

Literacy Research on English Learners: Past, Present, and Future

by Claude Goldenberg and Elsa Cárdenas-Hagan

Students who don't speak English proficiently or at all, known alternately as English learners (ELs), emergent bilinguals, or multilingual learners, have been in U.S. schools since before the United States was the United States (Goldenberg & Wagner, 2015). These first ELs—children of Polish shipbuilders recruited by the permanent English settlers in the Virginia colony—enjoyed a bilingual education in their native Polish and the English of their adoptive home. Since then, American territorial expansion and succeeding waves of immigrants meant that as the country grew, and the number of schools throughout the country grew, so too did the numbers of children from homes where a language other than English was spoken. Bilingual education has remained part of the U.S. educational landscape for most of the intervening years, but by far the majority of students speaking little or no English upon school entrance have been educated, and continue to be educated, in English programs (Cavanaugh, 1996; Goldenberg & Wagner, 2015).

With notable exceptions among groups and individuals (Kieffer & Thompson, 2018), the education of non- or limited-English speaking students has been less than successful as a national educational project. Cavanaugh (1996) noted a quarter-century ago that “history seems to have taught us [that] teaching English to those for whom it is a second language ... has not been done as well as it could” (p. 43). An understatement if ever there was one, this observation was true even before it was documented by national statistics, and it remains true today (U.S. Department of Education, n.d.).

Nonetheless, researchers since the middle of the last century have studied various aspects of ELs' educational achievement (particularly in literacy), what barriers might impede it, and how we might overcome them. In so doing, they have made contributions to literacy research that sometimes go unacknowledged.

A (Very) Brief History of English Learner Research in the U.S.

Beginning in the 1960s, and coincident with civil rights and national liberation movements, educators and activists concerned about the achievement of ELs focused on language of instruction as the pre-eminent factor determining these students' educational opportunities and academic success. As journalist, author, and advocate James Crawford (2004) wrote,

The civil-rights movement was beginning to energize language-minority communities. Parents who had themselves been shortchanged by English-

only schools were seeking a better deal for their children. Desegregation was important, but equal opportunity demanded more than equal treatment if students could not understand the language of instruction. (p. xiv)

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By the 1990s, despite enormous controversy in the preceding decades and a confusing and sometimes contradictory research base, there was some evidence of bilingual education's positive effects on ELs' academic achievement. However, the overarching picture was muddled. As the first major national research review on the education of English learners observed, it is difficult to synthesize the program evaluations of bilingual education because of the extreme politicization of the process. Most consumers of research are not researchers who want to know the truth, but advocates who are convinced of the absolute correct-

ness of their positions. (August & Hakuta, 1997, p. 138; also see Chapter 6 of this volume for an account of national evaluations, smaller local efforts, and the various research syntheses produced in the 1970s, 1980s, and early 1990s)

It was also clear that bilingual education was no panacea and that far too many ELs' achievement—particularly those from Spanish-speaking backgrounds—remained stubbornly low regardless of language of instruction or assessment (Goldenberg, 1996). A similar theme, that Spanish-speaking ELs tested in Spanish performed “somewhat but not much better,” was echoed a decade later by August & Hakuta (1997, p. 22).

In the succeeding decades, the research landscape changed substantially. The publication of additional research reviews and syntheses (e.g., August & Shanahan, 2006; Genesee et al., 2006; Goldenberg, 2008, 2013; Goldenberg & Coleman, 2010) continued trying to shape the extant research into something coherent and comprehensible despite a complex and messy research base of uneven quality. Ongoing research also continued, much of it spurred in 2000 by a major federally-funded research initiative launched by the National Institute of Child Health and Human Development (NICHD) in collaboration with the Office of Education Research and Improvement (OERI). The initiative's goal was “to identify the instructional conditions under which children whose first language is Spanish are most likely to succeed in developing English oral language, reading, and literacy skills” (<https://learningdisabilities.com/dr-g-reid-lyon/>).

Language of instruction—bilingual education—remains a potent topic, but it no longer dominates the field as it once did. Matters of curriculum, instruction, and what to do about students having difficulty gaining proficiency in written language, in whatever the language of instruction, now have their own informative research bases.

Contributions of English Learner Research to Literacy for ALL

English learner researchers, educators, and advocates have pushed an agenda that is highly relevant to our understanding of how language and literacy relate to each other and, more specifically, to academic success for students who come to school not fully proficient in English. One thing we have learned is that language of instruction matters, but so do many other factors. As a result, the research agenda is no longer limited by it.

