English Learners in California Schools

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Foreword

The litany of challenges facing California's K–12 public school system seems endless.

The latest reports document poor test performance throughout the schools. The finance system is caught up in state budget politics, with little freedom for districts to raise their own funds. Reformers are concerned that there are inadequate incentives for teachers to perform at their very best. The districts with the fastest-growing student populations have trouble both maintaining their existing infrastructure and building new schools to accommodate the growth. And the enthusiasm for charter schools has been offset by a lackluster performance of the students involved in this latest attempt at school reform. As if the challenges are not formidable enough, this latest report from PPIC highlights the scale and complexity of a student body where, on average, 26 percent are classified as English learners.

In this report, Christopher Jepsen and Shelley de Alth conclude that there are numerous obstacles to students being reclassified from English learners to Fluent English Proficient. To start with, over 50 languages are spoken in California's public schools. Although 85 percent of English learners speak Spanish as their first language, the sheer number of other languages complicates matters for specific students and teachers in any given setting. Add to this the mobility of families and movement in and out of schools, and the tendency of many students to drop out of school increases with grade level.

The authors note numerous other barriers to achieving English proficiency. Homogeneity of language in a school impedes learning a new language; special education students find the challenge more burdensome than other students; lagging academic performance prevents reclassification as fluent in English; and the level of resources available in a school to deal with the needs of English learners affects student outcomes. As frustrating and familiar as all this might be, the large

numbers of English learners in public schools—1.7 million in fall 2003—means that a failure of this program will haunt the state, its economy, and its governance processes for generations.

We often fear that California faces a future of large numbers of low-income families mired in a first-world economy. Although this might be an overstatement, the fact is that good language skills have always been associated with higher-paying jobs. The link to California's economic future is obvious, and Jepsen and de Alth demonstrate that we have a long way to go before current generations of English learners will be fully integrated into the California economy.

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Summary

Students who speak a language other than English at home and who are not proficient in English are known as English learners (ELs). These students constitute nearly one-third of California's elementary school students and one-quarter of all K–12 students. As might be expected, these students' incomplete mastery of English adversely affects their academic performance.

Given that proficiency in English is vital to success not only in academic subjects but also, later, in the workforce, both state policy and federal policy consider English proficiency a major goal for EL students. The federal government's No Child Left Behind (NCLB) Act of 2001 establishes guidelines for improving both the number of students reaching fluency in English and the number of students making gains on a test of English proficiency. Despite the policy importance of this issue, we know little about EL students and what aids or hinders their advancement toward English proficiency.

This report addresses the issue by providing a detailed analysis of the two specific NCLB guidelines for English learners. We first examine the determinants of *school-level* reclassification rates—the percentage of EL students who are successfully reclassified as Fluent English Proficient (FEP)—and, for students not considered fluent in English, we explore the determinants of gains in a test of *student-level* English proficiency. Using data from 2002 and 2003, we investigate how gains in English proficiency can be explained by differences in school and student characteristics.

EL Policies

Any study of English proficiency requires an understanding of the major state and federal policies affecting EL students. The most controversial policy affecting EL students is Proposition 227, enacted in 1998, which limits access to bilingual education by requiring that EL

students be taught "overwhelmingly" in English. Equally important to the education of EL students is the federal NCLB Act. In addition to its English proficiency goals, NCLB requires improvements in academic achievement for EL students, with performance targets equal to those set for all students.

Reclassification

In some ways, the best measure of success for an EL student is when he or she is reclassified as proficient in English. The necessary reclassification review from EL to FEP status is a complicated process. The State Board of Education suggests that districts use a combination of English proficiency scores from the California English Language Development Test (CELDT), academic achievement, teacher evaluation, and parental consultation. However, districts have demonstrated great latitude in how they weigh these factors (Parrish et al., 2003).

In 2002, schools on average reclassified 7 percent of their English learners. Of the EL students who achieved the board's recommended CELDT score, only 29 percent were reclassified, illustrating that the CELDT score is only one criterion used for reclassification. We identify factors that affect reclassification by analyzing the effects of a number of school attributes on reclassification rates.

Even though most eligible students are not reclassified in any given year, board guidelines are strongly related to reclassification rates. Higher CELDT scores and higher scores on the California Standards Test (CST) have positive relationships with a school's reclassification rate. Thus, policies aimed at improving CELDT and CST performance are likely to improve reclassification rates as well.

Our results also suggest that beyond the state guidelines, adequate resources are important for reclassification. Schools with large EL populations must have the capacity to undertake the individual, comprehensive review process needed for reclassification. Additionally, EL students should have access to EL-authorized teachers to prepare for reclassification. Although other determinants of school reclassification rates are difficult to define, overall district effects have a strong influence. Increased years of CELDT administration is likely to encourage districts

to implement state reclassification standards more uniformly, enabling further research of determining factors.

Current NCLB policy creates conflicting incentives that encourage increases in reclassification rates but also mandate high standards for EL performance on standardized tests (measuring both English proficiency and academic achievement). Recent amendments allow districts to include reclassified students (FEP) with English learners in achievement score reports for up to two years, but the issue remains problematic. Policies directed toward reclassification should attempt to resolve this discrepancy as well as consider whether EL students should be held to the same academic accountability standards as their English-speaking peers.

CELDT Growth

Student-level gains in English proficiency are another measure of success for EL students, as well as an important first step toward reclassification. Our analysis of individual-level CELDT gains has identified several categories of students who may require additional resources or attention to achieve proficiency in English. For example, speakers of Hmong, Khmer, and Spanish have lower CELDT gains than students who speak other languages. Thus, instructional methods that target these specific language backgrounds may help these students learn English. Other groups of English learners that may benefit from targeted methods to learn English include male students, students who receive special education services, students who frequently switch schools and districts, and students in secondary grades (6 through 12).

Students in bilingual education programs have lower CELDT growth than students in English-only programs. However, the instructional program itself may not be causing the unequal performance. Students in bilingual programs attend more disadvantaged schools than other EL students. Our analysis highlights the special challenges faced by students in bilingual programs.

Specific school attributes, including school-level measures of teacher characteristics, appear to have a weak relationship with gains in English proficiency. As with reclassification, the strongest consistent school-level attribute related to CELDT growth is average CST scores. Students in

schools with higher CST scores have higher annual CELDT growth, all else equal. The percentage of EL students in a given school has a small negative effect on CELDT growth for students in grades K–5, whereas access to more EL-authorized teachers generally has a small positive effect.

Districts collect much more detailed data than does the state, which can be used to follow students over time and link CELDT data with academic achievement and teacher data. Such linking is not possible at the state level. Yet districts have few if any resources available to conduct research using these comprehensive data. Thus, the state should consider ways to support and use research with district-level data, as suggested by the Legislative Analyst's Office. Improvements to the state data are on the horizon. SB 1453 (2002) establishes a statewide student identifier so students can be followed over time. The resulting database will greatly increase the number of research questions that can be answered with statewide data. However, subsequent legislation is needed to establish a database to link student identifiers to teacher identifiers for further research. Finally, the CELDT should continue to be improved upon as a valuable resource for measuring English proficiency.

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1. Introduction

Over one million school children who are not proficient in English attend California schools, constituting one-quarter of the state's elementary and secondary school population. These children, who speak a language other than English at home, are called English learners. Most of these students speak Spanish, but over 50 other languages have been identified in California schools. The number of English learner (EL) students has grown consistently over the last 20 years (Tafoya, 2002) and will continue to grow in the future. Although California represents around 12 percent of the nation's population, California schools contain more than 40 percent of the nation's English learners (Macias, 2000). Thus, the issue of English learner education is a central concern in California.

