A META-ANALYSIS OF RESEARCH ON ENGLISH LEARNERS

Prepared for the Riverside County Office of Education

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In the following report, Hanover Research reviews the empirical research base for English learners with regards to effective interventions, pedagogies, and student outcomes. This meta-analysis draws on oft-cited, research-based studies that demonstrate sufficiently large effect sizes for the development of English learners in primary and secondary schools. To bolster the analysis, this report also cites the experiences and recommendations of many prominent national organizations and education experts.

TABLE OF CONTENTS

EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

English learner (EL) students represent one of the fastest growing student populations in the United States. During the 2012-2013 school year, EL students made up more than 9 percent of public school attendees; in public urban schools, that proportion jumped to 14 percent. Similarly, many states have EL student populations that exceed the national average and show signs of continued growth, including California (23 percent), Nevada (16 percent), New Mexico (16 percent), and Texas (15 percent).[1] As this population of students characterizes an increasingly important stakeholder group at U.S. public schools, school districts are seeking ways to implement dedicated and specialized instruction that effectively bolsters EL performance outcomes. However, EL pupils are a highly heterogeneous group of students and designated educational interventions can be developed to target any number of specific characteristics or learning needs.[2]

To this end, this report examines empirical research from a variety of perspectives to provide the Riverside County Office of Education (RCOE) with a meta-analysis of recent studies that address the needs of EL students. Where possible, research is limited to data-driven studies and analyses. Hanover Research reviewed several online databases to identify high-quality studies for this report, including Proquest, EBSCOHost, ERIC, Science Direct, and the U.S. Department of Education's What Works Clearinghouse. Where provided, both sample size and effect size (*Cohen's d*) were used to determine a study's validity and generalizable applicability. Secondary anecdotal literature supplements research-based findings throughout the report to offer a holistic assessment of key EL initiatives and priorities.

Hanover Research evaluates a variety of central issues that can guide the development and implementation of dedicated EL programming for students from Kindergarten through Grade 12. These topics include level of schooling, length of time in EL programs, and delivery method, as well as other important administrative considerations related to implementation fidelity. The report is organized in four sections according to these themes:

- **Section I: Primary and Secondary Settings** examines effective EL interventions and teaching strategies based on a student's grade level.

- **Section II: Short-Term and Long-Term English Learners** presents findings that illustrate the differences between EL students based on the amount of time they have attended public, English-language schools. EL students are designated as "long-term" learners if they have enrolled in schools for more than five years.

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[1] "English Language Learners." National Center for Education Statistics, May 2015.
   http://nces.ed.gov/programs/coe/indicator_cgf.asp#info
[2] "English Language Learners: A Policy Research Brief Produced by the National Council of Teachers of English."
   National Council of Teachers of English, 2008. p.1.
   http://www.ncte.org/library/NCTEFiles/Resources/PolicyResearch/ELLResearchBrief.pdf

- **Section III: Integrated and Designated Approaches** assesses the effectiveness of two predominant EL classroom designs. Integrated classes have both EL and English-only students, while designated approaches to EL teaching separate EL students for dedicated instruction.

- **Section IV: Implementation Considerations** addresses other key issues that affect the successful implementation of EL initiatives. This section relies on best practices, rather than empirical, literature.

KEY FINDINGS

- **EL students typically enter school with significantly lower reading and math scores than their English-only peers; however, data suggest that EL students can close this gap.** Elementary school EL students who receive EL instruction consistently lessen the achievement gap throughout elementary school, and one study finds that by Grade 5, EL students perform at the same level as their non-EL counterparts in math. Indeed, the sooner that an EL student begins receiving instruction appropriate for his or her needs, the more likely he or she is to perform at the same level as English-only students by the end of middle school.

- **It is essential for district leaders to make EL students a priority.** This prioritization of student needs ensures that administrators and teachers adopt a unified vision and cohesive understanding. Often, district administrators and school principals participate in the same training as EL teachers so that they are able to monitor progress at the classroom level. This also allows key decision-makers to select and implement EL programming that reflects the unique needs and capacities of the district.

- **The efficacy of EL interventions relies more on key indicators of program quality than on specific model type.** Quality implementation typically consists of providing transitional support for newcomer EL students, ensuring EL students have access to the entire curriculum through programming that emphasizes content learning and language acquisition, and developing practices that are designed to integrate EL students and their families into a supportive school community.

- **Effective EL programming includes professional development opportunities for teachers as a central component of EL program implementation.** Teachers who receive professional development tailored to EL instruction report greater feelings of competency. Effective professional development acquaints educators with the language acquisition process, instructional strategies appropriate for EL students, cultural considerations, and assessment techniques.

- **Peer-to-peer interaction can be particularly beneficial for students with the weakest English-language skills.** For example, data suggest that EL students with higher mastery of English can serve as language and cultural models for lower-level EL students during intervention activities. Peer-assisted learning strategies, which

pair EL students to serve as peer tutors for one another, have also been found to be effective for low-, average-, and high-achieving students.

- **Schools should help students achieve English-language proficiency as soon as possible to reduce their risk of becoming long-term EL participants.** This is important because long-term EL students underperform relative to their peers at every grade level. Students who are reclassified as formal English learners in earlier grades are more likely to progress on time and have higher test scores through Grade 12. Long-term EL students enter high school with limited academic literacy in English—despite their oral proficiency in the language—and often require dedicated interventions that are distinct from the general EL population.

- **Teachers in integrated EL classrooms should develop explicit learning objectives for both language learning and content.** Data suggest that these types of classrooms benefit both EL and English-only students. In all three studies that specifically examine integrated, content-area instruction for both EL and non-EL students, researchers reveal that effective teachers used specific language goals to complement subject-based lessons, and vice versa.

- **Multi-tiered interventions are effective at identifying English learners that require more dedicated instruction.** These intervention models use regular testing to determine which students are placed in increasingly specialized programs. In one study, at-risk EL students were identified and enrolled in a second-tier reading intervention that targeted literacy in small groups. These students increased reading scores faster than their peers who were not placed in the second-tier program, and the effects persisted through the subsequent grade level.

SECTION I: PRIMARY AND SECONDARY SETTINGS

In this section, Hanover Research discusses English learner (EL) interventions based on whether the programs target primary- or secondary-level students. Interventions at various levels of schooling highlight different learner priorities and rely on different strategies to bolster the achievement of EL pupils. Findings in this section come primarily from evidence derived from empirical analyses.

KEY FINDINGS

- **Small-group interventions—typically consisting of between three and five students—are found to be effective for elementary-level EL students.** On average, these small-group sessions are organized daily for 30 minutes, although successful interventions have modified the schedule. EL interventions that positively affect student outcomes can have small-group components that meet for as little as 10 minutes weekly (Greenfader, Brouillette, and Farkas) or for as much as 50 minutes daily (Vaughn et al., 2006).

- **Indeed, peer-to-peer interaction can be particularly beneficial for students with the weakest English-language skills** (Baker et al.). For example, data suggest that EL students with higher mastery of English can serve as models for lower-level EL students during peer-to-peer intervention activities (Greenfader, Brouillette, and Farkas). Peer-assisted learning strategies, which pair EL students to serve as peer tutors for one another, have also been found to be effective for low-, average-, and high-achieving students (Saenz, Fuchs, and Fuchs).

- **Some research suggests that EL students in elementary school experience larger achievement gains when placed in native-language or bilingual intervention groups.** EL students who participated in Spanish literacy interventions—which aimed to increase both English- and Spanish-language mastery—scored higher in reading speed and comprehension than their EL counterparts in equivalent English literacy interventions (Cirino et al.; and Vaughn et al., 2006). Relatedly, EL students placed in bilingual groups showed more growth in oral reading fluency across Grades 1-3 than their peers in English-only groups, as well as higher reading comprehension scores in Grade 2 (Baker et al.).

- **Empirical studies that assess the efficacy of secondary school EL interventions generally evaluate students' mastery of academic vocabulary knowledge.** Mastery of key academic vocabulary across all content areas, particularly for middle and high school students, has been shown to have positive effects on EL students' reading comprehension and target word knowledge. This facilitates understanding of key content-area themes and concepts (Vaughn et al., 2009; and Lesaux et al.).

- **Direct vocabulary instruction benefits both EL and English-only students at both the primary** (Carlo et al.) **and secondary** (Vaughn et al., 2009) **levels.** This has important implications for programmatic implementation, as dedicated academic vocabulary instruction can be administered as a whole-class intervention.

- **Dedicated teacher training has been found to positively affect EL students in mainstream secondary school classrooms.** Educators that receive targeted professional development to meet the needs of EL students can better facilitate their learning in mainstream classes. In one study, EL students in mainstream classes with specially trained teachers scored higher on literary analysis and use of commentary measures than their peers with traditionally-trained instructors (Matunchniak, Olson, and Scarcella).

ELEMENTARY SCHOOL INTERVENTIONS

Figure 1.1, below, presents a summary table of six key empirical studies that investigate elementary-level EL interventions. Where possible, the effect sizes (*d*) of the programs' outcomes are provided. These research-based analyses use a variety of evaluative criteria to determine programmatic effectiveness; indeed, some studies measure EL students' speaking and oral skills while others examine reading comprehension and word recognition skills. This demonstrates the wide range of positive outcomes that targeted interventions can have on EL students in elementary school classrooms.

Figure 1.1: Empirical Studies of Elementary-Level EL Interventions

AUTHOR(S)	YEAR	SAMPLE SIZE	COMPONENTS OF INTERVENTION	OUTCOMES
Greenfader, Brouillette, and Farkas[3]	2014	5,240 students in Grades K-2	▪ 28 weekly, 50-minute lessons in drama and creative movement/dance ▪ 10 minutes per lesson were spent on peer-to-peer and small group practice ▪ Teachers provided with two paid professional development days to better understand how dance and drama can enhance language instruction. ▪ Teachers and teaching artists developed lessons that combined drama/dance with key English language development activities	▪ Treatment EL students were found to score marginally higher on speaking assessments ▪ Students with lower baseline speaking scores gained more than higher-level peers (*d=0.75-0.83*)

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[3] Greenfader, C.M., L. Brouillette, and G. Farkas. "Effect of a Performing Arts Program on the Oral Language Skills of Young English Learners." *Reading Research Quarterly*, 50:2, 2014.
http://onlinelibrary.wiley.com/doi/10.1002/rrq.90/epdf

AUTHOR(S)	YEAR	SAMPLE SIZE	COMPONENTS OF INTERVENTION	OUTCOMES
Baker et al.[4]	2012	214 at-risk EL students in Grades 1-3	- EL students in either bilingual or English-only classrooms - Bilingual EL students received 60-90 minutes of instruction in Spanish, 30-60 minutes in English, and 30 minutes of daily small group instruction - English-only EL students received 90 minutes of instruction in English, 30 minutes of additional reading time (if below grade-level), and 30 minutes of English language development	- EL students in paired bilingual classrooms made more growth on oral reading fluency than their English-only peers - Results were most significant in Grade 2 for reading comprehension in paired bilingual classrooms ($d=0.51$)
Cirino et al.[5]	2009	215 at-risk Grade 1 students	- Students received the intervention in the language of literacy acquisition (either English or Spanish) - Small groups (3 to 5 students) for 50 minutes per day over one school year - Groups led by intervention instructors - Supplement to core reading instruction - Intervention groups targeted oral language, reading, spelling, letter-word identification, and passage comprehension	- Treatment students outperformed comparable language-level peers in control groups - Larger average effect size for the Spanish study ($d=0.53$) than the English study ($d=0.40$) - Performance persisted through Grade 2
Saenz, Fuchs, and Fuchs[6]	2007	132 EL students, Grades 3-6	- Reciprocal peer-assisted learning groups that match students with same-level language partners - Small groups met three times a week for 15 weeks - Students practiced reading aloud and discussing texts with partners, who offered feedback	- Intervention students demonstrated significant improvements in word identification and reading comprehension - Effect size was larger for high-achieving students ($d=1.02$) than their average- ($d=0.60$) or low-achieving ($d=0.86$) peers

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[4] Baker, D.L. et al. "Effects of a Paired Bilingual Reading Program and an English-Only Program on the Reading Performance of English Learners in Grades 1-3." *Journal of School Psychology*, 50, September 2012. Accessed via Elsevier.

