabulary knowledge, knowledge of syntax/language structures, literacy knowledge). In the SVR framework, neither word reading nor linguistic comprehension on their own is sufficient for reading comprehension. There is an interaction between the two, and skill in one amplifies skill in the other. The SVR can be used to understand the factors that play a role in students' reading difficulties, which can result from poor word reading, weak linguistic comprehension, or both.

In 1990, Hoover and Gough tested the validity of the SVR model within a sample of Spanish-speaking ELs. The authors found that the product of decoding and listening comprehension scores could explain reading comprehension skills and that the product of these scores provided a better estimate of EL students' reading comprehension than the sum of the scores. They also reported that decoding and linguistic comprehension contributed separately to students' reading skills and that skilled

readers typically had strong decoding as well as strong linguistic comprehension. In contrast, poorer readers had weaker skills in one or both components. These results have several important practical implications for reading instruction with EL students. First, Hoover and Gough found that the SVR also applied to ELs. The authors found that decoding and linguistic comprehension are both necessary for reading comprehension in this sample of EL students and that when an EL student has some skill in either decoding or linguistic comprehension, instruction that improves either component will advance reading skill.

# The Simple View of Reading: Differences Between EL Students and EM Students

Research has also shown there are some differences in the ways the SVR explains reading comprehension for ELs relative to their EM peers. The contribution of linguistic comprehension to text comprehension for ELs in the upper elementary grades and beyond is one example. As text becomes more complex in the upper elementary grades, there are differences in the relative contributions of word reading and linguistic comprehension to reading comprehension for all students. On average, vocabulary and other linguistic comprehension

variables make a larger contribution to reading comprehension for all students as they progress beyond the primary grades and encounter more complex text. However, research suggests this is particularly true for ELs.

For example, Cho et al. (2019) used the SVR to compare the sources of reading comprehension failure for ELs and EM students with reading difficulties. Specifically, they examined the roles of linguistic comprehension and word reading in explaining poor reading comprehension for each group of students. Their sample consisted of 446 fourth-grade students with reading difficulties, 229 of whom were ELs, from 17 urban or near-urban schools in the southwestern United States. The authors found that although fourth-grade word reading was a significant contributor to reading comprehension difficulties regardless of language status, ELs outperformed EM students on measures of word reading. Additionally, authors found that EM students had a stronger performance on linguistic comprehension measures than ELs. Their findings showed that linguistic comprehension skills, such as listening comprehension and vocabulary, were on average more responsible for reading comprehension difficulties for ELs than they were for EM students. This research suggests that it is very important to support ELs in developing linguistic comprehension skills to support reading comprehension of the more complex, academic texts that they will encounter during the upper elementary and middle grades.

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#### **Early Indicators of Reading Risk Status Are** the Same for ELs and Their EM Peers

Longitudinal work suggests that the same early (i.e., kindergarten and first grade) indicators of reading risk status predict later reading performance equally well for ELs and EM students. In 2007, Lesaux and colleagues conducted a study seeking to establish the early predictors of ELs'

reading comprehension and to determine if they differed from predictors for their monolingual peers. Additionally, the authors investigated differences in the reading achievement over time for ELs and EM elementary students. In this five-year study, Lesaux et al. (2007) included 824 children from 30 schools in western Canada. The socioeconomically diverse sample consisted of 135 ELs who spoke 33 different languages. Students were classified as at risk or not at risk for reading difficulties in kindergarten based on their performance on the reading subtest of the Wide Range Achievement Test-3 (WRAT-3; Wilkinson, 1993). All students received early literacy instruction that emphasized systematic instruction in PA in kindergarten and phonics in the primary grades regardless of student language status. Researchers assessed the participants' working memory, phonological processing, and syntactic awareness, as well as literacy skills such as spelling and reading comprehension, during their kindergarten and fourth-grade years.

Lesaux et al. (2007) determined that there were no significant differences in the degrees to which decoding and linguistic comprehension in kindergarten through third grade predicted reading comprehension in fourth grade for ELs compared to EM students. This was true for students with reading difficulties as well as for those without reading difficulties. Letter identification, working memory, rhyme detection, and oral cloze tasks were significant kindergarten predictors of fourth-grade reading comprehension. Letter identification, working memory, rhyme detection, and phoneme deletion were significant kindergarten predictors of fourth-grade word reading. The authors found that although EM students performed better on the majority of the kindergarten tasks, by fourth grade, there were generally no differences between the two groups. ELs performed just as well, or better than, EM students on all fourth-grade tasks except one.

Kieffer and Vukovic (2012) also conducted a longitudinal study to investigate the role of early cognitive and linguistic skills in the development of English reading difficulties from first to third grade. Their sample included 150 linguistically and ethnically diverse students from economically disadvantaged backgrounds enrolled in urban schools. The schools used a systematic and explicit phonics-based literacy curriculum. Kieffer and Vukovic found that the interaction between students' linguistic comprehension and code-related skills in first and second grade predicted their reading comprehension in third grade. Early predictors of lat-

er reading comprehension were the same for primary-grade Spanish-speaking EL students and their EM counterparts. These authors also found that all students in their sample were most likely to have poor linguistic comprehension skills and adequate code-related skills rather than weakness in decoding alone or weaknesses in both linguistic comprehension and decoding.

The same early (i.e., kindergarten and first grade) indicators of risk for reading difficulties apply to EL and EM students. It is imperative that schools provide early intervention for ELs in the same way that they do for EM students, rather than waiting to see if EL students "catch up" as they gain more exposure to the language of instruction.