In 2001, California implemented a statewide assessment designed to measure proficiency in English—the California English Language Development Test (CELDT). The CELDT consists of three parts: listening and speaking, reading, and writing. The listening and speaking portion is administered individually, with the test-giver asking each student a set of questions to measure both specific and general skills (Legislative Analyst's Office, 2004a). The reading and writing portions of the test are administered as standardized tests with multiple-choice and short-answer sections. An overall scale score is calculated based on the scale scores for each individual section. The scale scores are converted to proficiency levels, which range from 1 (beginning) to 5 (advanced).

Figure 1.1 illustrates this assessment process for EL students. Students who are new to California schools and who speak a language other than English at home must take the CELDT within 30 days of entering California schools. This administration of the CELDT, known as the initial assessment, is the primary indicator used to determine whether these students should be classified as EL students or Fluent

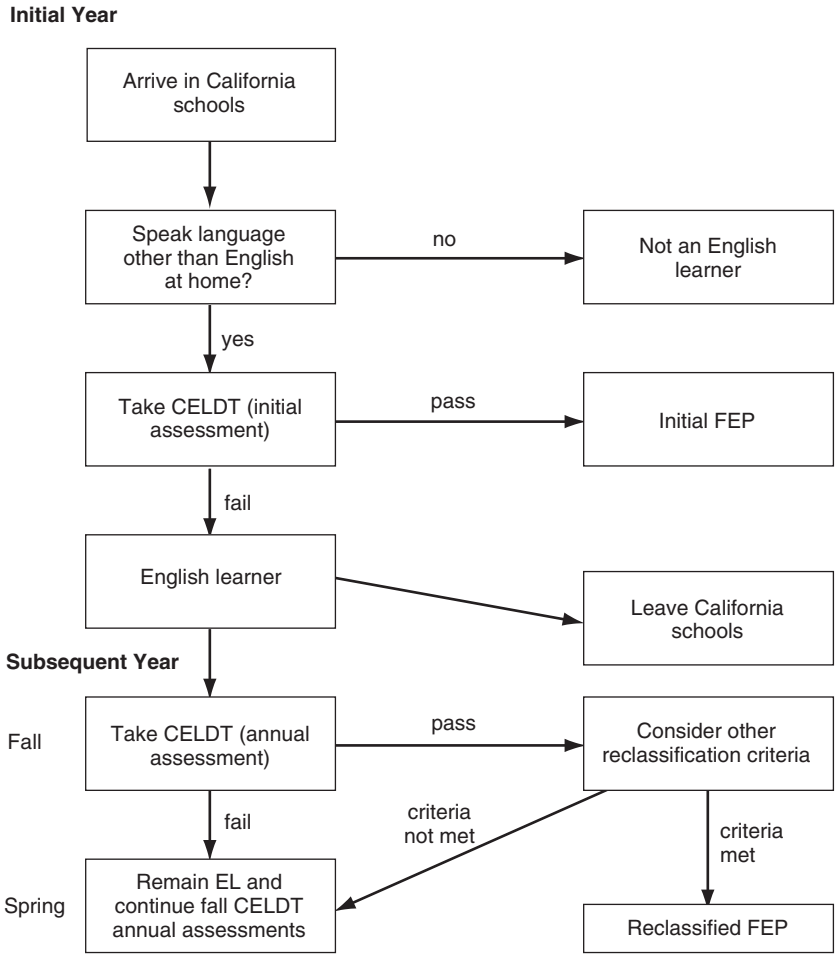

Figure 1.1—The Path of an English Learner

English Proficient (FEP) students.[1] Students are considered to be proficient in English if they have an overall CELDT score of 4 (early advanced) or 5 (advanced), with a score of 3 (intermediate) or higher on each section of the test. Students also may be considered proficient if their overall score is at the upper end of 3 and other test scores, grades,

[1]The initial assessment also includes EL students who transfer between schools in California but whose student records do not contain a previous CELDT score.

and input from parents and teachers warrant initial proficiency status. All other students are classified as English learners and are eligible for additional services and funding to assist them in learning English.

Students who meet initial CELDT proficiency enter mainstream classrooms, but those who do not are subject to annual assessments of the CELDT (between July and October) in subsequent years. The State Board of Education suggests that students with proficiency levels of 4 or 5, as well as students at the upper end of level 3 on the annual assessment, be considered for reclassification from EL to FEP. However, the CELDT is only one of several factors used in the reclassification review process set by individual districts, as discussed in Chapter 4. Students taking the CELDT annual assessment must usually be evaluated on a broader range of criteria to be considered for reclassification.

English proficiency is important for the success of EL students. Testing is becoming increasingly significant under the federal No Child Left Behind (NCLB) Act, and each school's EL population must demonstrate improvements and success in both English proficiency and academic achievement. Academic achievement tests are given in English,[2] and without proficiency in English, EL students may be unable to demonstrate their academic abilities on these standardized tests. EL students consistently have lower test scores than other students on standardized tests, including the California Standards Test (CST) and the California High School Exit Exam (CAHSEE), which are included in NCLB accountability. No doubt, lack of English proficiency contributes to this gap. English proficiency is also important for success in the labor market (Gonzales, 2000; Trejo, 2003).

Although most of the attention has been on academic performance, NCLB also contains two requirements for language proficiency. The first is that English learners gain proficiency in English. To meet this federal mandate, the state requires annual increases in the number or percentage of students advancing at least one proficiency level on the

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[2]Spanish speakers must take a Spanish-language academic achievement test if they have been enrolled in California schools for 12 months or less. However, this test is not part of NCLB or the state's accountability system.

CELDT. The second requirement is that districts must increase the number or percentage of students attaining English proficiency. In other words, NCLB requires increases in the number of students who are reclassified from EL to FEP.

Despite these federal requirements, researchers know little about the proficiency gains of EL students in California. The Legislative Analyst's Office (2004a) has provided the most detailed analysis of CELDT gains. Its report examines differences by language on the 2002 CELDT and predicts future reclassification rates by language for one cohort of students beginning kindergarten in 2001. The researchers found that more students advance a level on the CELDT when they are at the earlier stages of learning English. They also predicted that it takes about six years for half of their predicted EL cohort to be reclassified as fluent. Parrish et al. (2003) provide a demographic description of CELDT data from 2001 and 2002 in their analysis of Proposition 227, but their future evaluations of the proposition will include more extensive CELDT data analysis. They find that 56 percent of students made progress on the CELDT from 2001 to 2002 but caution that performance on standardized tests usually improves after its first implementation. They also suggest that the introduction of the CELDT and CST in 2001 may have lowered school reclassification rates slightly. Grissom (2004) investigates factors contributing to reclassification, including Proposition 227, using Standardized Testing and Reporting (STAR) data to track three four-year cohorts of self-contained groups of students. He finds that after four or five years of schooling, only 30 percent of ELs had been reclassified, and reading test scores were the strongest indicator of whether a student would be reclassified.

Our report contributes to current research by exploring the important and understudied issue of reclassification from EL to FEP, since this is the outcome eventually desired for all EL students. Although the state has set recommended guidelines for reclassification, districts have substantial latitude in how they use these guidelines, and these factors are not well understood. We go further than Grissom's analysis and investigate the relationship between reclassification rates and various student and school characteristics using CELDT and Language Census data. We pay particular attention to the role of districts, since

they typically set reclassification criteria. We also examine in greater detail student-level gains in English proficiency using the 2002 and 2003 CELDT. Specifically, we explore the relationship between CELDT growth and student language, other student characteristics, and school characteristics. For example, we investigate the more rapid gains in proficiency by Mandarin speakers than Spanish speakers and whether this can be explained by characteristics of these students or by the schools they attend.