[5] Cirino, P.T. et al. "One-Year Follow-Up Outcomes of Spanish and English Interventions for English Language Learners at Risk for Reading Problems." *American Educational Research Journal*, 46:3, September 2009. Accessed via Proquest.

[6] Saenz, L.M., L.S. Fuchs, and D. Fuchs. "Peer-Assisted Learning Strategies for English Language Learners with Learning Disabilities." *Exceptional Children*, 71:3, Spring 2005. Accessed via Proquest.

AUTHOR(S)	YEAR	SAMPLE SIZE	COMPONENTS OF INTERVENTION	OUTCOMES
Vaughn et al.[7]	2006	171 Grade 1 students	- Small groups (3 to 5 students) for 50 minutes per day for 115 sessions - Groups led by intervention instructors - Groups received dedicated literacy instruction in a variety of topics (e.g., word recognition, comprehension strategies, phonetic awareness, etc.) - Supplement to core reading curriculum in both Spanish (in bilingual schools) and English	- Treatment students performed higher on measures of phonological awareness, word attack, word reading, and spelling - Greater range of effect size for Spanish study ($d=0.33-0.81$) than for English study ($d=0.35-0.42$)
Carlo et al.[8]	2004	254 Grade 5 students	- Vocabulary enrichment intervention that combined direct word instruction with instruction in word learning strategies for EL students - Whole class participated for 15 weeks for 30 to 45 minutes per day - Each week, 10 to 12 new words were introduced and studied; every fifth week was a review - Spanish speakers were given a preview text in Spanish before the topic was officially introduced	- Treatment group showed greater gains in mastery, word association, and polysemy than their control group peers - Suggests that direct vocabulary instruction is effective for EL students (as well as English-only peers)

At the elementary level, the majority of studies that assess EL student outcomes do so from the perspective of language and literacy development. During this period in their academic and cognitive development, young EL students are trying to master both their home language and English. This early childhood dual language development often requires specialized interventions in order to ensure that EL students are gaining the foundational skills—such as phonemic awareness, phonics, fluency, and vocabulary—that are necessary for sustained achievement.[9]

Empirical data suggest that EL students in elementary school benefit from interventions that provide focused, small-group learning opportunities. Often, these small-group interventions offer EL students the opportunity to receive dedicated and largely personalized language and literacy instruction, as well as time for peer-to-peer interaction. According to the U.S. Department of Education, EL interventions with small-group elements are particularly beneficial for students with weak reading skills, given that educators and intervention specialists are adequately trained and supported by the school or district.

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[7] Vaughn, S. et al. "Effectiveness of a Spanish Intervention and an English Intervention for English-Language Learners at Risk for Reading Problems." *American Educational Research Journal*, 43:3, Fall 2006. Accessed via Proquest.

[8] Carlo, M. S. et al. "Closing the Gap: Addressing the Vocabulary Needs of English-Language Learners in Bilingual and Mainstream Classrooms." *Reading Research Quarterly*, 39:2, April 2004. Accessed via Proquest.

[9] Linan-Thompson, S. and S. Vaughn. "Research-Based Practices for English Language Learners." In *Research-Based Methods of Reading Instruction for English Language Learners, Grades K-4*. Association for Supervision and Curriculum Development, August 2007. http://www.ascd.org/publications/books/108002/chapters/Research-Based_Practices_for_English_Language_Learners.aspx

Small-group sessions vary considerably in duration and frequency, but it is recommended that they are implemented daily for a minimum of 30 minutes.[10] Among the sample of frequently-cited empirical studies identified for this report, all six successful elementary-level EL interventions consist of some length of small-group instruction that ranges from 10 minutes per week to 50 minutes per day.

In a large-scale study of K-2 students in California, researchers assessed the effectiveness of the Teaching Artist Project (TAP), a language development intervention that uses drama and creative movement to foster oral proficiency through social interactions. TAP aims to improve classroom engagement among EL students and bolster English comprehension, both of which contribute to augmented speaking skills. In addition to segments dedicated to vocabulary, modeling, and guided practice, instructors reserved 10 minutes during each weekly TAP lesson for small-group, peer-to-peer activities (for example, students might be asked to dramatize a short story or develop alternative plotlines). Using the California English Language Development Test to benchmark progress, the researchers found that, overall, EL students who participated in the TAP intervention only showed marginally significant gains on the California speaking assessment. However, the intervention was found to be increasingly effective as students' baseline speaking scores decreased; thus, students with the lowest initial level of speaking skills benefitted the most from the intervention (effect size ranging from 0.75 to 0.83) (Figure 1.2).[11]

Figure 1.2: Impact of TAP on EL Student Speaking, by Baseline Speaking Level
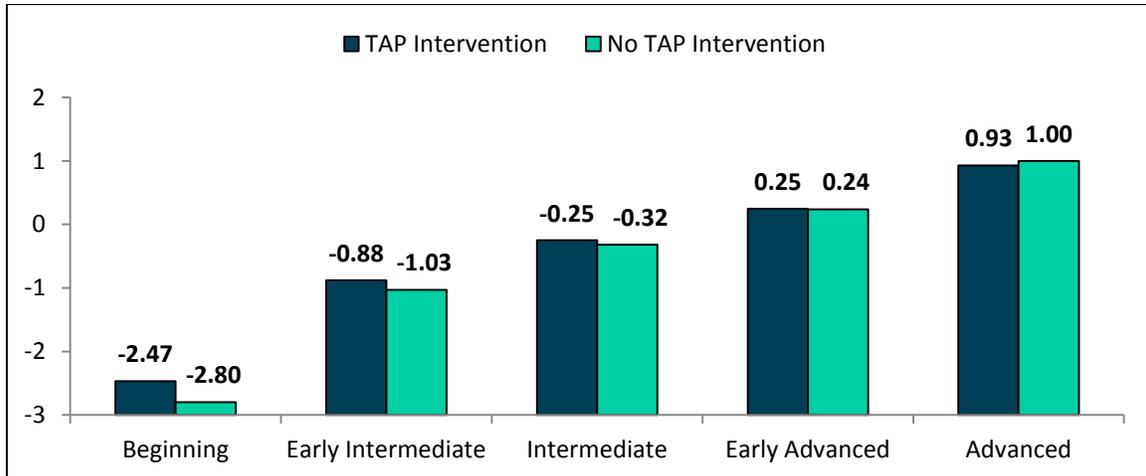
Source: International Literacy Association[12]

On the other end of the spectrum, two empirical studies examine the effectiveness of interventions that provide 50 minutes of daily small-group sessions for EL students. These studies evaluate a modified version of the Proactive Reading intervention, a program that is

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[10] Gersten, R. et al. "Effective Literacy and English Language Instruction for English Learners in the Elementary Grades." National Center for Education Evaluation and Regional Assistance, U.S. Department of Education, December 2007. p.7. http://ies.ed.gov/ncee/wwc/pdf/practice_guides/20074011.pdf
[11] Greenfader, Brouillette, and Farkas, Op. cit., p.185.
[12] Adapted from: Ibid., p.198.

provisionally supported by What Works Clearinghouse.[13] Proactive Reading places students in groups based on their language of instruction for core reading; thus, EL students with low levels of English proficiency are put into a Spanish program. In small groups of three to five students, Proactive Reading participants receive 40 minutes of reading and oracy instruction and 10 minutes of vocabulary and language development instruction each day that focus on five key content strands: phonemic awareness, letter knowledge, word recognition, connected text fluency, and comprehension strategies.[14] Students in both intervention groups (i.e., English and Spanish programs) generally outperformed their control-group peers. For EL students in the Spanish group, the effects of the Enhanced Proactive Reading initiative were larger than those among EL students in the English study (between 0.33 and 0.81 compared to between 0.35 and 0.42).

SECONDARY SCHOOL INTERVENTIONS

Figure 1.3 presents a summary table of five empirical studies that investigate secondary-level EL interventions. Where possible, the effect sizes (d) of the programs' outcomes are provided. The majority of these investigations measure programmatic success in terms of mastery of key academic vocabulary goals, which serve as a proxy for student achievement in English more broadly.

Figure 1.3: Empirical Studies of Secondary-Level EL Interventions

AUTHOR(S)	YEAR	SAMPLE SIZE	COMPONENTS OF INTERVENTION	OUTCOMES
Hwang et al.[15]	2015	6,169 middle school students	■ Whole-class vocabulary intervention that explicitly teaches five academic vocabulary words each week ■ Words are incorporated into all content area assignments for at least 15-20 minutes per day ■ Study examined the intervention's effect on students from multiple levels of English proficiency, from English Only (EO) levels through Limited English Proficient (LEP) levels.	■ All students in the treatment group scored higher on post-tests than their control-group peers ■ English-only students benefitted the most (0.07 points higher than control group), while limited-English proficiency students gains were marginal (0.03 points higher)

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[13] "Enhanced Proactive Reading." What Works Clearinghouse, Institute of Education Sciences. http://ies.ed.gov/ncee/wwc/interventionreport.aspx?sid=162

[14] [1] Cirino et al., Op. cit., p.758.
[2] Vaughn et al., "Effectiveness of a Spanish Intervention and an English Intervention for English-Language Learners at Risk for Reading Problems," Op. cit., pp.459–460.

[15] Hwang, J.K. et al. "Differential Effects of a Systematic Vocabulary Intervention on Adolescent Language Minority Students with Varying Levels of English Proficiency." *International Journal of Bilingualism*, 19:3, 2015. Accessed via Proquest.