The results of both studies have important implications for practice. Most importantly, they demonstrate that the same early (i.e., kindergarten and first grade) indicators of risk for reading difficulties apply to EL and EM students. It is imperative that schools provide early intervention for ELs in the same way that they do for EM students, rather than waiting to see if EL students "catch up" as they gain more exposure to the language of instruction. It is worth noting that the majority of the first-through third-grade students enrolled in the Kieffer and Vukovic (2012) study showed a weakness in linguistic comprehension, with adequate code-related skills. While this could reflect the effectiveness of the study schools' explicit and systematic early literacy curriculum, it also highlights the need for teachers to assess and monitor all students' linguistic comprehension, and when appropriate, provide additional instruction in this domain. Information about EL students' first-language vocabulary knowledge in kindergarten or first grade will be useful for teachers and administrators, as early vocabulary knowledge in students' first language has been found to predict later English reading achievement (e.g., Grimm et al., 2018).

It is equally important to assess and monitor students' knowledge and skills that are

foundational to word reading. Research has shown that the dominant predictor of word reading for both ELs and EM students is phonological awareness (Gottardo et al., 2008; Jared et al., 2010; Lindsey et al., 2003). As with vocabulary knowledge, early PA in EL students' home language is a strong predictor of later English reading achievement (Lindsey et al., 2003). In fact, in the study conducted by Lindsey et al. (2003), the correlation between Spanish PA and English word identification was similar to the correlation between Spanish PA and Spanish word identification. Also, Spanish PA was significantly correlated with English passage comprehension. These findings are all noteworthy because they suggest that teachers can administer early assessments of PA and vocabulary knowledge in an EL's first language, enabling teachers to intervene earlier to remediate any difficulties that exist and reduce risk for later reading difficulties.

# **Early Intervention Using Instruction Aligned With the Science of Reading for ELs**

Early intervention research shows that ELs can achieve the same level in word reading as their monolingual peers when they are instructed in a way that aligns with the science of reading. Richards-Tutor et al. (2016) reviewed 12 experimental studies published from 2000 to 2012 that examined the characteristics and outcomes of reading interventions for ELs in kindergarten through 12th grade who were identified as being at risk for reading difficulties or were identified as having a reading disability. The authors found that for kindergarten and first-grade students, explicit and systematic multiple-component interventions that included PA and word reading instruction were beneficial for both EL and EM students.

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For example, Vaughn et al. (2006) conducted a randomized, controlled trial with ELs at risk for reading difficulties to investigate the effects of an English intervention on the development of students' oracy and literacy skills. The intervention included six instructional practices that research supports as being effective for

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ELs who are beginning readers: "1) explicit and systematic teaching, 2) promotion of English language learning, 3) phonemic awareness and decoding, 4) vocabulary development, 5) interactive teaching that maximizes student engagements, and 6) instruction that produces opportunities for accurate responses with feedback for struggling learners" (p. 156). Forty-one Spanish speaking ELs from four schools in Texas that were considered to be effective for bilingual students participated in the study. They were eligible for the intervention if they scored below the twenty-fifth percentile on the letter-word identification task in both languages and if they were unable to read more than one word on the word-reading lists in both languages. In addition to their core reading instruction, students in the intervention group received intervention services from a trained bilingual teacher for 50 minutes a day, 5 days a week, for 7 months.

Vaughn et al. (2006) found that students who received the intervention showed significantly greater growth during the year when compared to the control group who received the high-quality core reading program, in measures of English word reading, word spelling, or foundational skills (i.e., phonological access, phonemic awareness, letter knowledge, nonword reading, passage comprehension, and spelling dictation) as well as in reading comprehension. Students in the intervention group also showed significant growth in Spanish phonemic awareness, word attack, and passage comprehension even though the intervention was in English.

#### **Brick by Brick Takeaways**

Gough and Tunmer (1986) proposed the SVR as a theoretical framework that illustrates reading comprehension as the product of word reading and linguistic comprehension. Later research established that the SVR also applies to ELs (Hoover and Gough, 1990), although there are

some differences in the degree to which decoding and linguistic comprehension contribute to reading comprehension for ELs and EM students. For example, research has found that the contribution of linguistic comprehension to text comprehension in the upper elementary grades is more significant for ELs relative to EM students (Cho et al., 2019). That said, a series of studies built our understanding that early indicators of reading risk status are the same for ELs and their EM peers (Gottardo et al., 2008; Grimm et al., 2018; Jared et al., 2010; Kieffer & Vukovic, 2012; Lesaux et al., 2007; Lindsey et al., 2003). Importantly, early intervention research shows that ELs can achieve the same level in word reading as their EM peers when they receive evidence-based instruction that is aligned with the science of reading (Richards-Tutor et al., 2016; Vaughn et al., 2006). ■

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## Colby Hall

Colby Hall studies literacy development, assessment, and instruction. Her research focuses on the components of effective literacy instruction for elementary and middle school students with or at risk for literacy-learning difficulties, inference instruction as a means of improving reading comprehension, reading instruction for bilingual/multilingual students with reading difficulties, instruction supporting text comprehension in content-area classrooms, and technology-delivered reading instruction.

Dr. Hall is currently co-principal investigator of an Institute of Education Sciences funded project that aims to further develop and pilot the Reading RULES for Kindergarten small-group literacy intervention program.



## **Emily Solari**

Emily Solari is the Edmund H. Henderson Professor of Reading at University of Virginia. Dr. Solari is also the director of UVA reading and the Reading Education program coordinator. Dr. Solari's scholarship has focused on the prevalence, predictors, and underlying mechanisms that drive reading development with the ultimate goal of developing and testing the efficacy of targeted interventions to prevent and ameliorate reading difficulties. Her work has been particularly focused on translating the science of reading by engaging with practitioners and policy makers to leverage scientific evidence to improve practice in school settings.