The next chapter provides demographic information from the fall 2003 CELDT. The third chapter provides a brief overview of state and federal policies affecting EL students, as well as a summary of research on these policies. Chapter 4 focuses on school reclassification rates from EL to FEP and includes an analysis of differences across schools and the role of districts. Chapters 5 and 6 look at the determinants of student-level CELDT growth: Chapter 5 studies the importance of EL students' native language, and Chapter 6 investigates the role of student characteristics (other than language) and school attributes on gains in English proficiency. Chapter 7 summarizes our findings and describes how our findings are relevant to policies affecting English learners. Additional technical materials appear in appendices at the end of the report.

2. Student Demographics

EL students constitute a large percentage of California's K–12 student population. This chapter provides demographic information describing this population. It explores the location, language, grade level, mobility, and program participation of EL students. The data come from the fall 2003 administration of the CELDT.[1]

Location

In fall 2003, nearly 1.7 million EL students in kindergarten through grade 12 took the CELDT (Table 2.1). EL students are dispersed throughout the state, although some regions have more EL students than others. For example, the South Coast (Los Angeles, Orange, and Ventura Counties) has by far the most EL students, with over 790,000 (nearly half the state total of EL students). The Bay Area, the Inland Empire, and the San Joaquin Valley each have English learner populations around 200,000. In contrast, the Sierras have only 741 EL students.

Similarly, the percentage of students who are English learners varies across the state's major regions (the statewide average is around 26 percent).[2] The Sierras have the lowest percentage of EL students, at 2.6 percent. The next lowest percentage is in the Far North region, with 10.3 percent. Not surprisingly, the South Coast, which includes Los Angeles County (home of over one-third of the state's English learners), has the highest percentage of students who are English learners, at 33 percent. Although modest in absolute numbers, the percentage of EL

[1]This chapter also updates the detailed analysis of fall 2002 EL demographics by the Legislative Analyst's Office (2004a).

[2]The Legislative Analyst's Office (2004a) also found substantial diversity by region in their analysis of fall 2002 CELDT data.

Table 2.1

Number and Location of EL Students in Fall 2003

Region	No. of EL Students	Total Enrollment	% EL
Bay Area	206,573	974,280	21.2
Central Coast	69,618	228,993	30.4
Far North	20,949	203,871	10.3
Inland Empire	173,828	783,941	22.2
Sacramento Metro	58,718	355,380	16.5
San Diego	139,081	534,471	26.0
San Joaquin Valley	201,565	786,172	25.6
Sierras	741	28,008	2.6
South Coast	793,165	2,403,653	33.0
All	1,664,947	6,298,769	26.4

SOURCE: Fall 2003 CELDT.

NOTES: Geographic regions are defined by the following counties:

Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma.

Central Coast: Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz.

Far North: Butte, Colusa, Del Norte, Glenn, Humbolt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yuba.

Inland Empire: Riverside, San Bernardino.

Sacramento Metro: El Dorado, Placer, Sacramento, Yolo.

San Diego: Imperial, San Diego.

San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare.

Sierras: Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne.

South Coast: Los Angeles, Orange, Ventura.

709 EL students are in the statewide California Youth Authority, thus, regions do not sum to total.

students in the Central Coast is around 30 percent. This concentration of English learners is consistent with the findings in Hill (2004) that the Central Coast has among the state's highest percentages of first-generation immigrant youth (ages 13 to 24) and that the Central Coast immigrants are less likely to be proficient in English than immigrants in other regions of the state.

Language

Not only are California's English learners diverse in terms of location, they are also diverse in terms of language. Over 50 languages are spoken in California public schools. As shown in Table 2.2, the dominant language is Spanish. Nearly 1.4 million English learners, roughly 85 percent of English learners, speak Spanish. The next most prevalent language is Vietnamese, with nearly 40,000 students (2.3% of the EL population). Several Asian languages including Cantonese, Hmong, and Filipino each are spoken by more than 1 percent of California's EL population. European languages other than Spanish are rare—Russian is the most common with about 8,000 speakers (0.5 percent).

Table 2.2

Languages Spoken by EL Students

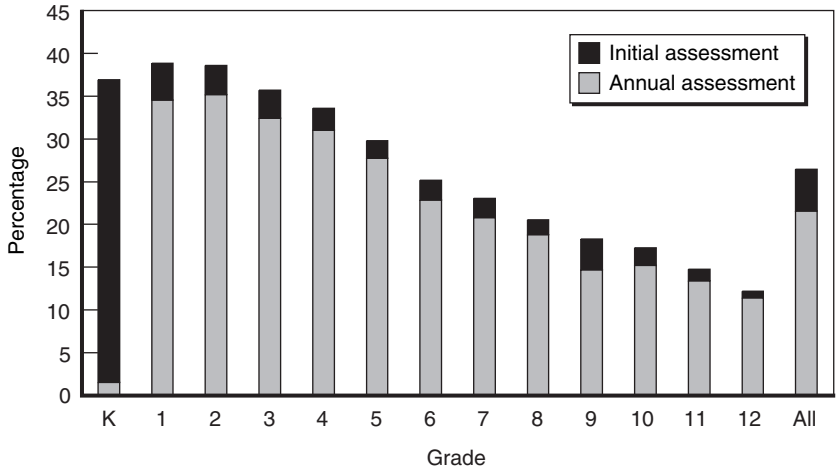
Language	No.	% of EL Students
Spanish	1,389,624	84.5
Vietnamese	37,616	2.3
Hmong	23,916	1.5
Cantonese	25,181	1.5
Filipino	21,416	1.3
Korean	11,155	0.7
Armenian	19,097	1.2
Khmer	11,694	0.7
Mandarin	12,339	0.8
Russian	8,282	0.5
Other Language	84,448	5.1

SOURCE: Fall 2003 CELDT.

NOTES: Khmer is also known as Cambodian. Filipino languages include Pilipino and Tagalog.

Grade Level

Just as there is substantial diversity by region and language in California's EL student population, so is there also a considerable difference in the percentage of EL students in each grade. As Figure 2.1 shows, this percentage declines by grade level. The figure also shows the breakdown of initial and annual assessment of EL test-takers. In



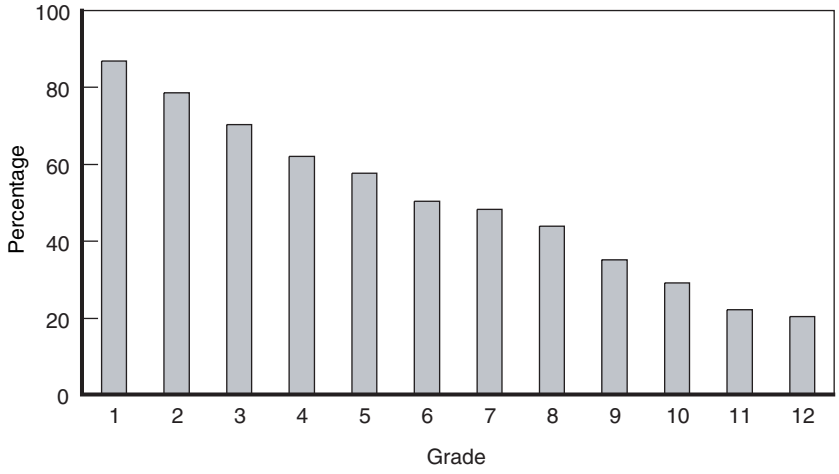
SOURCES: Fall 2003 CELDT and fall 2003 Student Information Form (SIF).