AUTHOR(S)	YEAR	SAMPLE SIZE	COMPONENTS OF INTERVENTION	OUTCOMES
Matunchniak, Olson, and Scarcella[16]	2013	1,640 middle and high school students	■ Teacher-based intervention in which mainstream educators received professional development targeted at EL student needs, particularly in analytical writing ■ Teachers were trained to help EL students develop cognitive strategies to derive meaning from academic texts ■ Professional development was supplemented with intervention activities based on students' pretest scores	■ Students who participated in the program for two years showed greater growth in on-demand writing than one-year students ($d=0.45$) and control students ($d=0.52$) ■ Two-year students scored higher on measures of analytic writing than their peers ($d=0.51$)
Lesaux et al.[17]	2010	476 Grade 6 students	■ Academic vocabulary intervention implemented in mainstream classrooms with high populations of minority-language students ■ Program lasted for 18 weeks, with dedicated lessons lasting for 45 minutes each; a total of 72 new high-utility words were taught ■ Whole-group, small-group, and independent activities were used to promote comprehensive understanding (e.g., speaking, reading, listening, and writing)	■ Students in treatment classrooms demonstrated mastery of words taught ($d=0.39$) ■ Smaller improvements were made in morphological awareness ($d=0.20$), depth of word knowledge ($d=0.15$), and reading comprehension ($d=0.15$)
Vaughn et al.[18]	2009	888 Grade 7 students	■ Academic vocabulary intervention in mainstream social studies classrooms ■ Students received dedicated vocabulary instruction around a given theme for 50 minutes per day for 12 weeks ■ Teachers read selected passages, taught key ideas, used videos and graphic organizers to illustrate ideas, and led paired student activities ■ Teachers pronounced new words, gave Spanish cognates or translations, and provided a visual representation of the word	■ EL and non-EL students equally benefited from participation, with both groups scoring higher on comprehension and vocabulary measures than control-group counterparts

[16] Matunchniak, T., C.B. Olsen, and R. Scarcella. "Examining the Text-Based, On-Demand, Analytical Writing of Mainstreamed Latino English Learners in a Randomized Field Trial of the Pathway Project Intervention." *Reading and Writing*, 27:6, November 2013. Accessed via Proquest.

[17] Lesaux, N.K. et al. "The Effectiveness and Ease of Implementation of an Academic Vocabulary Intervention for Linguistically Diverse Students in Urban Middle Schools." *Reading Research Quaterly*, 45:2, 2010. Accessed via Proquest.

[18] Vaughn, S. et al. "Enhancing Social Studies Vocabulary and Comprehension for Seventh-Grade English Language Learners: Findings from Two Experimental Studies." *Journal of Research on Educational Effectiveness*, 2, October 2009. Accessed via EBCSOHost.

Author(s)	Year	Sample Size	Components of Intervention	Outcomes
Townsend and Collins[19]	2009	37 middle school students	- After-school vocabulary development program, two cohorts of students - Participants met four times a week for five weeks, each session lasting 75 minutes - Students studied six new target words each week and developed strategies for processing word meaning more generally	- Treatment students increased their academic vocabulary knowledge - Participants from both cohorts made statistically significant growth on the target word items ($d=0.42$ and 0.71) - Only students in the second cohort made significant growth on non-target word items ($d=0.50$)

Middle and high school EL interventions, as evidenced above, typically address different concerns than programs that are implemented at the elementary level. Whereas EL students in primary school receive instruction dedicated to language development more broadly, secondary school EL students generally receive instruction targeted toward more academically-focused outcomes. Indeed, many programs at this level pinpoint reading and textual comprehension in an academic setting. These considerations aim to prepare middle and high school EL students for success in higher education, where oral and listening English proficiency may no longer be enough for academic achievement. Reading, writing, and analyzing text—which is founded on an understanding of academic vocabulary—are critical skills that EL students need to develop as they graduate into middle and high school.[20]

To this end, key research-based studies at the secondary level largely assess the value that academic vocabulary knowledge has for EL students. As students progress into higher grade levels, this vocabulary knowledge has increasingly noticeable effects on reading comprehension, first language transfer into English, and vocabulary development more broadly.[21] Mastery of academic vocabulary is an important indicator of overall performance, yet many secondary EL students "lack opportunities to develop the sophisticated, abstract, academic vocabulary necessary to support reading, writing, and discussion of the academic topics covered in school."[22] According to the U.S. Department of Education, academic vocabulary "represents words that are used primarily in the academic disciplines (science, history, geography, mathematics, literary analysis, etc.). These words are much more frequently used in discussions, essays, and articles in these disciplines than in informal conversations and social settings."[23] While many of these EL students may be fully capable

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[19] Townsend, D. and P. Collins. "Academic Vocabulary and Middle School English Learners: An Intervention Study." *Reading and Writing*, 22:9, October 2009. Accessed Via Proquest.

[20] Cisco, B.K. and Y. Padron. "Investigating Vocabulary and Reading Strategies with Middle Grades English Language Learners: A Research Synthesis." *Research in Middle Level Education*, 36:4, 2012. p.1. https://www.amle.org/portals/0/pdf/rmle/rmle_vol36_no4.pdf

[21] Ibid.

[22] Baker, S. et al. "Teaching Academic Content and Literacy to English Learners in Elementary and Middle School." National Center for Education Evaluation and Regional Assistance, U.S. Department of Education, April 2014. p.13. http://ies.ed.gov/ncee/wwc/pdf/practice_guides/english_learners_pg_040114.pdf

[23] Ibid., p.14.

of communicating effectively by the time they enter middle or high school, often, language mastery is weakest in the areas of academic writing, reading, and comprehension.

Empirical and anecdotal evidence suggest that it is better to select a small set of academic terms for in-depth instruction rather than inundating EL students with a large number of new words. In one successful secondary-level EL intervention, for example, students focused on only eight or nine new words per eight-week session.[24] The U.S. Department of Education recommends that educators highlight between five and eight words over the course of several lessons so that EL students can develop deep and meaningful mastery. These words should be central to the understanding of the central text or lesson concept and be relevant across other content areas.[25]

In many of the empirical studies cited in this report, researchers reveal that explicit instruction in academic and content-area vocabulary indeed has positive effects on EL students, who often have "fewer opportunities to engage in academic discussions, to be exposed to rich content instruction, and to have good language models" than their native-English peers.[26] For example, in a vocabulary acquisition intervention in a Grade 7 social studies classroom, students received dedicated vocabulary and concept-building instruction for 50 minutes per day for nine to 12 weeks. Specifically, the daily intervention schedule was composed of:

- A brief overview of the "big ideas";
- Explicit vocabulary instruction that integrated paired students' discussion of the words;
- Discussion built around a short video clip (two to four minutes) that complemented the day's reading;
- A teacher-led or paired student reading assignment followed by generating and answering questions; and
- A wrap-up activity in the form of a graphic organizer or other writing exercise.[27]

In these ways, the targeted vocabulary intervention addressed both key social studies terminology and how those terms reinforced students' understanding of central unit concepts. According to the researchers, it "shifted the instructional emphasis from the acquisition of historical facts to one in which the *big ideas* provided context for promoting students' using language and understanding the content."[28] For EL students, this extended vocabulary instruction contributed to higher measures of curriculum-based vocabulary and reading comprehension.

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[24] Lesaux et al., Op. cit., p.203.

[25] Baker et al.. "Teaching Academic Content and Literacy to English Learners in Elementary and Middle School," Op. cit., p.16.

[26] Vaughn et al., "Enhancing Social Studies Vocabulary and Comprehension for Seventh-Grade English Language Learners: Findings from Two Experimental Studies," Op. cit., p.316.

[27] Bullet points adapted from: Ibid., p.306.

[28] Ibid., p.316.

SECTION II: SHORT-TERM AND LONG-TERM ENGLISH LEARNERS

In this section, Hanover Research examines the effect that length of time in EL classes has on students. In doing so, two primary groupings emerge: short- and long-term English learners. Because there is limited research-based literature that addresses this distinction specifically, much of the empirical data that assesses this topic investigates students' EL designation and how they are classified by their schools over time.

KEY FINDINGS

- **EL students typically enter school with significantly lower reading and math scores than their English-only peers; however, data suggest that EL students can close this gap.** Elementary school EL students who receive EL instruction consistently lessen the achievement gap throughout elementary school, and one study finds that by Grade 5, EL students who enroll in Kindergarten perform at the same level as their non-EL counterparts in math (Han and Bridglall). Indeed, the sooner that an EL student begins receiving instruction that meets his or her needs, the more likely he or she is to perform at the same level as English-only students by the end of middle school (Halle et al.).

- **However, data do not consistently indicate a suggested length of time that EL students generally need to reach proficiency.** Some studies suggest that three years in an EL program is enough to successfully prepare students for grade-level proficiency targets (Flores, Batalova, and Fix), while others observe that five (Han and Bridglall) or even eight years (Umansky and Reardon) is needed to close the gap and eliminate students' EL status. Given the heterogeneity of this group of students, this finding is perhaps unsurprising. Regardless of the amount of time that students are classified as EL, it is important to ensure that they are not reclassified before reaching established proficiency benchmarks.

- **Long-term EL students underperform relative to their peers at every grade level** (Flores, Batalova, and Fix). These students enter high school with limited academic literacy in English—despite their oral proficiency in the language—and often require dedicated interventions that are distinct from the general EL population. These programs should explicitly teach academic literacy instruction, similar to traditional elementary school curricula (Menken and Kleyn).

- **Re-designated, former EL students who have reached grade-level benchmarks outperform their EL peers and often match English-only peers' achievement levels** (Ardasheva, Tretter, and Kinny; Hill, Weston, and Hayes). Here, former EL classification serves as a proxy for short-term English learners, as these EL students are subsequently able to enroll in mainstream classes without EL support.

- **Schools should help students achieve English-language proficiency as soon as possible to reduce their risk of becoming long-term EL participants.** Indeed, data

suggest that there is variability in the developmental trajectories of EL students based on the grade in which they reach oral English language usage proficiency (Halle et al.). Students who are reclassified as formal English learners in earlier grades are more likely to progress on time and have higher test scores through Grade 12. Even long-term EL students who eventually reach proficiency benchmarks and are reclassified perform higher than students who never achieve reclassification (Hill, Weston, and Hayes).

- **School administrators can identify EL students who are at-risk for becoming long-term EL designees.** This can allow educators to target these students in elementary or middle school for additional EL intervention to reduce the likelihood of long-term EL status. For instance, English letter naming fluency, initial sound fluency, and vocabulary skills at the beginning of Kindergarten often predict English oral reading fluency and overall growth of EL students in Grade 1 (Yesil-Dagli). Similarly, age of entry into EL programming can affect later success, so EL students who enroll in schools with EL instruction after Kindergarten or Grade 1 may require additional assistance (Yazejian et al.).

SHORT-TERM ENGLISH LEARNERS

Figure 2.1 presents key research-based studies that examine the outcomes of EL students who receive early and/or consistent English learner instruction. These analyses draw data from early childhood education interventions that illustrate the effectiveness that EL programs can have over the short-term; to this end, most of these studies evaluate students through elementary school and compare the achievement of EL pupils to their English-only peers. The success of elementary-level EL students in diminishing the achievement gap between EL and non-EL students here serves as a proxy for the ability of these students to succeed in the short-term (and thus avoid remaining in specialized EL programs for an extended period of time).