Findings from Language of Instruction—aka Bilingual Education

Two reports appearing in 2006, nearly a decade after August and Hakuta's report, weighed in on the language of instruction question. August and Shanahan (2006), generally known as the Report of the National Literacy Panel, included a meta-analysis that largely agreed with the four previous meta-analyses: Despite variability in outcomes, learning to read in the home language can promote reading achievement in English. In technical terms, the meta-analytic analysis showed a moderate positive effect size for bilingual education (see August & Shanahan, 2006, Chapter 14, “Language of Instruction”).

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Genesee et al. (2006) conducted a narrative review of the research rather than a quantitative one. This analysis reached the same general conclusion about bilingual education's positive effect, with an important qualification: Longer-term bilingual education, at least through middle school, produces better results than short-term (“transitional”) bilingual education (see Genesee et al., 2006, Chapter 5, “Academic Achievement”).

Genesee et al. further suggested that while longer-term bilingual education produced superior results overall, in the short run (K-3), bilingual education results were either no better than English Medium Instruction or worse in terms of outcomes in English. This finding of variable effects is consistent with what August and Shanahan reported, although the latter calculated an overall positive, albeit moderate, effect of bilingual education.

This conclusion—superior long-term effects but variable and possibly negative effects in the early years—was largely borne out by the two most important and methodologically strong studies of the topic to date: Slavin et al. (2011), a randomized study conducted in six different cities and states, and Umansky and Rardon (2014), a retrospective quasi-experimental design with strong controls that studied nine cohorts of students from kindergarten to 11th grade in a single major urban area.

Slavin et al. (2011) found that beginning in first grade, students in English immersion outperformed those in the bilingual program on English language and literacy measures. Students in the bilingual program were, not surprisingly, superior in Spanish measures. Differences gradually diminished over the next 3 years. By fourth grade, there was no statistically significant difference between the bilingual education and English immersion students on the English measures. The bilingual students remained significantly superior in reading comprehension of Spanish passages.

The second study's findings (Umansky & Reardon, 2014) are also largely consistent with the conclusions reached by Genesee et al.'s review and with the findings of Slavin et al. (2011): In the elementary grades, ELs in English Medium Instruction reached English proficiency at a faster rate than students in bilingual programs (short-term transitional and long-term bilingual education extending through middle and high school). The pace of reaching English proficiency reversed in middle school. The lines literally crossed in their graph depicting English proficiency attainment by students in the different programs: ELs in the long-term programs caught up and surpassed the percentage of students attaining English proficiency in English immersion and transitional bilingual education. By the end of high school, approximately 7% more students in the long-term bilingual programs had reclassified to English proficiency compared to students in English immersion or transitional bilingual education, a modest but not trivial difference.

At the same time, however, it took a long time for most students, all of whom entered the district in kindergarten, to achieve English proficiency. Regardless of the language program, fewer than one-half reclassified to fluent English proficiency by sixth grade. This means that more than half of all students were, regardless of the language program, "long-term English learners." The definition and characteristics of long-term English learners should give us pause:

In general, the term "long-term English learner (LTEL)" refers to English learner (EL) students who have been enrolled in a U.S. school for six years or more and have not been reclassified as fluent English proficient. *These students may have had inadequate prior schooling experiences, and they are usually struggling academically due to their limited literacy skills in English.* (REL at WestEd, 2016, p. 1; emphasis added)

Bilingual education holds out the promise of helping students become bilingual and biliterate, surely an advantage from any perspective. And overall, bilingual education is likely to help ELs attain modestly higher levels of English proficiency, including English literacy skills. Both of these desirable outcomes are more likely to be true in long-term bilingual education programs. But by itself, bilingual education will not lead to educational equity for English learners. If it is to succeed in doing so, it must incorporate findings from other streams of research—and work toward findings yet to come.

Key Findings From Other Research Streams

Aside from language of instruction, the National Literacy Panel (August & Shanahan, 2006) synthesized findings from other important lines of research. These were usefully summarized in an executive summary available online at (<https://drive.google.com/file/d/127VbQMis-9R4r47VaJfR1-d6Rs95pY586/view>). Four conclusions remain current and valid:

1. "Instruction that provides substantial coverage in the key components of reading—identified by the National Reading Panel (NICHD, 2000) as phonemic awareness, phonics, fluency, vocabulary, and text comprehension—has clear benefits for language-minority students." (p. 3)
2. "Instruction in the key components of reading is necessary—but not sufficient—for teaching language-minority students to read and write proficiently in English. Oral proficiency in English is critical as well—but student performance suggests that it is often overlooked in instruction." (p. 4)
3. "Oral proficiency and literacy in the first language can be used to facilitate literacy development in English." (p. 5)
4. "There is surprisingly little evidence for the impact of sociocultural variables on literacy achievement or development."