Figure 2.1—Percentage of Students Who Are English Learners, by Grade

kindergarten, most English learners are taking the test for the first time, but in all other grades, most English learners are taking the assessment test annually. In fall 2003, the total percentage of EL students in elementary grades was around 30 percent. This percentage peaked at 39 percent in grade 1 and declined to 30 percent in grade 5. By grade 8, the percentage had declined to about 20 percent, and by grade 12, to 12 percent. However, Hill (2004) points out that many young immigrants and children of immigrants do not complete high school, which suggest that the percentage of English learners among high-school-age youth is much higher.

Mobility

A commonly held belief is that EL students have limited English skills because they are recent immigrants. However, 85 percent of EL students are not immigrants at all; they were born in the United States (Tafoya, 2002). The CELDT data do not contain place of birth, but they do contain mobility information relating to school attendance. Figure 2.2 shows the percentage of EL students for each grade who have been in their current district since kindergarten. Over half of the EL



SOURCE: Fall 2003 CELDT.

NOTES: Information on grade of arrival in the current district is missing for about 4 percent of EL students. Another 6 percent of EL students are excluded from the figure because they attend districts that serve only a subset of the grades between kindergarten and grade 12.

Figure 2.2—Percentage of EL Students Who Arrived in Current District in Kindergarten, by Grade

students in grade 6 have been in the same district since kindergarten. In grade 9, the percentage is still over 35 percent, but it dips to 22 percent in grade 11 and 20 percent in grade 12. The low percentages for secondary school students are not surprising given that many secondary school students who were EL students in kindergarten have subsequently been reclassified as FEP.

Program Participation

CELDT data also contain student-level information on participation in several programs ranging from special education to gifted and talented education (GATE). Table 2.3 summarizes the program participation of returning EL students for fall 2003. The table presents statistics only for returning EL students because EL students newly arriving in California schools for the first time would most likely not yet be placed in special programs. For comparison, the table also includes the program

Table 2.3

Program Participation for Returning EL Students and All Students

	EL Students		All Students	
	No.	%	No.	%
Special education	116,242	8.6	484,548	10.1
Schoolwide Title I	802,676	59.1	1,783,090	37.3
Targeted Title I	172,593	12.7	448,072	9.4
Migrant education	86,432	6.4	140,484	2.9
GATE	13,893	1.0	426,592	8.9

SOURCES: Fall 2003 CELDT annual assessment of students and spring 2004 STAR data.

participation of all students in spring 2004 (data for all students are provided in the spring of each school year).[3] The percentage of students who receive special education services for an identified disability such as deafness or autism is 8.6 percent for EL students and 10.1 percent for all students. The most common disabilities for EL students are specific learning disabilities and speech or language impairment.

The next two rows of the table present information on Title I receipt. Title I is a federal program that provides additional resources to disadvantaged students, typically defined as low-income students. Over two-thirds of returning EL students receive Title I services. The majority (59.1%) are in schools with schoolwide Title I funding. These are schools that have a high share of low-income students, so all students in the school are eligible to receive Title I services. However, not all students in fact receive such services. Another 12.7 percent of EL students receive Title I services in schools that do not receive schoolwide Title I (called "targeted" Title I). The Title I participation rates for all students are much lower: 37.3 percent for schoolwide Title I and 9.4 percent for targeted Title I.

Only 6.4 percent of EL students participate in the migrant education program, a program that provides additional resources for migrant students. Even among this highly mobile population, over 60 percent

[3]Non-EL students are a better comparison group, but program participation data are not available for the group of non-EL students. The data are available only for all students.

have been in U.S. schools since 2000. Finally, the table illustrates that only 1 percent of returning EL students participate in GATE programs. The participation rate is much higher for all students (8.9%).

Table 2.4 contains program participation for EL instructional services. Only 6.5 percent of students receive their academic subjects in their primary language (i.e., bilingual education), and another 2.3 percent receive other EL services. Although 16.8 percent of students receive only English-language development (ELD) services, 40.1 percent receive ELD combined with specially designed academic instruction in English (SDAIE). The two programs are designed to complement each other because ELD targets English proficiency and SDAIE targets academic achievement. Another 23.6 percent receive ELD and SDAIE with some primary language support.

Nearly 11 percent of EL students do not appear to receive any of these programs. Most likely, some of them do but schools did not report them on the CELDT.[4] The percentages of students not receiving EL services vary by language: Among Cantonese speakers, 19.5 percent have no reported EL services, compared to only 1.9 percent for Armenian speakers. EL students receiving no services constitute nearly 20 percent of all returning EL students in grades 9 through 12, but only 8 percent in grades K through 5. Because EL students not receiving EL services generally attend schools with students who do receive EL services, there

Table 2.4

EL Services Received

	No.	% of EL Students
ELD only	228,284	16.8
ELD and SDAIE	544,503	40.1
ELD and SDAIE with primary language support	319,875	23.6
ELD and academic subjects in primary language	88,772	6.5
Other EL services	31,251	2.3
No services reported	145,069	10.7
Total no. of EL students	1,357,754	

SOURCE: Fall 2003 CELDT annual assessment of students.

[4]Schools, not students, report this statistical information on the CELDT.

are no discernible differences in school characteristics between these two sets of EL students. The reasons why some EL students in a school receive EL services whereas other students in the same school do not deserves further attention beyond what is possible with CELDT data.

We also compare the CELDT data on EL services with data from STAR and from Parrish et al. (2003). In spring 2004, only 80 percent of EL students who took the CST reported receiving ELD, SDAIE, or bilingual education.[5] This result suggests that 20 percent of students reported other EL services or no EL services. In contrast, Parrish et al. (2003) report that only 5 percent of EL students do not receive any EL services and another 10.7 percent receive "other" services. However, they measure instructional services in spring 2002 using school-level data. Although these two sources differ in their allotment of EL students between "other" EL services or no EL services, both sources suggest that less than 85 percent of EL students receive some combination of ELD, SDAIE, and bilingual education.

These discrepancies likely result from the fact that the distinction among EL programs is not always clear. The schools decide whether their program is ELD, SDAIE, or a modification of these, and some programs cannot be clearly placed into one category or another. Table 2.4 shows that most EL students do not receive bilingual education, assuming that the majority of schools correctly classify their EL programs. This finding is consistent with the state's evaluation of Proposition 227 (Parrish et al., 2003) and the spring 2004 STAR data.

Another finding from the state's evaluation of Proposition 227 is that the schools attended by students in bilingual education programs have lower levels of parental education and income than the schools attended by students in other EL programs (Parrish et al., 2003). This difference persists in the 2003 CELDT data used in our analysis. The average percentage of students eligible for a free or reduced-price lunch is 78 percent for students in bilingual education programs, compared to an average of 67 percent for other EL students. Similarly, the average percentage of parents with less than a high school diploma is noticeably

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[5]Authors' calculation from 2004 STAR website (http://star.cde.ca.gov/star2004/viewreport.asp).

higher for students in bilingual education programs (46%) than for other EL students (34%).