Figure 2.1: Empirical Studies of Short-Term EL Student Achievement

AUTHOR(S)	YEAR	SAMPLE SIZE	EVALUATIVE CRITERIA	OUTCOMES
Yazejian et al.[29]	2015	5,037 Preschool children tracked through Grade 1	■ Relationship between age of entry and time in care in an early education program and language and socio-emotional skills ■ Most dual language learners were placed in classes with teachers who spoke their home language, but most instruction is in English	■ Age of entry and duration were positively associated with receptive language outcomes for dual language learners ■ Late entrants gained during their time in the program, but did not surpass early entrants ■ Teacher ratings of socio-emotional development improved with longer attendance

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[29] Yazejian, N. et al. "High-Quality Early Education: Age of Entry and Time in Care Differences in Student Outcomes for English-Only and Dual Language Learners." *Early Childhood Research Quarterly*, 32, February 2015. Accessed via Elsevier.

Author(s)	Year	Sample Size	Evaluative Criteria	Outcomes
Ardasheva, Tretter, and Kinny[30]	2012	18,523 Grade 6-8 students	▪ Students were divided into three groups: English-only, former EL, and current EL ▪ All EL students (current and former) received content-based instruction supported by bilingual aides ▪ Annual proficiency tests evaluated students' EL status ▪ Data assessed students' reading and math achievement	▪ Re-designated fluent English proficient students outperformed current EL and English-only students in reading (*d=1.07 and 0.52*) and math (*d=0.86 and 0.42*) ▪ Results were consistent, regardless of the poverty index of the school ▪ Once students were reclassified as "former EL," there was a substantial jump in standardized test scores
Yesil-Dagli[31]	2011	2,481 Grade 1 EL students	▪ Relationship between language and literacy skills in Kindergarten and oral reading fluency in Grade 1 ▪ EL students attended *Reading First* schools (high-poverty, low-achieving) and received services specially designed for EL student	▪ EL students were able to surpass mainstream fluency benchmarks by the end of Grade 1 ▪ English letter naming fluency is the best predictor of English oral reading fluency for EL students ▪ English vocabulary skills were the second best predictor
Halle et al.[32]	2011	19,890 Kindergarten students tracked through Grade 8	▪ Data isolated first-time Kindergartners, among which was a sub-sample of EL first-time Kindergartners ▪ English screening tests determined EL status, and proficiency status was classified by time of passing (Kindergarten, Grade 1, or not by the end of Grade 1) ▪ El students generally had access to an EL aide, specialized tutoring or EL instruction, and/or non-English books	▪ EL students who were proficient by Kindergarten kept pace with English-only peers in reading and math ▪ EL students who were not proficient by the end of Grade 1 were able to close gap in reading but not in math ▪ EL students positively grow in measures of socio-behavioral outcomes at a steeper rate than their English-only peers

[30] Ardasheva, Y., T.R. Tretter, and M. Kinny. "English Language Learners and Academic Achievement: Revisiting the Threshold Hypothesis." *Language Learning*, 62:3, September 2012. http://www.ee.louisville.edu/~eri/papers_pres/Tretter_Language_Learning_2012.pdf

[31] Yesil-Dagli, U. "Predicting ELL Students' Beginning First Grade English Oral Reading Fluency from Initial Kindergarten Vocabulary, Letter Naming, and Phonological Awareness Skills." *Early Childhood Research Quarterly*, 26, 2011. Accessed via Elsevier.

[32] Halle, T. et al. "Predictors and Outcomes of Early Versus Later English Language Proficiency among English Language Learners." *Early Childhood Research Quarterly*, 27, July 2011. Accessed via Elsevier.

AUTHOR(S)	YEAR	SAMPLE SIZE	EVALUATIVE CRITERIA	OUTCOMES
Han and Bridglall[33]	2009	17,000 Kindergarten students tracked through Grade 8	▪ Academic trajectories of students with varying levels of EL status (high, low, or none) over five years ▪ Reading and mathematics scores were used to track progress ▪ EL students received dedicated bilingual instruction as needed throughout the five-year period ▪ EL students started Kindergarten with lower reading and mathematics scores than non-EL peers	▪ EL students can perform at the same level as their non-EL peers provided they get the necessary resources ▪ By Grade 5, EL students had closed the gap in math and narrowed the gap in reading ▪ Children who spoke a non-English language at home increased math scores faster than English-speaking peers ($d=0.24$-0.50)

As evidenced above, students who enter school as English learners can meet grade-level standards and achieve at the same level as their English-only peers. If they are enrolled in classrooms or programs that provide the proper educational and instructional resources, EL students can often close the achievement gap by the time they reach Grade 5. Often, this reliable English-language foundation can ensure that EL student do not continue to lag behind grade-level peers and become stymied in classes that fail to meet their needs. Because much of the data on short-term performance come from large-scale longitudinal studies, it is unclear precisely what EL services the students received. However, it is noted that short-term students in EL schools generally received some combination of the following services: EL or bilingual aides, dedicated EL instruction each week, and EL services for their families.[34]

Over the short-term, then, data highlight the importance of developing proficiency early in a child's time in school. Indeed, as students pass from grade to grade without achieving proficiency, their chances of closing the performance gap with their English-only peers diminishes as their likelihood of becoming long-term learners increases.[35] This suggests that short-term EL students—here implying students that have recently enrolled in EL programming—can benefit from many of the same services developed for elementary school students. Small-group interventions, targeted literacy and math instruction, and native-language or bilingual periods offer a way for schools to ensure that short-term EL students effectively and quickly integrate into the mainstream curriculum.

LONG-TERM ENGLISH LEARNERS

Experts acknowledge that the research base that empirically examines the needs of long-term EL students is limited; consequently, Figure 2.2 presents studies that primarily address reclassification concerns among this population. The amount of time that it takes for an EL student to reach proficiency benchmarks and be reclassified as a former EL student often

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[33] Han, W. and B.L. Bridglall. "Assessing School Supports for ELL Students Using the ECLS-K." *Early Childhood Research Quartery*, 24, 2009. Accessed via Elsevier.
[34] Ibid., p.450.
[35] Halle et al., Op. cit., p.14.

designates whether he or she is either a short- or long-term EL participant. In California, for instance, long-term EL students "have been enrolled in [U.S.] schools for more than six years without yet meeting the criteria for reclassification."[36] As such, by comparing traditional-, re-designated-/former-, and non-EL students, as well as time to reclassification, these studies approximate the concerns faced by long-term EL students.

Figure 2.2: Empirical Studies of Long-Term EL Student Outcomes and Concerns

AUTHOR(S)	YEAR	SAMPLE SIZE	EVALUATIVE CRITERIA	OUTCOMES
Hill, Weston, and Hayes[37]	2014	More than 120,000 students each in Grades 2, 4, 7, and 8; tracked for five years	▪ Researchers divided student population according to EL status and amount of time classified as an EL student ▪ The California Standards English Language Arts test and on-time grade progression determined student achievement	▪ Reclassified EL students outperform EL students and do as well as native English speakers in terms of academic outcomes and on-time grade progression ▪ Students who are reclassified in younger grades are more likely to progress on time and have higher test scores through Grade 12 ▪ Long-term EL students who are reclassified later in their education still outperform EL students ▪ Stricter reclassification guidelines are associated with better outcomes for reclassified EL students
Umansky and Reardon[38]	2014	5,423 Kindergarten students tracked through Grade 12	▪ Researchers studied four EL programs: traditional English immersion, Spanish transitional bilingual program, Spanish maintenance bilingual program, and Spanish dual immersion ▪ Timing of reclassification (to non-EL) was the main dependent variable, which was based on six assessments	▪ English immersion students have more favorable reclassification outcomes in elementary school ▪ By middle school, students in two-language programs catch up and surpass their English immersion peers in terms of reclassification and academic achievement ▪ On average, 50 percent of EL students are reclassified; however, it often takes approximately eight years ▪ Reclassification rates slow in middle school

[36] Olsen, L. "Reparable Harm: Fulfilling the Unkept Promise of Educational Opportunity for California's Long Term English Learners." Californians Together, 2010. p.10. http://edsource.org/wp-content/uploads/ReparableHarm1.pdf

[37] Hill, L.E., M. Weston, and J.M. Hayes. "Reclassification of English Learner Students in California." Public Policy Institute of California, January 2014. http://www.ppic.org/content/pubs/report/R_114LHR.pdf

[38] Umansky, I.M. and S.F. Reardon. "Reclassification Patterns Among Latino English Learner Students in Bilingual, Dual Immersion, and English Immersion Classrooms." *American Educational Research Journal*, August 2014.

AUTHOR(S)	YEAR	SAMPLE SIZE	EVALUATIVE CRITERIA	OUTCOMES
Flores, Batalova, and Fix[39]	2012	133,968 K-12 students tracked through Grade 12	▪ Researchers divide students by participation in EL programs: current or former EL and never EL ▪ 18 percent of the sample was classified as EL at some point ▪ Outcome measures include performance on elementary and secondary math and reading tests	▪ EL students who completed language acquisition programs in three years achieved the best results in meeting proficiency standards ▪ Long-term EL students (five or more years) lagged behind in every grade
Menken and Kleyn[40]	2010	Three high schools in New York City	▪ Qualitative data derived from interviews with long-term EL students, administrators, and teachers ▪ Researchers aimed to discern the unique needs of long-term EL students	▪ Long-term EL participants were 3-3.5 years below grade level ▪ Long-term EL students' education can be classified as subtractive, where priority is given to English instruction (as opposed to bilingualism) ▪ Long-term EL students generally do not receive specialized services apart from those offered to traditional EL students

Long-term EL students consistently fail to meet grade-level English-language standards, the negative effects of which compound from year to year and make it increasingly difficult for these students to reach proficiency. Several factors often contribute to students becoming long-term English learners, such as placement in mainstream classrooms without EL services (the "sink or swim" method), curricula and materials that do not address the needs of EL students, weak or inconsistent language development programs, or enrollment in linguistically isolated schools.[41]

The precise academic problems faced by long-term EL students can be difficult to pinpoint, particularly as these students typically function well socially and use English to communicate. However, long-term EL students generally arrive in middle or high school with insufficient mastery of academic language, which impedes success in reading and writing. The majority of these students, despite years in English-language schools, often only display intermediate levels of English proficiency (or below). [42] Because of these shortcomings, long-term EL students require differentiated programs to ensure that they reach proficiency benchmarks, the achievement of which has academic and linguistic

[39] Flores, S.M., J. Batalova, and M. Fix. "The Educational Trajectories of English Language Learners in Texas." Migration Policy Institute, March 2012. http://www.migrationpolicy.org/sites/default/files/publications/TexasELLs.pdf

[40] Menken, K. and T. Kleyn. "The Long-Term Impact of Subtractive Schooling in the Educational Experiences of Secondary English Language Learners." *International Journal of Bilingual Education and Bilingualism*, 13:4, July 2010. https://katemenken.files.wordpress.com/2011/10/menken-kleyn-ijbeb-134-july-2010-subtractive-schooling-ltell1.pdf

[41] Olsen, Op. cit., pp.14–19.