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However, home language experiences can have a positive impact on literacy achievement.” p.7

Early Identification of Potential Reading Difficulties

Since the report, there has been progress on a number of additional fronts. Whereas one of the conclusions reached by the NLP was that “most assessments do a poor job of gauging individual strengths and weaknesses” (Executive Summary, p. 6), there have been notable advances in developing screening instruments. These are brief measures of students’ current skills that provide information as to whether they are likely to require additional support in acquiring literacy skills. Francis et al. (2020) note that early screening for English learners should be aligned to the language of instruction. The most recent developments have been reported in studies by Baker et al. (2022) and Cummings et al. (2021). Baker et al., for example, found that letter naming, decoding, and oral reading fluency in Spanish were accurate predictors of reading risk on Grades 1 and 2 comprehension measures in Spanish and in English. In contrast, English screeners, with few exceptions, only predicted reading risk on English measures, not on Spanish measures. Using these screeners, Baker et al. constructed decision thresholds for students “at risk,” “at some risk,” or “on target” that can be used to identify students at potential early risk for reading difficulties, depending on the language program students are in.

Early Intervention for Students at Risk

There has also been important progress in creating and testing effective early intervention programs for ELs at risk for reading difficulties, whether they are learning to read in English or Spanish. In a series of important studies, Vaughn and colleagues (e.g., Vaughn et al., 2006 a and b) have demonstrated that students who struggle with early literacy development in first grade can achieve and outperform comparison groups when comprehensive literacy approaches are implemented with fidelity. These approaches contain the instructional elements found to be effective by the National Reading Panel: explicit and systematic instruction in phoneme awareness, phonics, fluency, vocabulary, and comprehension. In addition, as recommended by the National Literacy Panel, the interventions provide oral English instruction that supports students’ understanding the meaning of the words and text they are being taught to read. Spelling and writing instruction

are also provided. A similar study in English only was reported with similar findings by Ehri et al. (2007).

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However, follow-up studies by Vaughn et al. three to four years post-intervention found “few statistically significant differences” between students who received the interventions and those who did not (Vaughn et al. 2008). Although all differences were in favor of the students in either the Spanish and English interventions, the clear implication is that students who experienced positive results from early intervention must receive continued support if the benefits are to be sustained. There are no silver bullets.

Accelerating Oral English Development

One of the biggest challenges ELs and their teachers face is accelerating students’ English language development. As we’ve seen, schools have been noticeably unsuccessful in helping large numbers of ELs attain English proficiency in a timely fashion, a fact noted years ago. There are no national statistics on the number of long-term English learners (LTELs), but data from large metropolitan areas around the country suggest that 23% to a staggering 74% of the secondary EL population comprise LTELs (REL at WestEd, 2016). Long-term bilingual education does no better at preventing students from becoming LTELs, even though in the long run more students acquire English language proficiency (Umansky & Reardon, 2014).

We have made very modest progress in beginning to identify conditions that might accelerate English language development. Two studies are particularly noteworthy at the very earliest grades: Saunders et al. (2006) and Tong et al. (2008).

Saunders et al. (2006) compared kindergarten classes in English immersion and bi-

lingual programs that had a separate English language development (ELD) block of time to classes with no ELD block, where oral language was presumably integrated with instruction throughout the day. They found that students in classes with the ELD block spent more time receiving oral language instruction and had modestly stronger gains in English oral language development.

Tong et al.'s (2008) randomized trial tested the efficacy of a kindergarten and first-grade program designed to accelerate English oral language development. The intervention was equally effective with students in English immersion or bilingual education and consisted of (a) daily tutorials; (b) storytelling and retelling with authentic, culturally relevant literature; and (c) an academic oral language activity, "Question of the Day." There is one caveat: students who received the experimental treatment also received more ELD instruction time, so it is impossible to rule out the effects of additional time independent of the program used.