Summary

EL students in California's schools are diverse along many dimensions. They are heavily concentrated in the Los Angeles area, but sizable populations exist in many other parts of the state, such as the Central Coast. EL students are also concentrated in early grades: over one-third of elementary school students are English learners. At the higher grades, less than 20 percent of the students are English learners. Over 80 percent of EL students list Spanish as their primary language. The second most common language is Vietnamese, at 2.3 percent.

Most EL students were born in the United States of immigrant parents. Over half of EL students in elementary school have been in the same school district since kindergarten, and over half of EL students in secondary school have been in U.S. schools for five or more years. In general, few EL students receive special services such as gifted and talented education, but most receive Title I services.

EL students are generally enrolled in ELD and SDAIE programs rather than in bilingual education. However, a sizable percentage do not report participation in any EL programs. EL program participation varies by language and grade level, but the reasons why some students receive no services are not clear.

3. Policy Context for EL Students

As the portion of English learners in California's public school children has grown, policymakers have directed greater attention toward addressing their specific needs. At both the state and federal levels, funds and programs are now targeted toward the special educational challenges of this diverse and significant group that will affect the future of the state and its economy. The two main goals of both state and federal policy are to enable EL students to become English proficient and to provide them with equal access to core curriculum (de Cos, 1999).

To understand the political context of EL education today, one must consider the history of policies directed toward EL students. Before the 1960s, many states passed laws forbidding languages other than English to be used in schools. However, in 1968, Latino leaders lobbied to pass the federal Bilingual Education Act, which prohibited discrimination on the basis of a students' limited-English ability. A 1974 Supreme Court case, *Lau vs. Nichols*, required that districts take steps to ensure access to standard curriculum for English learners, including assistance in learning English. As a result, Congress passed the Equal Educational Opportunities Act of 1974, which required that schools receiving federal money include English-language instruction in their EL curriculum and overcome language barriers that inhibit EL participation in school.

California state policies have evolved within this federal framework. The Chacon-Moscone Bilingual-Bicultural Education Act (AB 1329) of 1976 required that districts offer bilingual education to any student identified as an English learner. The Bilingual Teacher Training Assistance Program of 1981 provided training funds for teachers seeking bilingual credentials or certificates. The Impacted Languages Act of 1984 mandated assistance to districts with significant refugee and EL populations. The Chacon-Moscone Act sunsetted in 1987, but the state

legislature continued to authorize state funding for general bilingual education. In 1997,[1] nearly 30 percent of California's EL students remained in bilingual instruction.[2] But that year, in response to a Sacramento Superior Court ruling, California overhauled all previous rules mandating and protecting bilingual education. The ruling reinterpreted Chacon-Moscone and stated that native-language instruction was no longer required, although it was not prohibited. And in spring 1998, standardized testing began for all California students in grades 2 through 11, including English learners. At that time, districts were using a variety of different, inconsistent tests to identify and monitor student English proficiency because no state standard had yet been set.

Proposition 227

EL instruction changed significantly in June 1998 with the passage of Proposition 227 by 61 percent of California's voters. The proposition required that EL students be taught "overwhelmingly in English" through sheltered/structured English immersion programs for a transition period and then be transferred to a mainstream English-language classroom. The act stated that this move to mainstream classes should normally happen within one year.[3] The law allows alternatives to English immersion, such as bilingual education, only through parental waivers. In response to Proposition 227, the state set new standards for English-language development and acquisition. As expected, the proposition significantly shifted the proportion of English learners in various instructional methods, and today only 6.5 percent of those who

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[1]The year 1997 here reflects the academic year 1997–1998. Throughout the report, we refer to an academic year by its fall year, but this encompasses the fall of the stated year and the remainder of the academic calendar in the following year.

[2]Authors' calculations from the 1997–1998 Language Census.

[3]California Law Education Code, Section 305: "Children who are English learners shall be educated through sheltered English immersion during a temporary transition period not normally intended to exceed one year. . . . Once English learners have acquired a good working knowledge of English, they shall be transferred to English language mainstream classrooms."

take the CELDT annually report receiving bilingual education.[4] When EL students first enroll in California schools, they are placed in structured English immersion classes for at least 30 days before being assigned to traditional classrooms.

Implementation

Proposition 227 still provides districts with substantial flexibility in interpreting its "overwhelmingly in English" mandate. Labels of instructional practices from district to district can represent vastly different methods in practice. Gutierrez, Baquedano-Lopez, and Asato (2000) describe tremendous variance in the interpretation and implementation of Proposition 227, and they are critical of the lack of professional development provided to teachers after its implementation. Garcia and Curry-Rodriguez (2000) find that in the aftermath of Proposition 227, districts historically opposed to bilingual education embraced new all-English instruction, whereas schools that had been teaching in the native language continued to do so through parental waivers. Parents receive information of varying quality on their waiver options, affecting their choices about bilingual education. Rossell and Baker (2002) observe that many English learners were placed directly in mainstream classrooms rather than in sheltered English immersion classes. Yet, research suggests that few students can achieve proficiency in a year or less as specified by the proposition. Hakuta, Butler, and Witt (2000) find that achieving oral English proficiency requires three to five years, whereas academic proficiency in English can require four to seven years. In a cohort study, Grissom (2004) finds that only about 30 percent of students have reached fluency in four to five years.[5] On a positive note, districts surveyed on Proposition 227 reported an increased focus on how to best educate English learners in the aftermath of the proposition (Parrish et al., 2002).

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[4]As reported on the 2003 CELDT annual assessment file.

[5]Fluency is defined here as reclassification to FEP.

Evaluation

Several studies have examined EL academic achievement since the implementation of Proposition 227. Although various news reports and educators trumpeted gains in EL test scores, these studies found that scores increased across all types of language instruction (including bilingual) and for non-EL students as well (Gandara, 2000; Butler et al., 2000; Thompson et al., 2002; Parrish et al., 2002). Parrish et al. (2003) found some evidence of the gap between English learners (including reclassified FEPs) and English-only students narrowing slightly since Proposition 227, but they found no clear pattern favoring English-only versus bilingual schools. Other factors, including class size reduction, accountability reforms, data limitations, and increasing test familiarity could also be influencing EL test performance indicators since the implementation of Proposition 227. Thus, it is difficult to attribute any gains to English immersion education, and English learners still lag far behind their English-speaking peers.

Another factor complicating the comparisons of English-only versus bilingual schools is the vastly different baseline composition of the student body in these two types of schools. Bilingual schools and schools that were bilingual before Proposition 227 have overall poverty rates and percentages of English learners two to three times higher than schools instructing EL students in English. English learners in bilingual and formerly bilingual schools also enter these schools with substantially lower initial English proficiency than EL students entering English-only schools (Parrish et al., 2003). Before and after Proposition 227, EL students in both English-only and bilingual schools performed worse than other students on math and reading assessments, again demonstrating the difficulty in comparing the merits of English instructional programs.

State Programs for English Learners

In addition to state policies that create standards for educating English learners, various California programs fund EL education. For over 25 years, state Economic Impact Aid (EIA) has provided funding for compensatory educational services to low-performing and EL

students. English learners now receive 85 percent of EIA funding, which can be used for extra assistance and instruction, teacher training, and supplemental materials. Economic Impact Aid totaled $499 million in 2003 (Legislative Analyst's Office, 2004b), or about $265 per EL student.