[42] Ibid., p.23.

benefits for the remaining duration of the students' time in school. Successful elements of programs that address the unique needs of long-term EL students include:

- **Specialized English language development courses.** A course designed specifically for Long Term English Learners focuses on powerful oral language development, explicit literacy development, instruction in the academic uses of English, high quality writing, extensive reading of relevant texts, and an emphasis on academic language and complex vocabulary. Long Term English Learners should be concurrently enrolled in a grade-level English class mixed heterogeneously with strong native English speakers and taught by the same teacher.

- **Clustered placement in heterogeneous and rigorous grade-level content classes mixed with English proficient students and taught with differentiated instructional strategies.** In order to maximize integration with English proficient students, increase interaction with strong English models, and ensure curricular rigor, Long Term English Learners should be placed into grade-level content classes in intentional clusters of "like Long Term English Learners" among English proficient students. Long Term English Learners should not comprise more than one-third of the class.

- **Explicit language and literacy development across the curriculum.** Teaching subject matter to English Learners requires direct, explicit instruction on strategies needed to build vocabulary and comprehend grade-level texts and participate in discussion about the content. All classes should be designed for explicit language development and focus on academic language as needed for studying the specific academic content of the class. Long Term English Learners need explicit instruction in academic uses of English, with a focus on comprehension, vocabulary development, and advanced grammatical structures needed to comprehend and produce academic language. They also need, however, explicit instruction in the language of the content used in the discipline being studied. Lessons should be designed around carefully structured language objectives for integrating subject matter content, vocabulary development, and content-related reading and writing skills.

- **Native speakers classes (articulated sequence through Advanced Placement levels).** Wherever possible, Long Term English Learners should be enrolled in an articulated, high quality program of primary language development. These courses should be designed for native speakers, and include explicit literacy instruction aligned to the literacy standards in English and designed for skill transfer across languages.

- **Placement for accelerated progress and maximum rigor paired with formal systems for monitoring success.** Long Term English Learners should be placed into rigorous, college preparation courses and specialized English language development courses. The master schedule is arranged to facilitate accelerated movement needed to overcome gaps and earn credits, as well as to allow for adjusting a student's placements to provide increased supports. A formal monitoring system can review mid-semester assessments and grades for each Long Term English Learner in order to determine whether placement needs to be adjusted and what kind of supports might be needed to improve student success.[43]

By implementing dedicated programs for long-term EL students, schools ultimately aim to be able to reclassify them as former EL students and begin the transition into normalized mainstream classrooms. As the empirical data suggest, reclassification is major factor in the sustained success of EL students, regardless of the amount of time that they are designated

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[43] Bullet points taken verbatim, with some edits for clarity, from: Ibid., pp.33–36.

as English learners; indeed, students who achieved proficiency in three years scored the highest on math and reading standards among all EL students in Texas.[44] Moreover, even though long-term EL students underperform relative to their peers across all grade levels, those who are reclassified still outperform EL students significantly.[45] Reclassification status further affects graduation rates, as students designated as long-term proficient (having achieved proficiency prior to Grade 6) show the highest graduation rates among all EL populations (Figure 2.3)

Figure 2.3: Average Four-Year Graduation Rates by ELL Status and Ethnicity
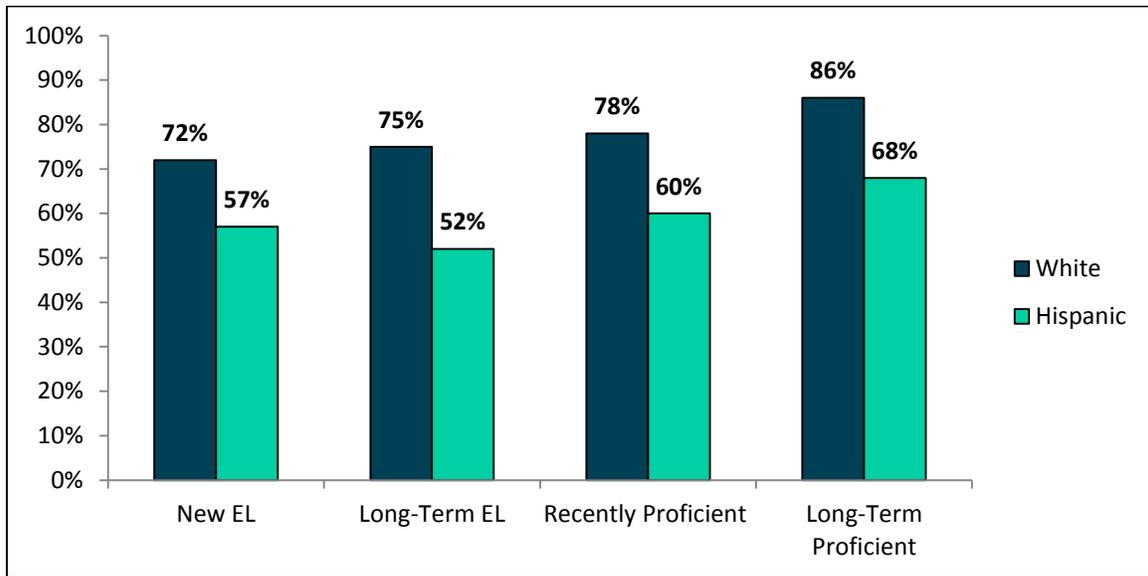
Source: The University of Chicago Consortium on Chicago School Research[46]

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[44] Flores, Batalova, and Fix, Op. cit., p.1.

[45] Hill, Weston, and Hayes, Op. cit., p.19.

[46] [1] Adapted from: Gwynne, J. et al. "What Matters for Staying On-Track and Graduating in Chicago Public Schools: A Focus on English Language Learners." The University of Chicago Consortium on Chicago School Research, May 2012. pp.33–34. http://files.eric.ed.gov/fulltext/ED532513.pdf

[2] New EL students are those who were first determined to be EL in Grade 6 or later. Long-term EL students were those first determined to be EL before Grade 6. Recently proficient students are former EL who achieved English proficiency in Grade 6 or later. Long-term proficient students are former EL who achieved proficiency prior to Grade 6.

SECTION III: INTEGRATED AND DESIGNATED APPROACHES

In this section, Hanover Research assesses the efficacy of both integrated and designated approaches to EL instruction for K-12 English learners. Integrated strategies combine instructional methods for both EL and non-EL students in a single classroom; meanwhile, designated pedagogies allot differentiated time for specialized EL instruction. This section draws equally from empirical studies and anecdotal literature.

KEY FINDINGS

- **Integrated EL classrooms should develop explicit learning objectives for both language learning and content.** In all three studies that specifically examine integrated, content-area instruction for both EL and non-EL students, researchers reveal that teachers use specific language goals (such as vocabulary identification or academic writing practice) to complement subject-specific lessons, and vice versa (Vaughn et al., 2009; August et al.; and Silverman and Hines).

- **Data suggest that integrated language classrooms benefit both EL and English-only students.** With integrated curricula, no evidence indicates that non-EL students' performance declines throughout the year (Silverman and Hines). In fact, two empirical studies found that integrated instruction (provided that it is implemented with fidelity) increases the performance of English-only students as well as EL students, although the effect size is generally larger among English learners (Vaughn et al., 2009; and August et al.).

- **Dedicated vocabulary instruction around key subject-area concepts increases measures of both vocabulary and content-area knowledge.** This strategy is especially effective in content-area classrooms (e.g., science, social studies, etc.) as EL students can use vocabulary to identify the key themes and concepts within each lesson (i.e., the "big ideas") (Vaughn et al., 2009).

- **Visual aids and experiential learning opportunities can complement integrated instruction and further support English learners.** These resources and instructional strategies further cement the "big ideas" of each lesson. In one study, EL students in classrooms that showed complementary video clips for each lesson were able to significantly lessen the gap in general vocabulary knowledge with their non-EL peers (Silverman and Hines). Similarly, students in an integrated science classroom that highlighted hands-on activities outperformed their counterparts in control classrooms (August et al.).

- **Specialized professional development for teachers in integrated classrooms is critical to ensure that they can meet the needs of EL students.** Specifically, participation in professional development before the implementation of an integrated-language classroom curriculum has aided teachers in understanding the needs of their EL students. This dedicated training also introduces key components

of integrated education and facilitates teachers' comfort with the curriculum's unique features (August et al.).

- **Designated EL classrooms are more effective when dedicated English-language development is provided in blocked periods, rather than integrated throughout the day** (Gamez). These blocks of time allow teachers to directly address issues faced by English learners, and students benefit from their teacher's concerted effort to use lexically diverse and complex speech during this time.

- **Multi-tiered interventions are effective at identifying English learners that require more dedicated instruction.** These intervention models use regular testing to determine which students are placed in increasingly specialized programs. In one study, at-risk EL students were identified and enrolled in a second-tier reading intervention that targeted literacy in small groups. These students increased reading scores faster than their peers who were not placed in the second-tier program, and the effects persisted through the subsequent grade level (Linan-Thompson et al.).

INTEGRATED ENGLISH LEARNER CLASSROOMS

The following table (Figure 3.1) outlines four data-driven analyses that examine EL instruction within integrated, content area classrooms. This approach requires educators to address the learning needs of both EL and non-EL students conjointly. In all of the studies, EL students are placed in mainstream classrooms with dedicated EL resources and/or specialized professional development for course teachers. Of note, there is considerable variability in sample sizes among the four identified empirical students, which helps to underscore the efficacy of integrated EL pedagogies (as they are effective both on the small- and large-scale). Where possible, effect sizes (*d*) are presented with the studies' outcomes.

Figure 3.1: Empirical Studies of Integrated EL Instructional Strategies

AUTHOR(S)	YEAR	SAMPLE SIZE	CLASSROOM FEATURES	OUTCOMES
Vaughn et al.[47]	2009	888 Grade 7 social studies students	- Academic vocabulary intervention in mainstream social studies classrooms - Students received dedicated vocabulary instruction around a given theme for 50 minutes per day for 12 weeks - Teachers read selected passages, taught key ideas, used videos and graphic organizers to illustrate ideas, and led paired student activities - Teachers pronounced new words, gave Spanish cognates or translations, and provided a visual representation of the word	EL and non-EL students equally benefited from participation, with both groups scoring higher on comprehension and vocabulary measures than control-group counterparts

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[47] Vaughn et al. "Enhancing Social Studies Vocabulary and Comprehension for Seventh-Grade English Language Learners: Findings from Two Experimental Studies," Op. cit.