We have an equally meager set of studies in the upper grades. Two that provide avenues to pursue and are examples of needed research are O'Malley et al. (1985) and Carrier (2003), both of which found positive effects of teaching English oral language learning strategies on high school students' academic oral language skills. Both also emphasized that "strategy instruction needs to be explicit" (Carrier, p. 397).

Overall, educators have little research to draw on because of the scarcity of studies examining the effects of instructional practices with ELs on oral English outcomes (Genesee et al., 2006; National Academies of Sciences, Engineering, and Medicine, 2017, 2018). We will return to this topic in the final section.

Overlap in Effective Instructional Practices for ELs and Non-ELs

Finally, it has become increasingly clear that there are many similarities in effective instruction for ELs and non-ELs. Programs that include many familiar elements of effective instruction also help boost ELs' achievement (Goldenberg, 2008):

- clear goals and objectives
- appropriate and challenging material
- well-designed instruction and routines
- clear instructions and supportive guidance
- effective modeling of skills, strategies, and procedures
- active student engagement
- informative feedback
- application of new learning

- practice and periodic review
- structured, focused interactions with other students
- frequent assessments, with reteaching as needed
- visuals and displays of concepts and information

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For literacy specifically, learning to read in a language one is simultaneously learning is very similar to learning to read in a language one already knows. The differences have to do with differences in target languages' writing and spelling systems rather than whether the learner already speaks and understands the language (Goldenberg, 2020). Indeed, Cheung and Slavin (2005) reviewed many of the same studies as the National Literacy Panel and concluded that "the programs with the strongest evidence of effectiveness [for ELs] are all programs that have also been found to be effective with students in general" and modified for ELs (p. 262). This was demonstrated, yet again, by Vaughn et al. (2006 a and b) and Ehri et al. (2007). Both interventions began as programs to help at-risk monolingual English readers, then adapted to meet the needs of at-risk EL readers by providing additional support in English language development so that students understood the words and the text they were being taught to read. In the case of the Spanish intervention, obviously, there was no need for English language support for literacy instruction. However, the same instructional model was adapted for and delivered in Spanish.

The same overlap between effective literacy instruction for ELs and non-ELs is true in later grades. Goldenberg (2020) reviewed four middle school programs demonstrating "that a sound instructional program, augmented with an ELD component designed to help ELs learn the academic content, helps ELs develop language and literacy skills in intermediate stages of literacy development" (p. S138). Specifically:

The interventions have in common well-structured, planned, and delivered curriculum; intense, ongoing teach-

er training; and explicit instruction presenting conceptually challenging grade-level material and corresponding academic vocabulary. The interventions used a number of strategies, sometimes referred to as sheltered instruction or integrated ELD, such as videos, graphic organizers, paired and group work, and interactive scaffolded discussions. Instruction was essentially all in English. (p. S138)

Some of the interventions used “home language support,” such as Spanish/English cognates (e.g., *infirm/enfermo*) or quick translations or definitions in Spanish; only one used what was described as culturally relevant instructional components.

Further demonstrating the overlap between effective instruction for ELs and non-ELs is the fact that programs’ effects were nearly identical for both groups of students. “Consequently,” Goldenberg (2020) notes, “because ELs scored lower before the intervention, they also scored lower afterward” (p. S138). He goes on to observe the following:

The good news is that ELs in these studies benefited from the interventions designed to bolster their academic language, specifically, vocabulary in the content areas, which in turn produced at least modest positive effects on reading comprehension. The more cautious news is that the interventions did nothing to address the achievement gap between ELs and non-ELs, which has been a driving motivation in EL research, practice, and policy for over 50 years. (p. S138)

Future Directions to Promote English Learners’ Literacy Achievement

It is obvious that educators and researchers must continue working to determine why so many ELs, particularly those from Spanish-speaking backgrounds, remain behind their peers in language and literacy development even after six or more years in U.S. schools. Older arrivals and students with interrupted formal schooling present additional challenges (Robertson & Lafond, n.d.). Most importantly, we must continue to develop strategies, approaches, and programs that, when implemented with fidelity, greatly improve these students’ chances for school success.

Language of instruction—the great debate over bilingual education—remains a vibrant and important issue. But continued research and program development on bilingual educa-

tion models must not be isolated from exploration into at least four additional and complementary critical issues:

- appropriate literacy curriculum
- effective instructional practices
- identification, intervention, and continued support for students at risk
- acceleration of English language development

Neither language of instruction nor any one of these four sets of issues listed hold the key to improving literacy development for English learners; all must be taken into account. Other factors are also likely to play important roles in determining student outcomes (e.g., individual differences, the influence of the home environment, building on student assets, teacher preparation and professional development).