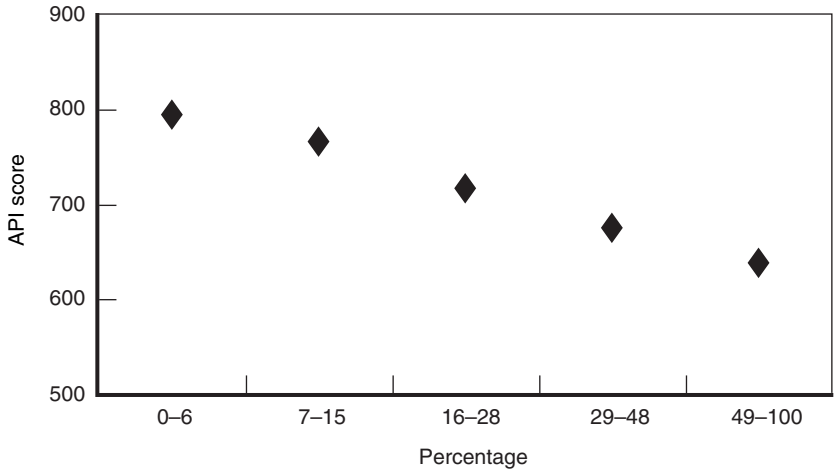
Proposition 227 created the Community-Based English Tutoring (CBET) program, which funds training for parents or other community members to become English tutors for EL students. The program receives $50 million annually through 2006, allocated to participating districts based on their number of English learners. In 2002, 546 school districts and 187,570 tutors participated, with funds averaging about $30 per EL student.

In 1999, the California Legislature enacted the English Language Acquisition Program (AB 1116) to promote the English proficiency of students in grades 4 through 8 to help them meet state academic content and performance standards. Districts receive $100 per EL student in these grades, subject to budget approval, for supplemental programs including intersession, summer school, special materials, and tutors; in 2002 districts received $53 million, estimated to reach around 90 percent of eligible EL students. The English Language and Intensive Literacy Program, which began in 2000, focuses on supplemental language and literacy classes outside the normal school day for EL students in all grades who are having difficulty learning English. Districts may apply for up to $400 per student for up to 120 hours of instruction. The program allocation totals $250 million over three years.

The state 1999 Public School Accountability Act requires that all California students be tested in academic core subjects. Each school receives an Academic Performance Index (API) calculated by using the CST, the nationally norm-referenced California Achievement Test (CAT/6), the California Alternate Performance Assessment (CAPA), and the CAHSEE. Schools then must meet API annual percentage growth targets, which are based on 5 percent of the distance between a school's base score and a state-set goal score of 800 (on a scale of 200 to 1,000). Each numerically significant subgroup within a school, including ethnic and socioeconomically disadvantaged groups (but not ELs), must also meet targets, set at 80 percent of schoolwide API growth targets. Schools

that meet these targets and participation criteria are eligible for monetary and other awards. Schools that do not meet targets are eligible for improvement funds and interventions, which increase with years of not meeting targets. English learners in a district for less than one year are excluded from the school's API but are included thereafter. If English learners cannot achieve the same levels of API growth as their English-speaking peers, schools with larger EL populations will have more difficulty reaching annual growth targets.

Figure 3.1 shows the statewide relationship between the percentage of English learners in a school and the school's API score. Schools with ELs making up nearly half or greater of their total enrollment have APIs nearly 160 points below schools with 6 percent or fewer ELs. Although many factors can explain lower API scores in schools serving large numbers of EL students, this figure illustrates the challenges faced by schools with significant EL populations.



SOURCES: Fall 2002 CELDT and SIF and spring 2003 STAR data.
NOTE: Categories of English learners were determined by dividing the data roughly into fifths.

Figure 3.1—Percentage of English Learners in a School and Mean API Score

No Child Left Behind Act

Recent federal legislation established expanded accountability standards and created specific mandates for English learners. The NCLB Act of 2001 establishes the following goals related to English learners:

- All students, including English learners, will attain "proficiency" in reading and mathematics by 2014; and
- All English learners will become proficient in English.

States, districts, and schools are accountable for improvements each year in both EL academic (reading and mathematics) performance and English proficiency. The act mandates annual English proficiency testing, interventions for failing schools, monitoring and reporting of EL performance on English proficiency and academic standards, and reporting of dropout and graduation rates of English learners.

Title I

The first component of NCLB legislation affecting English learners, "proficiency" in reading and mathematics, is tied to federal Title I funding for disadvantaged students. Because about 72 percent of English learners receive either targeted or statewide Title I funding, most EL students are affected by these standards. Under NCLB, states, districts, schools, and student subgroups must show "adequate yearly progress" in

- Annual measurable objectives for designated percentages of students scoring proficient or above in both English-language arts and math;
- Growth in academic achievement using an additional indicator (California uses the API); and
- Improvements in graduation rates.

NCLB also requires student participation rates of 95 percent on each assessment. Annual measurable objective assessments include the CST, the CAPA, and the CAHSEE. Even though first-year goals are relatively low, they will increase until 100 percent of students reach proficiency by

2014. Subgroups,[6] which must meet the same academic proficiency standards as the overall school, include English learners. Reclassified FEP students are considered English learners under NCLB until they attain proficiency on the CST English-Language Arts (CST ELA) for three years. A recent amendment to NCLB[7] allows all reclassified FEPs to be included in the EL subgroup for accountability purposes for up to two years, and EL students during their first year of U.S. enrollment will not be included in "adequate yearly progress" requirements.

In its initial years of implementation, many schools failed to meet NCLB's "adequate yearly progress" goals because of the low participation or passage rates of a single student subgroup, including English learners (Avalos-Lavimodiere, 2003; Tully and Leal, 2003). English learners in the state overall met proficiency targets, but as these targets increase, this group will face additional challenges. In spring 2004, only 17.9 percent of ELs statewide scored proficient in English language arts and 26.9 percent scored proficient in math (California Department of Education, 2004c). Schools that receive Title I funding and that do not meet all of these "adequate yearly progress" requirements for two consecutive years will be designated for "program improvement" and will face increasing levels of sanctions. Sanctions include offering transfers to better-performing schools, implementing tutoring programs, hiring new principals, and eventually being taken over by the state.

Title III

The second component of NCLB legislation affecting English learners, proficiency in English, is tied to federal Title III funding. Title III funding provides federal money to the state and districts for English learner and immigrant student educational services. Title III of the NCLB requires that states

- Establish English-language proficiency standards;
- Conduct an annual assessment of English-language proficiency;

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[6]Subgroups must be numerically significant, defined as 100 students or 50 students who represent at least 15 percent of the students to be tested.

[7]The U.S. Department of Education issued new NCLB policies concerning ELs on February 19, 2004.

- Define two annual proficiency achievement objectives to measure and increase EL development and English attainment; and
- Hold districts accountable for meeting annual measurable achievement objectives.

With the implementation of the CELDT in 2001, California became the first state to meet the proficiency assessment criteria. The state has defined achievement objectives as annual increases in the number or percentage of students gaining one proficiency level on the CELDT and annual increases in the number or percentage of students attaining English proficiency (being reclassified as FEP) at the district level. If a district fails to make progress on these objectives, the district must develop an improvement plan and could eventually face a loss of Title III funding. In 2003, over 80 percent of districts met both achievement objectives (California Department of Education, 2004d).