AUTHOR(S)	YEAR	SAMPLE SIZE	CLASSROOM FEATURES	OUTCOMES
August et al.[48]	2009	890 middle school science students	▪ Students were placed in mainstream science classes based on language proficiency testing ▪ Teachers were provided with instructional materials and professional development specific to EL student needs ▪ Curricula focused on hands-on, experiential learning and visual materials were used to ensure EL students understood the tasks ▪ EL students also received explicit vocabulary instruction	▪ EL and non-EL students produced positive gains in performance ▪ Science (*d=0.16-0.25*) and vocabulary (*d=0.26-0.37*) outcomes improved for EL students
Silverman and Hines[49]	2009	85 Preschool-Grade 2 science students	▪ Students received 45 minutes of dedicated instruction in science three days per week in mainstream elementary school classrooms ▪ Eight words were chosen per lesson for both the treatment and control groups ▪ Treatment students also viewed a video clip that incorporated the lesson's words	▪ Multimedia classrooms has a positive effect on EL students' measure of vocabulary knowledge ▪ The intervention closed the gap between EL and non-EL students' knowledge of target words (*d=0.97*) and narrowed the vocabulary gap more generally (*d=0.99*) ▪ Non-EL students showed no effect, either positively or negatively
Thomas and Collier[50]	2002	210,054 English minority K-12 students	▪ Data collected from all minority language students across five school districts, representing over 80 primary languages (75 percent Spanish, however) ▪ Students placed in one of eight different EL programs, including developmental, transitional, and two-way bilingual immersion, English as a Second Language, and mainstream classrooms	▪ 50/50 developmental bilingual education was the only program to assist EL students reach the 50th percentile in both English and their native language ▪ EL students benefitted from interactions with grade-level English-only peers ▪ EL students in mainstream classrooms with no EL services showed the largest decreases in performance

[48] August, D. et al. "The Impact of an Instructional Intervention on the Science and Language Learning of Middle Grade English Language Learners." *Journal of Research on Educational Effectiveness*, 2, October 2009. Accessed via EBSCOHost.

[49] Silverman, R. and S. Hines. "The Effects of Multimedia-Enhanced Instruction on the Vocabulary of English-Language Learners and Non-English-Language Learners in Pre-Kindergarten Through Second Grade." *Journal of Educational Psychology*, 101:2, 2009. http://legacy.wlu.ca/documents/40526/SilvermanHinesVocab.pdf

[50] Thomas, W.P. and V.P. Collier. "A National Study of School Effectiveness for Language Minority Students' Long-Term Academic Achievement." Center for Research on Education, Diversity & Excellence, 2002. http://www.usc.edu/dept/education/CMMR/CollierThomasExReport.pdf

Among the identified studies, most address integrated content-area classrooms from the perspective of academic vocabulary and the integral role that it plays in the performance of EL students. In Section I of this report, Hanover highlights the effectiveness of dedicated academic vocabulary instruction among middle and high school students; these studies further support that conclusion and determine that integrated approaches to EL instruction are the most successful when teachers develop and/or implement interventions that combine English language and content-area instruction. By combining language and content goals for both EL and English-only students, integrated classrooms facilitate the transfer of linguistic and academic knowledge between the two groups of students. This transfer has disproportionately positive effects for English learners (as they can practice the language with native speakers).[51]

For example, researchers implemented a middle school science intervention in a large, predominately EL district in Texas. The program provided both specialized instructional materials to teachers (e.g., instructional guide, charts, hands-on activities, etc.) and professional development to help them use those resources. Educators relied on the intervention curriculum for daily 40-minute lessons on science topics over the course of nine weeks.[52] The curriculum focused on experiential learning and explicit vocabulary instruction on 15 key words per week for both EL and non-EL students. At the conclusion of the nine-week program, all students—regardless of English learner status—demonstrated improvements in vocabulary and science understanding, while the professional development for teachers supported their instructional methods. The alterations made to the science curriculum, such as the use of visuals, modeling, and vocabulary instruction, allowed teachers to meet the needs of EL students without negatively impacting the achievement of their English-only cohort.[53]

This study highlights the key features of effectively integrated EL classrooms, **namely the inclusion of language objectives in content lessons, experiential and visual learning opportunities, and teacher support through professional development.** Because this pedagogical strategy has been shown to increase not only the achievement of EL students, but also that of their non-EL peers, integrated classrooms are increasingly endorsed by national organizations such as the Center for Research on the Educational Achievement and Teaching of English Language Learners (CREATE) and the National Center for Educational Evaluation and Regional Assistance.[54]

In these classrooms, developing language objective alongside content objectives is the first step on which other components (e.g., visual learning aids) can expand. According to

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[51] [1] Thomas and Collier, Op. cit., p.7.

[2] Baker et al.. "Teaching Academic Content and Literacy to English Learners in Elementary and Middle School," Op. cit., p.40.

[52] August et al., Op. cit., p.352.

[53] Ibid., p.371.

[54] [1] Himmel, J. et al. "Using the SIOP Model to Improve Middle School Science Instruction." CREATE Brief, Center for Applied Linguistics, May 2009. p.9. http://www.cal.org/create/pdfs/create-briefs-collection.pdf

[2] Baker et al.. "Teaching Academic Content and Literacy to English Learners in Elementary and Middle School," Op. cit., p.31.

CREATE, "content objectives identify what students will learn and be able to do in the lesson, and language objectives address the aspects of academic language that will be developed or reinforced. These objectives should be stated in clear and simple language and posted for students to see."[55] In developing language goals that complement content-area standards, educators can identify key vocabulary, concept words, and language structures with which students will need to be familiar in order to accomplish the lesson's activities. In science, for instance, a student's language objective can read "Students will be able to orally describe three types of cells to a partner" while his or her content objective can read "Students will be able to produce a visual representation of each of the three types of cells."[56] Using these goals as a basis for instruction, teachers can then develop opportunities for interaction and create visual and/or multimedia aides to facilitate a deeper understanding of both language and content-area concepts for EL students. What is more, these strategies can be incorporated with equally promising results in integrated social studies classrooms and other subject areas.[57]

DESIGNATED ENGLISH LEARNER CLASSROOMS

Figure 3.2 presents summaries of four empirical analyses that address designated EL instruction. This strategy provides EL students with the opportunity to receive specialized support in a dedicated setting for part or all of the school day, thus contrasting the integrated approach to EL learning. Few recent studies met inclusion criteria in terms of either sample size or effect size. Of those included in this meta-analysis, two address differentiated instruction, one discusses the interaction between EL and non-EL students as a criterion for designated instruction, and one evaluates Response to Intervention (RTI) strategies.

Figure 3.2: Empirical Studies of Designated EL Instructional Strategies

AUTHOR(S)	YEAR	SAMPLE SIZE	CLASSROOM FEATURES	OUTCOMES
Gamez[58]	2015	101 Kindergarten EL students	▪ Students in transitional bilingual education classrooms, where the primary language spoken was Spanish ▪ 30-45 minutes of English language development; some classrooms offered it as a distinct block of time and others integrated it throughout the day	▪ The quality of English used by teachers is a significant and positive source of influence on oral language growth ▪ Students in classrooms with blocked language development periods exhibited greater growth in oral language skills ▪ Teachers' speech and vocabulary had a strong influence on student outcomes

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[55] Himmel et al., Op. cit., p.10.

[56] Ibid.

[57] [1] Reutebuch, C.K. "Effective Social Studies Instruction to Promote Knowledge Acquisition and Vocabulary Learning of English Language Learners in the Middle Grades." CREATE Brief, Center for Applied Linguistics, December 2010. p.27. http://www.cal.org/create/pdfs/create-briefs-collection.pdf

[58] Gamez, P.B. "Classroom-Based English Exposure and English Language Learners' Expressive Language Skills." *Early Childhood Research Quarterly*, 31, January 2015. Accessed via Elsevier.

AUTHOR(S)	YEAR	SAMPLE SIZE	CLASSROOM FEATURES	OUTCOMES
Cho[59]	2012	8,670 Kindergarten and Grade 1 students	▪ Longitudinal dataset restricted to mainstream classrooms that had both EL and non-EL students ▪ Classrooms are neither bilingual nor employ EL aides	▪ Non-EL students with EL classmates experience a 3-6 percent of a standard deviation decrease in reading and a 2.4 percent of a standard deviation decrease in math ▪ Within-class ability grouping for reading instruction was found to mitigate some of the negative effects
Solari and Gerber[60]	2008	82 Kindergarten EL students	▪ Students assigned to one of three groups that differed in terms of time used for instruction work- and text-level targeted skills: control, phonological awareness concentration, and listening comprehension concentration ▪ Students identified as either at-risk or not-at-risk	▪ Students in the listening comprehension intervention outperformed students in the other groups on almost all measures (include phonological awareness) ▪ Demonstrates that early targeted listening comprehension instruction can have positive effects for EL students
Linan-Thompson et al.[61]	2006	103 Grade 1 high-risk reading students	▪ Students took pretests to determine baseline literacy skills in either Spanish or English ▪ Students who scored below the 25th percentile were placed in the second-tier reading intervention; supplemental instruction for 50 minutes per day in small groups ▪ Students retested at the beginning of Grades 1 and 2	▪ Both Spanish and English intervention students were shown to respond to the intervention ▪ Intervention students performance on reading-related measures was statistically and practically significantly higher than control ▪ Spanish students who were no longer at risk at the end of Grade 1 maintained this status through Grade 2

Dedicated instruction for EL students helps to pinpoint areas of weakness among these pupils and develop English-language skills that mainstream students may not need. Indeed, this pedagogic strategy is particularly beneficial in mainstream classrooms that do not normally provide resources or aides for EL students. In these classrooms, EL students often do not receive the materials they need for success, and data suggest that English-only students' reading test scores may be adversely affected as well.[62] As such, educational

[59] Cho, R.M. "Are There Peer Effects Associated with Having English Language Learner (ELL) Classmates? Evidence from the Early Childhood Longitudinal Study Kindergarten Cohort (ECLS-K)." *Economics of Education Review*, 21, 2012. Accessed via Elsevier.

[60] Solari, E.J. and M.M. Gerber. "Early Comprehension Instruction for Spanish-Speaking English Language Learners: Teaching Text-Level Reading Skills While Maintaining Effects on Word-Level Skills." *Learning Disabilities Research and Practice*, 23:4, November 2008. Accessed via EBSCOHost.