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Fortunately, there is much to build on (see Appendix for list of resources). Worldwide literature, key studies, and research reviews in the U.S. demonstrate that appropriate literacy curricula for English speakers are starting points for building appropriate literacy curricula for English learners. An essential addition is English language instruction that supports students’ understanding of texts they are to read. The same is true about effective instructional practices, which overlap substantially for English learners and English speakers. If instruction is in English, language supports must be in place so that instruction and instructional content are comprehensible. Building on student assets and collaborations between home and school are likely to make additional contributions (August & Shanahan, 2006).

Perhaps the greatest challenge remains in promoting, or better yet, accelerating English language development. This might be the single most important factor sustaining the achievement gap between English learners and their peers. Middle school intervention

studies have demonstrated significant gains among English speakers and English learners, but the achievement gap between them persists (Goldenberg, 2020). Nationwide around 50% or more of English learners are long-term English learners, having been in school for at least six years and still not English proficient.

EL research over more than a half century, and especially over the past 20 years, has yielded important insights about how we can approach the challenge we face at this moment: helping students who come to school not yet proficient in English maintain and further develop their home language; develop full English proficiency; achieve high levels of literacy, ideally in both languages; and gain access to all possible opportunities for success in work, education, and life. ■

References

- August, D., & Hakuta, K., Eds. (1997). *Improving schooling for language minority children: A research agenda*. National Academy Press.
- August, D. & Shanahan, T., (2006). *Developing literacy in second language learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Lawrence Erlbaum Associates.
- Baker, D., Cummings, K., & Smolkowski, K. (2022). Diagnostic accuracy of Spanish and English screeners with Spanish and English criterion measures for bilingual students in Grades 1 and 2. *Journal of School Psychology, 92*, 299-323. <https://doi.org/10.1016/j.jsp.2022.04.001>
- Carrier, K. S. (2003). Improving high school English language learners' second language listening through strategy instruction. *Bilingual Research Journal, 27*(3), 383-408.
- Cavanaugh, M. (1996). History of teaching English as a Second Language. *The English Journal, 85*(8), 40-44.
- Cheung, A. & Slavin, R. (2005). Effective reading programs for English Language Learners and other language-minority students. *Bilingual Research Journal, 29*(2), 241-267.
- Crawford, J. (2004). *Educating English learners: Language diversity in the classroom*. Bilingual Educational Services.
- Cummings, K. D., Smolkowski, K., & Baker, D. L. (2021). Comparison of literacy screener risk selection between English proficient students and English learners. *Learning Disability Quarterly, 44*(2), 96-109. <https://doi.org/10.1177/0731948719864408>
- Ehri, L.C., Dreyer, L.G., Flugman, B., & Gross, A. (2007). Reading Rescue: An effective tutoring intervention model for language-minority students who are struggling readers in first grade. *American Educational Research Journal, 44*(2), 414-448. <https://doi.org/10.3102/0002831207302175>
- Francis, D., Santi, K. L., Khalaf, S, Bunta, F., Rojas, R., Gusewski, S., & Heibert, L. (2020). Identification of disabilities in Spanish-speaking children in English-speaking contexts. In E. Grigorenko, Y. Shtryov & P. McCardle (Eds.), *All about language: Science, theory and practice*. Paul H. Brookes Publishing Company.
- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2006). *Educating English language learners*. Cambridge University Press.
- Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. *American Educator, 32*(2), 8-23, 42-44. <https://www.aft.org/search/site/goldenberg?page53>. Reprinted in abridged form in *ERS Spectrum*, Winter, 2010.
- Goldenberg, C. (2013). Unlocking the research on English learners: What we know—and don't yet know—about effective instruction. *American Educator, 37* (2), 4-11, 38. <http://www.aft.org/periodical/american-educator/summer-2013/unlocking-research-english-learners>
- Goldenberg, C. (2020). Reading wars, reading science, and English learners. *Reading Research Quarterly, 55*(S1), S131-S144.
- Goldenberg, C., & Coleman, R. (2010). *Promoting academic achievement among English learners: A guide to the research*. Corwin Press.
- Goldenberg, C., & Wagner, K. (2015). Bilingual education: Reviving an American tradition. *American Educator, 39*(3) 28-32, 44. http://www.aft.org/ae/fall2015/goldenberg_wagner
- Kieffer, M. & Thompson, K. (2018). Hidden progress of multilingual students on NAEP. *Educational Researcher, 47*(6), 391-398.
- National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the educational success of children and youth learning English: Promising futures*. National Academies Press.
- National Academies of Sciences, Engineering, and Medicine. (2018). *English learners in STEM subjects: Transforming classrooms, schools, and lives*. National Academies Press.
- National Institute of Child Health and Human Development (NICHD) (2000). *Report of the National Reading Panel reports of the subgroups. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Government Printing Office.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning, 35*(1), 21-46.
- REL at WestEd (2016). *Long-term English learner students: Spotlight on an overlooked population*. Contract ED-IES-12-C-0002. <https://www.wested.org/wp-content/uploads/2016/11/LTEL-factsheet.pdf>
- Robertson, K. & Lafond, S. (n.d.). How to support ELL students with interrupted formal education (SIFEs). *Colorín Colorado*. Retrieved 10/31/22 from <https://www.colorincolorado.org/article/how-support-ell-students-interrupted-formal-education-sifes>
- Saunders, W., Foorman, B., & Carlson, C. (2006). Is a separate block of time for oral English language development in programs for English Learners needed? *Elementary School Journal, 107*(2), 101-198.
- Slavin, R., Madden, N., Calderón, M., Chamberlain, A., Hennessy, M. (2011). Reading and language outcomes of a multiyear randomized evaluation of transitional bilingual education. *Educational Evaluation and Policy Analysis, 33*, 47-58.
- Evidence from Lottery Data. *American Educational Research Journal, 54* (Suppl. 1), 282S-306S. <https://doi.org/10.3102/0002831216634463>
- Tong, F., Lara-Alecio, R., Irby, B., Mathes, P., & Kwok, O. (2008). Accelerating early academic oral English development in transitional bilingual and structured English immersion programs. *American Educational Research Journal, 45*(4), 1011-1044. DOI: 10.3102/0002831208320790