Funding

Title I and Title III funding is allocated per qualifying pupil (disadvantaged students for Title I and English learner or immigrant students for Title III). Title I grants to California school districts in 2003 totaled $1.6 billion, about $254 per California pupil or $610 per qualifying pupil.[8] Title III money in 2003 to California totaled $140 million, which breaks down to about $77 per qualifying student (California Department of Education, 2004b). To receive Title III money, a district or union of smaller districts must be eligible for at least a $10,000 grant. Title I funding is a much larger federal program than Title III, but supplemental funding is important for English learners as they strive to meet these new accountability standards. The following chapter on reclassification discusses the contradictory incentives that

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[8]Title I grants are made as targeted grants within schools or as schoolwide grants (if over 40 percent of students qualify) based on eligibility for free or reduced-price lunch or by participation in CalWORKs. California Title I students in 2003 totaled 2,619,449 (personal communication from Calvin McGee, Education Data Office, California Department of Education, Sacramento, California, August 31, 2004).

result from Title I and Title III accountability requirements for EL students.

English Learner Achievement Findings

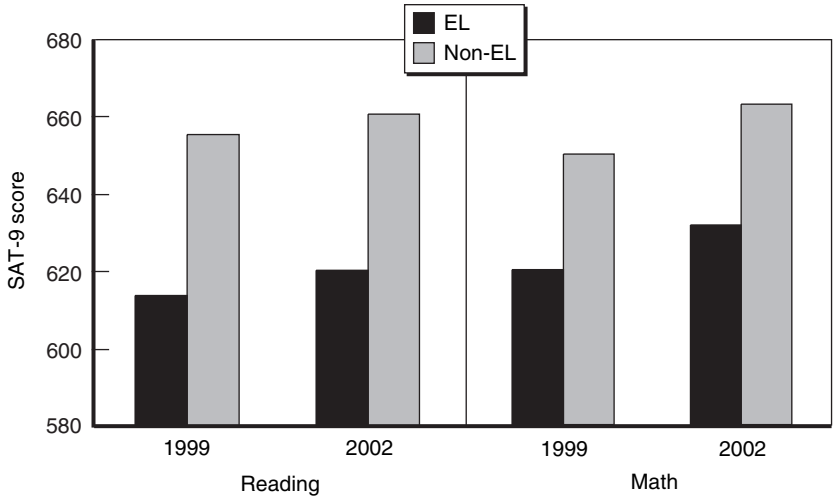
Before English learners can make large gains on academic achievement tests given in English, they must gain English proficiency. Research has validated a relationship between performance on language proficiency tests and standardized achievement tests (Castellon-Wellington, 2000; Stevens, Butler, and Castellon-Wellington, 2000; Abedi, 2001; Ulibarri, Spencer, and Rivas, 1981). Students with a greater command of English are more likely to be demonstrating their actual content knowledge than English ability on achievement tests. However, other factors play a strong role in test performance. Abedi (2001) cites length of time in the United States, overall academic grades, and student mobility as additional factors influencing how well English learners perform on standardized tests. Although language proficiency tests can measure knowledge of general English, they are less useful in assessing mastery of academic and content words necessary to perform on achievement tests (Stevens, Butler, and Castellon-Wellington, 2000). Thus, achievement tests for English learners are influenced, but not entirely driven, by English proficiency.

Various researchers have raised concerns that testing English learner academic achievement does not adequately reflect the student's ability or competence (Butler et al., 2000; Thompson et al., 2002; Stevens, Butler, and Castellon-Wellington, 2000; Abedi, 2001). The SAT-9, administered in grades 2 through 11 from 1997 until 2001,[9] is a nationally norm-referenced test using a population that is 1.8 percent English learners; thus, it is not representative of California's student population, which is one-quarter English learners (Thompson et al., 2002). Teachers interviewed by Palmer and Garcia (2000) argued that, "This test [SAT-9], because it is designed for native English speakers, did not give educators useful information about their limited English proficient students' progress." The California Department of Education

[9]California replaced the SAT-9 with the nationally norm-referenced CAT/6 in the 2002 school year.

has acknowledged that EL students should be given a "reasonable period of time" to meet the standards of mainstream students, yet it requires that English learners take achievement tests in English beginning in their first year of enrollment (California Department of Education, 1999). Below, we examine exactly how English learners are performing relative to their English-speaking peers.

EL scores on the SAT-9 have been studied widely because the test was in place from the imposition of Proposition 227 in 1998 until the 2001 school year. Parrish et al. (2003) find a large and consistent gap between EL students'[10] and native speakers' scores from 1998 to 2001. The gap in reading and language arts narrowed slightly across all grades during this period. The gap in math did not change but is consistently two-thirds the size of the reading gap between the two groups. Figure 3.2 shows SAT-9 scores for English learners and non-English learners in grade 5 in both math and reading.



SOURCES: 1999 and 2002 STAR data.

Figure 3.2—English Learner and Non-English Learner SAT-9 Scores, Grade 5

[10]The authors include reclassified FEPs in their EL subgroup.

English learners show the greatest achievement growth in early years, possibly reflecting the increased difficulty of learning higher levels of academic English (Gandara et al., 2003). Gandara et al. (2003) find that both initially classified FEP and reclassified FEP students have SAT-9 scores that fall behind those of their native English-speaking peers during elementary school. CST scores show similar patterns, with consistent performance gaps between EL students and English-speaking peers and a smaller math gap than reading gap. From 2000 to 2001, Parrish et al. (2003) found a slight closing of the CST reading gap between English learners and English speakers. These achievement test results highlight the difficulties English learners face in trying to meet the same academic standards of their English-speaking peers.

Besides serving as measures of accountability, testing will soon be used as a requirement for graduation. Passage of the CAHSEE will be necessary for graduation from California high schools beginning in 2006, and English learners are much less likely to pass than their English-speaking peers (Gandara et al., 2003). In 2003, only 49 percent of English learners passed the math portion of the CAHSEE, compared to 79 percent of non-EL students, and only 39 percent passed the English-language arts section, compared to 82 percent of non-EL students. Interestingly, greater percentages of initial FEP students and reclassified FEP students than English-only students passed both portions of the test. This test will pose additional challenges for English learners as they progress through the California school system.

Because the validity of testing English learners in English has been questioned, another test is used for California's dominant-language group. The Spanish Assessment of Basic Education, Second Edition (SABE/2) is required for Spanish speakers who have been enrolled in California schools for 12 months or less as an additional measure of academic achievement. As would be expected, student performance on the SABE/2 is higher than EL performance on English-speaking tests, with EL students scoring at or above national norms (EdSource, 2002; Mora, 2002).[11] Scores in high school were substantially lower than

[11]Participation in the SABE/2 is low, so its results are not an adequate reflection of achievement levels of California's Spanish-speaking students.

scores in earlier grades, but this is similar to achievement test score patterns of English-only students. Although the SABE/2 can present an alternative picture of academic content knowledge for English learners, it is outdated and not aligned to California content standards. Thus, it is not reported as an accountability measure of student or school performance and serves as little more than an additional information piece.

The value of testing in a student's native language is debatable. Abedi (2001) found that translating test items to a student's native language does not significantly improve EL performance unless school instruction was also in the student's native language. Testing students in their native language may not reflect new content gained. As ELs gain English-language skills, their academic progress in English should be evaluated. Additionally, some English learners may not be literate in their native language, so they would not be able to demonstrate content knowledge in that language. In fact, multiple guidelines to consider a student for reclassification, including academic achievement in English, were adopted because educators were unsure that simply demonstrating English proficiency would ensure academic proficiency (Grissom, 2004). Barriers to testing EL students are difficult to resolve because problems exist with EL testing in both the native language and in English.