[61] Linan-Thompson, S. et al. "The Response to Intervention of English Language Learners at Risk for Reading Problems." *Journal of Learning Disabilities*, 39:5, September 2006. http://www.researchgate.net/profile/Paul_Cirino/publication/6789248_The_response_to_intervention_of_English_language_learners_at_risk_for_reading_problems/links/0912f508052a7c1445000000.pdf

[62] Cho, Op. cit., p.641.

researchers promote dedicated and targeted instruction for English learners for part of the day when integrated or immersion classrooms are not feasible. For example, data reveals that EL students benefit from high-quality English usage and instruction by teachers and peers; moreover, this increase in performance is greater when EL students receive dedicated English-language development instruction in specifically blocked periods rather than when it is integrated throughout the school day.[63]

This blocked-time approach to English-language development—and designated EL instruction more broadly—reinforces the finding that EL students respond to dedicated interventions, or RTI. Linen-Thompson and her colleagues established that at-risk EL students respond positively to both English and Spanish second-tier interventions that target their specific reading shortcomings, the effects of which persisted over the subsequent grade level.[64] Furthermore, designated EL classrooms employ many of the same strategies as small-group interventions (described in Section I of this report); indeed, tiered programs for EL students operate based on the principle that "most academic difficulties can be prevented with early identification of need followed by immediate intervention."[65]

These multi-tiered interventions, in essence, identify students for increasingly designated instruction that provides dedicated materials and resources for EL students. Unlike traditional programs in mainstream classrooms, RTI and designated instruction identify students before they fail and maintain a record of their progress through regular assessment and re-assessment. Typically, multi-tiered interventions for EL students comprise three stages: (1) core classroom instruction for all students; (2) strategic instruction for struggling students; and finally, (3) intensive intervention for the most at-risk students (Figure 3.3).[66]

Figure 3.3: Dedicated Learning Strategies at Each Tier in Multi-Tiered Classrooms

LEVEL	DESCRIPTION
Tier 1	Tier 1 services involve providing effective, differentiated instruction in the general education classroom using whole-class and small-group formats. For English learners, this instruction is made comprehensible by having clear learning objectives and using a variety of techniques, such as presenting material visually, providing sufficient repetition, and offering opportunities to practice new learning
Tier 2	Tier 2 services are intended to be short-term. With this extra instruction, the desired outcome is that students will learn the skills they have been struggling with and can then benefit from Tier 1 instruction alone. Tier 2 services can be provided by classroom teachers themselves in small-group instruction, by specialists who work in the classroom or pull students out during the school day, in before- or after-school programs, or in Saturday school or summer school. Instruction for English learners might include intensive English language development, instruction with ample contextual clues to make it understandable, and/or specific literacy interventions.

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[63] Gamez, Op. cit., p.142.
[64] Linen-Thompson et al., Op. cit., p.396.
[65] Echevarria, J. and J. Hasbrouck. "Response to Intervention and English Learners." CREATE Brief, Center for Applied Linguistics, July 2009. p.13. http://www.cal.org/create/pdfs/create-briefs-collection.pdf
[66] Ibid.

LEVEL	DESCRIPTION
Tier 3	In some cases, Tier 3 is supplemental—provided in addition to Tier 1 and Tier 2 services. In other cases, particularly when the student's performance level is far below grade-level expectations, Tier 3 may be provided as a replacement to core classroom instruction. Tier 3 instruction is more intensive than Tier 2 because it is provided in smaller groups and with a more specific skills focus.

Source: Center for Applied Linguistics[67]

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[67] Adapted from: Ibid., pp.14–15.

SECTION IV: IMPLEMENTATION CONSIDERATIONS

In this section, Hanover Research reviews academic and professional literature regarding educational programs and interventions for EL students from a variety of key perspectives. Much of this research supplements the empirical findings presented in previous sections of this report by identifying practices and strategies that school districts can use to improve the performance of EL students in English language proficiency, academic English skills, and core academic content areas.

KEY FINDINGS

- **It is essential for district leaders to make EL students a priority.** This prioritization of student needs ensures that administrators and teachers adopt a unified vision and cohesive understanding. Often, district administrators and school principals participate in the same training as EL teachers so that they are able to monitor progress at the classroom level. This also allows key decision-makers to select and implement EL programming that reflects the unique needs and capacities of the district.

- **The efficacy of EL interventions relies more on key indicators of program quality than on specific model type.** Quality implementation typically consists of providing transitional support for newcomer EL students, ensuring EL students have access to the entire curriculum through programming that emphasizes content learning and language acquisition, and developing practices that are designed to integrate EL students and their families into a supportive school community.

- **Effective EL programming includes professional development opportunities for teachers as a central component of EL program implementation.** Teachers who receive professional development tailored to EL instruction report greater feelings of competency. Effective professional development acquaints educators with the language acquisition process, instructional strategies appropriate for EL students, cultural considerations, and assessment techniques.

- **Regular assessments are important to ensure that EL programming is both meeting the needs of English learners and aligning with the district's standards.** Both formative and summative assessments are important components of the evaluation process for EL students and teachers. These instruments, administered anywhere from daily to annually, help teachers track student progress and identify struggling students or ineffective pedagogies.

ADMINISTRATIVE PRACTICES

For EL programs to be successful, school district administrators must first make the success of EL students a priority. District leaders should work to develop a culture of shared responsibility and accountability that promotes high levels of achievement among the EL student population. All staff—including district- and school-level administrators and

faculty—should understand their responsibilities with regard to English learners and how their support of EL students will be evaluated. Districts may additionally consider creating opportunities for all school staff to communicate about EL students and pedagogies. This communication and collaboration among staff members helps to develop confidence and capacity to meet the needs of EL students; for example, providing common planning time for classroom teachers and EL specialists/aides can foster collaboration and improve educator and student outcomes. Often, administrators in schools with high concentrations of EL students are tasked with monitoring these strategies at the classroom level to ensure both faculty and EL students are receiving adequate support.[68]

After ensuring that integration of support structures for EL students is a district-level priority, **administrators are encouraged to select an EL program model that best suits the needs, capabilities, and demographics of their school district.** Administrators are responsible for ensuring that staff members and other key stakeholders understand the program model, particularly if the new intervention requires EL specialists, para-educators, or other additional staff. Without a common implementation and operation strategy for new EL programming, difficulties can arise between district administrators, school leaders, and teachers who all have differing ideas about the program model.[69]

PROGRAM MODELS

As alluded to in previous sections of this report, EL programs are classified generally into two main models of instruction: English-only and bilingual. After collecting information regarding stakeholder needs and capacities, as well as the school district's ability to implement various programs, administrators are tasked with selecting an intervention that is supported by empirical research. Overall, data show mixed evidence regarding the effectiveness of one program model over another. **Instead, many experts and education researchers posit that effective implementation is often more valuable than a particular type of instruction and both English-only and bilingual interventions can yield positive results.**[70] Irrespective of specific program model, effective programs for EL students share a number of key characteristics regarding support and access for these students, which include:

- Providing transitional support for newcomer English learners;

- Providing high-quality instruction and materials that facilitate deep understanding of English-language and content-area concepts;

- Ensuring EL students have access to the entire curriculum through programming that emphasizes content learning as well as language acquisition; and

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[68] Stepanek, J. and J. Raphael. "Creating Schools that Support Success for English Language Learners." *Lessons Learned*, 1:2, September 2010. p.1. http://files.eric.ed.gov/fulltext/ED519412.pdf

[69] Ibid.

[70] [1] Thomas and Collier, Op. cit., p.8.
[2] Stepanek and Raphael, Op. cit., p.2.
[3] Saunders, W., C. Goldenberg, and D. Marcelletti. "English Language Development: Guidelines for Instruction." *American Educator*, Summer 2013. p.15.
https://www.aft.org//sites/default/files/periodicals/Saunders_Goldenberg_Marcelletti.pdf

■ Programmatic practices that are designed to integrate EL students and their families into a welcoming and supportive school community.[71]

As stated, these effective practices can be implemented along the continuum of EL instructional models, from bilingual to English-only interventions (Figure 4.1). The effectiveness of many of these programs is addressed in Sections I-III of this report. In general, data suggest that bilingual programs may be more effective than other EL instructional models, although they are typically more resource-intensive to implement than English-only programs and districts may have more difficulty finding qualified bilingual teachers.[72]

Figure 4.1: Characteristics of Common Programs for EL Students

MODEL	GOAL	PROGRAM	LANGUAGE OF INSTRUCTION
English-only	Develop literacy in English	English language development (ELD)	English
		English as a second language (ESL) pull-out	English; students are served in mainstream classrooms with ESL instructional support provided in the classroom by a specialist
		Sheltered English instruction	English adapted to students' proficiency level, supplemented by gestures, visual aids, manipulatives, etc.; native language support may be provided separately
		Structured English immersion (SEI)	All instruction in English, adapted to students' proficiency levels; native language support may be provided separately
Bilingual	Develop literacy in two language simultaneously	Bilingual immersion	Both English and students' native language; usually throughout elementary school
		Dual language immersion	
		Two-way immersion	
		Developmental bilingual education	
		Late-exit	Both English and the students' native language
		Maintenance education	
		Heritage language/ Indigenous language programs	
Bilingual with transitional support	English acquisition; transfer to English-only classrooms	Early-exit	Both English and students' native language; after transition, no further instruction in the native language
		Transitional bilingual education	

Source: Center on Instruction[73]

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[71] Bullet points adapted from: Olsen, L. "Ensuring Academic Success for English Learners." Linguistic Minority Research Institute, Summer 2006. pp.2–5. http://www.laurieolsen.com/uploads/2/5/4/9/25499564/uc-lmri.pdf

[72] See, for example: Thomas and Collier, Op. cit.

[73] Taken from: Moughamian, A.C., M.O. Rivera, and D.J. Francis. "Instructional Models and Strategies for Teaching English Language Learners." Center on Instruction, 2009. p.5. http://www.centeroninstruction.org/files/Instructional%20Models%20for%20ELLs.pdf

PROFESSIONAL DEVELOPMENT

As outlined in previous sections of this report, professional development for teachers with EL students is critical to effective implementation of EL programs. The Center for Applied Linguistics (CAL), for example, recommends that school districts collect information regularly on staff needs and program strengths and weaknesses to create professional development plans that reflect issues of importance to the staff and schools.[74] To this end, some schools even have their principals attend EL professional development sessions alongside classroom teachers to gain a deeper understanding of effective teaching strategies.[75]

According to education experts, EL professional development should be both "intensive and ongoing, with many opportunities for both peer and expert coaching."[76] Experts suggest that **professional development opportunities are most effective when they include teaching techniques that can be applied in classrooms, provide in-class demonstrations with students, and include some component of personalized coaching.**[77] Underscoring the importance of this professional development for EL educators, one study of over 5,300 EL teachers in California revealed that teachers who receive professional development dedicated for instructing EL students felt significantly more competent in teaching their students across grade levels and content areas.[78] In order to ensure that EL teachers are maximizing their time in professional development sessions, the Alliance for Excellent Education recommends that training programs address eight "knowledge bases" that will allow teachers to successfully work with EL students. These are presented below, in Figure 4.2:

Figure 4.2: Professional Development Themes for EL Teachers

KNOWLEDGE BASE	DESCRIPTION
First and Second Language Acquisition Theory	Knowledge of how children learn their first language and how learning a second language differs, and which first language literacy skills transfer to the second language and how.
Subject-Area Content	A basic understanding of the subjects ELLs take in secondary schools for ESL teachers, a deep understanding for content-area teachers.
ESL and Sheltered Instruction Methodologies	Knowledge of how to integrate language development activities and explanations with content-area instruction.
Content-Area Pedagogy	Knowledge of specific methods for different content areas.
Content-Area Language and Discourse	An understanding of how language is used in a specific subject area or discipline and of subject-specific text genres and structures.