Umansky, I. & Reardon, S. (2014). Reclassification patterns among Latino English learner students in bilingual, dual immersion, and English immersion classrooms. *American Educational Research Journal*, 51, 879-912.

U.S. Department of Education (n.d.). *Academic Performance and Outcomes for English Learners*. Author. Retrieved October 10, 2022 from, <https://www2.ed.gov/datastory/el-outcomes/index.html>.

Vaughn, S., Mathes, P., Linan-Thompson, S., Cirino, P., Carlson, C., Pollard-Durodola, S., Cárdenas-Hagan, E., & Francis, D. (2006a). Effectiveness of an English intervention for first-grade English language learners at risk for reading problems. *The Elementary School Journal*, 107(2), 153–180. <https://doi.org/10.1086/510653>

Vaughn, S., Cirino, P., Linan-Thompson, S., Mathes, P., Carlson, C., Cárdenas-Hagan, E., Pollard-Durodola, S., Fletcher, J., & Francis, D. (2006b). Effectiveness of a Spanish intervention and an English intervention for English-Language learners at risk for reading problems. *American Educational Research Journal* 43(3), 449–487.

Vaughn, S., Cirino, P. T., Tolar, T., Fletcher, J. M., Cárdenas-Hagan, E., Carlson, C. D., et al. (2008). Long-term follow-up for Spanish and English interventions for 1st grade English language learners at risk for reading problems. *Journal of Research on Educational Effectiveness*, 1(3), 179-214.

Appendix: EL Resources

Center for the Success of English Learners. Research center at the University of Houston and sponsored by the Institute for Education Sciences, US Department of Education. <https://www.cselcenter.org>

Colorin Colorado: A website for educators of English learners. Published by WETA public broadcasting station. <https://www.colorincolorado.org>

Florida Center for Reading Research: An interdisciplinary reading research center at Florida State University. <https://www.fcrr.org>

Meadows Center for Preventing Educational Risk: A center dedicated to generating, disseminating, and supporting the implementation of empirically validated, evidence-based practices at the University of Texas-Austin <https://meadowscenter.org>

Multitiered System of Supports for English Learners: Model demonstration research sponsored by the Office of Special Education Programs, U.S. Department of Education <https://www.mtss4els.org>

National Research and Development Center to Improve Education for Secondary English Learners: Research center sponsored by the Institute for Education Sciences, US Department of Education. <https://www.elrdcenter.wested.org>



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