

Stated Briefly

The correlates of academic performance for English language learner students in a New England district



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**In collaboration with the English
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English language learner students' English proficiency scores correlated with math and reading performance in all grades. English language learner students in special education had significantly lower English proficiency scores than other English language learner students. There were no clear patterns in the relationship between type of English language learner program and English proficiency scores or math or reading performance.

Why this study?

With growing enrollments of English language learner students in many districts in the Northeast & Islands Region, administrators need information on English language learner programs and other supports. In 2012 the Regional Educational Laboratory Northeast & Islands helped establish the English

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Language Learners Alliance, a research alliance of English language learner program directors in districts and states across the Northeast Region. One of the alliance's goals is to understand the growing diversity in the English language learner population and the corresponding need for differentiating instruction for both English language development and content learning. For this study of one district in Connecticut the alliance enumerated two goals: to better understand the relationships among English language learner students, programs, and academic performance, in order to support decisionmaking that meets the diverse needs of English language learner students, and to improve the use of district data to inform policy for these students. The alliance hoped that conducting the study in one district in Connecticut would provide an example of the kind of data analysis that districts can do as part of an ongoing cycle of using data to improve programs and services.

Connecticut has experienced rapid growth in its English language learner population over the last decade. While the total student population shrank about 1 percent, the population of English language learner students grew almost 40 percent and now constitutes about 5 percent of Connecticut's student population. Nationally, more English language learner students are moving to districts that have not historically had English language learner students, challenging district leaders to provide programs and services to meet their needs (Wainer, 2004; Zehler et al., 2008).

Study description

The study team analyzed data on English language learner students and schools across grades K–12 from a large urban district in Connecticut with a share of just over 10 percent of English language learner students in its student population. The team examined student characteristics, type of English language learner program, and school characteristics for English language learner students in different grade spans to determine which characteristics were correlated with English language proficiency scores on the Language Assessment Systems Links (LAS Links) assessment and math and reading scores on the Connecticut Mastery Test (CMT) or Connecticut Achievement and Performance Test (CAPT), depending on grade level. Analyses were conducted separately by grade span (K–1, 2–3, 4–5, 6–8, and 9–12 for LAS Links; 3, 4–5, 6–8 for CMT; and 9–12 for CAPT).

Summary of findings

The following tables summarize the study findings and the methodology used to examine the three research questions:

- What were the characteristics of English language learner students and of the English language learner programs and schools they attended in 2010/11?
- Which student characteristics, types of English language learner programs, and school characteristics were most closely related to English language learner students' English proficiency scores in 2010/11?
- Which student characteristics, including English proficiency levels, and which types of English language learner programs were most closely related to English language learner students' math and reading performance?

Table 1. Characteristics of English language learner students and of the programs and schools they attended in 2010/11

Grades	Variables used	Analysis procedure
K–12	<ul style="list-style-type: none"> • Student characteristics • Type of English language learner program • School characteristics 	Descriptive
Key findings		
<ul style="list-style-type: none"> • More than 90 percent of English language learner students spoke Spanish as their home language. • The percentage of English language learner students in special education (15.9 percent) was higher than the district average for all students (12.0 percent). • Participation in English language learner programs varied across grade spans. • Some school characteristics varied by grade span, particularly the percentage of English language learner students enrolled and the percentage taught by English language learner–certified teachers. 		

Table 2. Student characteristics, type of program, and school characteristics most closely related to English language learner students’ English proficiency in 2010/11

Grades	Dependent variable	Predictor variables	Analysis procedure
K–8	Overall LAS Links English proficiency score	<ul style="list-style-type: none"> • Student characteristics • Types of English language learner programs • School characteristics 	Multilevel regression modeling
9–12	Overall LAS Links English proficiency score	<ul style="list-style-type: none"> • Student characteristics • Types of English language learner programs 	Ordinary least squares regression modeling
Key findings			
<ul style="list-style-type: none"> • In all grade spans, being in special education was associated with significantly lower English proficiency scores than the average for all English language learner students. • The relationship between program type and English proficiency scores varied by grade. • In grades K–1 and 4–8 attending a higher performing school was associated with higher English proficiency scores. • In all grade spans the statistical models explained 17.2–31.2 percent of the variation in English proficiency scores, leaving 68.8–82.8 percent unexplained. 			

Table 3. Student characteristics, English proficiency scores, and types of English language learner programs most closely related to English language learner students’ math and reading performance in 2010/11

Grades	Dependent variables	Predictor variables	Analysis procedure
3–8	CMT math scores CMT reading scores	<ul style="list-style-type: none"> • Student characteristics • Types of English language learner programs • LAS Links English proficiency scores 	Ordinary least squares regression modeling
9–12	CAPT math scores CAPT reading scores	<ul style="list-style-type: none"> • Student characteristics • Types of English language learner programs • LAS Links English proficiency scores 	Ordinary least squares regression modeling
Key findings			
<ul style="list-style-type: none"> • The student characteristics associated with math and reading scores varied by grade span and content area. • English proficiency scores were associated with both math and reading performance in all grade spans. • There were no clear patterns in math and reading scores across English language learner programs. • Across all grade spans the statistical models explained 29.4–51.0 percent of the variation in reading and math scores, leaving 49.0–70.6 percent unexplained. 			

Considerations for districts

- District leaders need to understand the characteristics of their English language learner student population, such as home language and whether students are born in the United States, because students with different characteristics have different academic outcomes and may benefit from different programs and services.
- Given the association of English proficiency scores with content assessment outcomes, district leaders need to expand the information they collect about English language learner students to include data elements that describe language-related information. Key data elements include baseline English proficiency, details about previous schooling in students' native language and in English, ongoing tracking of students' English acquisition, and accurate descriptions of the instruction students receive. These data elements could be used in future studies to learn more about differences in achievement that have implications for decisions on meeting the diverse needs of English language learner students.
- As district leaders expand data collection and analysis efforts, they need to consider data accuracy and reliability and the concomitant need for training in data collection.
- District leaders need to look specifically at English language learner students with disabilities. The needs of English language learner students in special education may differ from those of other English language learner students or of native English-speaking students in special education.

Implications for future work

Further research should investigate English language learner achievement longitudinally, in part because students' assignments to English language learner programs change over time (such as moving to language transition support services after 30 months). Longitudinal research studies would provide more information about language acquisition patterns and could help policymakers identify indicators that show when students diverge from those patterns and could benefit from additional or different interventions.

The relationship between English language proficiency and special education status should be explored. Being in special education was associated with English proficiency scores lower than the average at all grade spans and content scores lower than the average at many grade spans. These students face unique challenges: Disabilities among English language learner students might be over- or underidentified because of the difficulty of distinguishing English language deficiencies from learning disabilities (Klingner, Artiles, & Barletta, 2006; Salend, 2008); English language learner students might receive inadequate or inappropriate services if there is insufficient collaboration between English language learner staff and special education staff; and English language learner students in special education might remain indefinitely in English language learner programs and become "long-term English language learner students" with low academic performance and limited progress. Future research should include more information about the students, including disability designation, time in district, and services received.

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