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[74] Howard, E.R. et al. "Guiding Principles for Dual Language Education." Center for Applied Linguistics, 2007. p.78. http://www.cal.org/twi/Guiding_Principles.pdf

[75] Stepanek and Raphael, Op. cit., p.1.

[76] Calderon, M., R. Slavin, and M. Sanchez. "Effective Instruction for English Learners." Future of Children, Spring 2011. p.109. http://www.princeton.edu/futureofchildren/publications/docs/21_01_05.pdf

[77] Ibid., p.114.

[78] Gandara, P., J. Maxwell-Jolly, and A. Driscoll. "Listening to Teachers of English Language Learners: A Survey of California Teachers' Challenges, Experiences, and Professional Development Needs." Policy Analysis for California Education; The Center for the Future of Teaching and Learning; and The University of California Linguistic Minority research Institute, 2005. p.12. http://files.eric.ed.gov/fulltext/ED491701.pdf

KNOWLEDGE BASE	DESCRIPTION
Linguistic and Cross-Cultural Contexts	An understanding of language policies, sociocultural factors that influence language use and classroom behavior, and similarities and differences between English and student native languages.
Curriculum Development	Knowledge of how to design content-based ESL and sheltered subject curricula that integrate language development with content topics.
Assessment	Knowledge of how to minimize the English language demands of assessments to allow ELLs to demonstrate content knowledge and how to employ and interpret multiple measures of assessment to get a fuller picture of student knowledge and ability.

Source: The Alliance for Excellent Education[79]

INSTRUCTIONAL PRACTICES

It is important for school districts implementing EL programming to consider the variation within the EL population and the specific needs of individual students. Indeed, reports suggest that schools frequently provide all EL students with the same set of services, often in the same classroom and with the same instructor.[80] This strategy is potentially detrimental to EL students that are continuously lumped together, as homogeneous groupings tend to result in lower achievement for less proficient students with little improvement for high achieving students.[81] Given the myriad EL subpopulations—e.g. long-term EL student who have been in the United States since Kindergarten but have failed to develop academic English proficiency by the start of high school; EL students who receive special education services; students who are inappropriately classified as English-proficient but still struggle with reading and coursework; or migrant students with interrupted education and recent immigrants—school administrators need to consider how to best meet the needs of each.[82]

As noted in prior sections of this report, substantial research has been conducted into the optimal instructional practices for use with EL student populations. The National Center for Education Evaluation and Regional Assistance—a subsidiary of the U.S. Department of Education—published a practice guide in 2014 that synthesizes the extant research on instruction for EL students and compiles a set of recommended practices based on the literature and on the expertise of the authors.[83] The guide's recommended practices address several considerations across various instructional areas, such as content-area instruction, academic vocabulary instruction, and writing instruction (Figure 4.3). **These largely align with key findings presented throughout this report,** suggesting that Hanover indeed identified prominent studies in the field of EL education.

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[79] Adapted from: Short, D.J. and Fitzsimmons, S. "Double the Work: Challenges and Solutions to Acquiring Language and Academic Literacy for Adolescent English Language Learners." Alliance for Excellent Education. pp.23–24. https://www.carnegie.org/media/filer_public/bd/d8/bdd80ac7-fb48-4b97-b082-df8c49320acb/ccny_report_2007_double.pdf

[80] Calderon, Slavin, and Sanchez, Op. cit., p.106.

[81] Saunders, Goldenberg, and Marcelletti, Op. cit., p.18.

[82] Calderon, Slavin, and Sanchez, Op. cit., pp.105–106.

[83] Baker et al.. "Teaching Academic Content and Literacy to English Learners in Elementary and Middle School," Op. cit., p.5.

Figure 4.3: Instructional Practice Recommendations for Elementary- and Middle-School EL Students

RECOMMENDATION	KEY ELEMENTS	LEVEL OF EVIDENCE
Teach a set of academic vocabulary words intensively across several days using a variety of instructional activities.	▪ Choose a brief, engaging piece of informational text that includes academic vocabulary as a platform for intensive academic vocabulary instruction. ▪ Choose a small set of academic vocabulary for in-depth instruction. ▪ Teach academic vocabulary in depth using multiple modalities (writing, speaking, listening). ▪ Teach word-learning strategies to help students independently figure out the meaning of words.	Strong
Integrate oral and written English language instruction into content-area teaching.	▪ Strategically use instructional tools—such as short videos, visuals, and graphic organizers—to anchor instruction and help students make sense of content. ▪ Explicitly teach the content-specific academic vocabulary, as well as the general academic vocabulary that supports it, during content-area instruction. ▪ Provide daily opportunities for students to talk about content in pairs or small groups. ▪ Provide writing opportunities to extend student learning and understanding of the content material.	Strong
Provide regular, structured opportunities to develop written language skills	▪ Provide writing assignments that are anchored in content and focused on developing academic language as well as writing skills. ▪ For all writing assignments, provide language-based supports to facilitate students' entry into, and continued development of, writing. ▪ Use small groups or pairs to provide opportunities for students to work and talk together on varied aspects of writing. ▪ Assess students' writing periodically to identify instructional needs and provide positive, constructive feedback in response.	Minimal
Provide small-group instructional intervention to students struggling in areas of literacy and English language development.	▪ Use available assessment information to identify students who demonstrate persistent struggles with aspects of language and literacy development. ▪ Design the content of small-group instruction to target students' identified needs. ▪ Provide additional instruction in small groups consisting of three to five students to students struggling with language and literacy. ▪ For students who struggle with basic foundational reading skills, spend time not only on these skills but also on vocabulary development and listening and reading comprehension strategies. ▪ Provide scaffolded instruction that includes frequent opportunities for students to practice and review newly learned skills and concepts in various contexts over several lessons to ensure retention.	Moderate

Source: The National Center for Education Evaluation and Regional Assistance[84]

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[84] Adapted from: Ibid., pp.6–7.

INSTRUCTIONAL MATERIALS

The Council of the Great City Schools, an organization that supports urban public school initiatives throughout the United States, provides extensive guidance for districts evaluating their EL instructional materials. The organization lists three overarching phases of evaluation (Figure 4.4):

Figure 4.4: Evaluation Process for EL Instructional Materials

Step 1: Evaluate materials based on overarching considerations relative to EL philosophy and delivery.

Step 2: Evaluate materials based on non-negotiable EL criteria.

Step 3: Evaluate materials along district-specific criteria.

Source: Council of the Great City Schools[85]

The first step in the organization's recommended evaluation process requires districts to evaluate instructional materials broadly, taking into account the fundamental philosophy of their EL program. This process includes establishing that the materials in question have been designated for use with EL students, that they establish high expectations for these students, and that they are aligned to the state standards. Once the materials have been narrowed down to only those that meet the criteria established in Step 1, the remaining tools should be evaluated according to the non-negotiable criteria.[86] The final step requires the evaluation of materials that pass the preceding steps along district-specific criteria, such as specific intervention materials, cultural relevance, and considerations for instructional technology.[87]

Students in intensive ELD programs, whose language proficiency precludes them from performing at grade level in English language arts, may derive additional benefit from instructional materials with the following characteristics:

- Curriculum-embedded assessments with guidance for teachers that support students who are at risk of becoming or who are long-term English learners to progress rapidly to grade-level proficiency in English literacy within 12–18 months.

- Multiple levels and points of entry and exit to appropriately address the English proficiency levels of students in grades four through eight.

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[85] Adapted from: "A Framework for Raising Expectations and Instructional Rigor for English Language Learners." Council of the Great City Schools, August 2014. p.11. http://www.cgcs.org/cms/lib/DC00001581/Centricity/Domain/4/Framework%20for%20Raising%20Expectations.pdf

[86] For full criteria, see: Ibid., pp.14–21.

[87] Ibid., pp.22–25.

- Instruction that integrates all strands: reading, writing, speaking and listening, and language.

- Teacher and student materials support the needs of students who are at risk of becoming or who are long-term English learners in moving to grade-level proficiency in English literacy and include: development of academic language; organization and delivery of oral communication; development of reading fluency and comprehension; consistent instructional routines; and support of active student engagement.[88]

STUDENT ASSESSMENTS

In California, state law does not mandate that EL students receive a certain number of minutes of English language instruction per school day or year. Instead, as of 2006, the California Department of Education proposes that school districts should "have a rationale for the scheduling and amount of [EL instruction] students are receiving that bears relation to progress in English."[89] Given the district-level autonomy to implement EL programs, student assessments become critical to ensuring that English learners are actually receiving the appropriate level of dedicated EL instruction.

Assessments are typically either classified as formative or summative. Formative assessments ("assessments *for* learning") provide information about student learning, often in real-time, for teacher to adapt instruction to meet student needs. Summative assessments ("assessments *of* learning"), conversely, evaluate student achievement after a set period of learning to determine student competencies. Both types of assessments may be effectively used to make decisions regarding EL students' placement and performance.[90] Regardless of whether districts implement formative or summative assessments, or both, the most effective evaluations are those that are "aligned with the school's vision and goals and with appropriate curriculum and related standards."[91] **These assessments, in order to be effective, valid, and reliable for EL students, need to be conducted in both of the languages used for instruction.**

The California Department of Education recommends that administrators conceptualize three cycles of assessments for EL students: short, medium, and long. Formative assessments typically meet short and medium assessment cycles (which assess student progress minute-by-minute, daily, and weekly), while summative assessments meet medium and long assessment cycles (which assess student progress by unit, quarterly, and annual milestones).[92] For example, a weekly review (i.e., short-cycle assessment) could be

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[88] Bullet points taken verbatim from: "Chapter Twelve of the English Language Arts/English Language Development Framework for California Public Schools." California State Board of Education, July 2014. p.1018. http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter12.pdf

[89] Retrieved from: "Frequently Asked Questions: English Learners (DOC)." California Department of Education, August 2006. p.6. http://www.cde.ca.gov/sp/el/er/

[90] "Chapter Eight of the English Language Arts/English Language Development Framework for California Public Schools." California State Board of Education, July 2014. pp.822–823. http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter8.pdf

[91] Howard et al., Op. cit., p.8.

[92] "Chapter Eight of the English Language Arts/English Language Development Framework for California Public Schools," Op. cit., p.8.

conducted through student discussions and/or self-reflections in order to ascertain their "current learning status relative to lesson learning goals." This short-term assessment allows teachers to modify instructional planning for the following week and provide up-to-date feedback to students. On the other hand, annual assessments, including Smarter Balanced tests or the CELDT, measure the status of student achievement given the district's standards of learning. This long-term assessment evaluates students' overall mastery of key concepts and judges how teachers and administrators are meeting the needs of the district's EL student population.[93]

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[93] Ibid., pp.827–828.

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