Accommodations are allowed on achievement tests for students with disabilities or special needs. During their first year, English learners can receive such accommodations as extra time, questions being read aloud to them, and translating directions, but the usefulness of these accommodations is questionable (Abedi, 2001). For example, Castellon-Wellington (2000) studied grade 7 EL performance on one achievement test and found that accommodations of extra time or reading aloud did not improve test performance.

As the educational community continues to emphasize accountability and testing in schools, English learners face unique challenges in meeting performance standards. EL performance lags far behind that of English speakers, and recent reforms have not significantly addressed this gap. Achievement testing of English learners with English tests is partially a measure of their English proficiency and may not be an accurate measure of their academic content knowledge. Because of

California's sizable EL population, closing the gap between English learner and native speaker test achievement is especially important to meet state and federal accountability targets and new graduation standards. Accountability policies for English learners need to be carefully tailored to not penalize EL students before they can accurately demonstrate achievement in English.

English Learner CELDT Performance

In addition to achievement test findings, English proficiency as measured by the CELDT presents a fuller picture of how English learners are performing in California schools. Current literature on English learners has not fully explored the use of this rich data source, partly because of its recent implementation. A report by the Legislative Analyst's Office (2004a) summarizes student achievement on this test and evaluates EL improvement. The LAO's report uses only one year of CELDT gains (2002), and it does not present an empirical analysis of factors driving these gains. The report does provide an interesting simulation, in which one year of CELDT gains are used to predict the progress of the 2001 kindergarten class through 12 years of schooling. The report finds that by grade 6, almost half the students would be reclassified, and by grade 9, three-quarters would be reclassified, but these timelines differ by language. Parrish et al. (2003) describe patterns of CELDT scores but again use data from only two years of test administration and do not perform a regression analysis. Because we believe the CELDT data have not been used extensively, our analysis will contribute to this body of literature.

Instructional Settings and Teacher Credentials

To create a fuller picture of EL education in California, this section briefly discusses the various types of instructional settings and teacher qualifications that EL students experience. Instructional methods have been strongly affected by Proposition 227 as schools have shifted away from bilingual education; yet significant variance remains inside schools and classrooms. The use of a student's primary language can vary widely, from using primary language for clarification of English

instruction to teaching academic subjects in the primary language, which constitutes bilingual education. English-language development is designed as systematic and rapid instruction of English for acquisition of English skills at a level that offers equitable access to core curriculum for English learners. Specially designed academic instruction in English (SDAIE) is a method of instruction to make core curriculum accessible to EL students who already possess intermediate English proficiency and literacy. Thus, SDAIE is often used in conjunction with ELD to foster EL understanding of academic content. Some English learners receive no special instruction, either because of a parental waiver or because the school does not offer EL services. Even though these various methods are employed, studies of EL services have failed to provide conclusive evidence on which types of instructional programs are most effective (de Cos, 1999).

Because English education must replace other instructional time, EL students receive less academic instruction time than their English-speaking peers. Common practice is to provide approximately 30 to 45 minutes of ELD daily. Elementary schools often pull students away from regular classes for ELD, and secondary schools often put English learners in multiple periods of "English as a Second Language" classes instead of assigning them to full days in academic classes (Gandara et al., 2003). English learners are more likely to attend classes and schools with other nonproficient, lower-achieving peers, which can hinder EL progress. Research supports the notion that the academic achievement of peers influences a student's own achievement.[12]

Besides the influence of instruction and peers on an English learner's educational experience, teachers play an important role. California teachers for EL students must obtain regular credentials, as well as specific authorization to teach English learners. Yet California's English learners are significantly less likely than English-speaking students and even low-income non-EL students to have a fully credentialed teacher (Gandara et al., 2003). No Child Left Behind legislation mandates that every student be taught by a highly qualified teacher, making the issue of

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[12]Betts, Zau, and Rice (2003) find a peer influence effect in their study of San Diego student achievement.

teacher credentialing more central to educational debates. This requires that not only English learners have fully certified teachers but also that they have teachers with demonstrated knowledge of EL instruction.

Table 3.1 lists the types of English learner authorizations, ranking from the most rigorous requirements (Bilingual, Crosscultural, Language and Academic Development—BCLAD) to the least (in training). BCLAD certificates require that a teacher know a second language and learn a method to teach in this language, as well as gain knowledge of language development and culture. A BCLAD authorization is valid in all types of instructional settings, including bilingual education. Five percent of California EL teachers have a full credential and BCLAD authorization (University of California Linguistic Minority Research Institute, 2003). Crosscultural, Language and Academic Development (CLAD) teachers must gain training in language development, structure, and methodology but are not required to have command of a second language. BCLAD and CLAD teachers are authorized to teach ELD as a separate subject in EL-designated classrooms. SB 395 (1999), which updated a previous authorization created in SB 1969 (1994), requires 45 hours of training in SDAIE and ELD, in addition to a basic credential.[13] An SB 395 authorization allows a teacher to use SDAIE methods and content-based ELD instruction in a departmentalized (single subject) or self-contained (multiple subject) classroom, but it does not authorize professionals to teach ELD as a stand-alone subject.

Table 3.1

Authorizations for Teaching EL Students

	Valid Instructional Setting			Stand-Alone ELD
	Bilingual	ELD	SDAIE	Instruction
BCLAD	X	X	X	X
CLAD		X	X	X
SB 395		X	X	
In training		X	X	

[13]Forty-five hours of training in SDAIE and ELD earns teachers a single-subject credential. To receive a multiple-subject SB 395 credential, teachers must complete an additional 45 hours of training or have extensive teaching experience with EL students.

Teachers in training are commonly employed by schools to teach EL students and are not required to hold an EL authorization; they must agree to obtain training for authorization within two to three years. Additionally, bilingual paraprofessionals (aides) assist teachers in training for a BCLAD authorization or other EL teachers. These various types of EL authorization provide some training for teachers to meet the challenges of educating English learners. The state Bilingual Teacher Training Program has 14 sites around the state to help teachers already holding basic credentials to obtain one of the various types of EL authorizations.

Not only are English learners more likely to be taught by uncertified teachers, but they are often not taught by EL-trained teachers and staff (Gandara and Maxwell-Jolly, 2000; Gutierrez, Baquedano-Lopez, and Asato, 2000; Palmer and Garcia, 2000). Gandara et al. (2003) cite a 2002 survey that found that more than one-quarter of teachers of English learners hold no EL authorization. They found that in the state overall, there are 4.2 teachers with some type of EL authorization for every 100 English learners and only 1.9 fully credentialed BCLAD teachers for every 100 EL students. EL-authorized teachers are not distributed evenly within the state and are underrepresented in some of the schools with the largest EL populations. Because schools attended by English learners are more likely to have problems with crime, drugs, and overcrowding, these schools have a more difficult time attracting and retaining qualified teachers. The extra training needed to receive a BCLAD or CLAD may hinder the number of teachers receiving this specialized EL training. BCLAD and CLAD authorizations predate the implementation of Proposition 227, and it is not clear that these authorizations are appropriate for post-227 instruction.

English learners' needs also compete with a variety of other constraints on teachers' time and available resources. A 1999 survey of school districts by the California Department of Education revealed inadequate teacher training and materials for EL education in the aftermath of Proposition 227 (Gandara et al., 2003). In a separate survey, teachers expressed frustration over having inadequate time to address the special needs of EL students (Parrish et al., 2003). Shortages

of effective teachers and training were also aggravated by class size reduction legislation. Smaller class sizes led to a greater demand for teachers, and many credentialed teachers migrated away from California's poorest schools, which contain the largest concentrations of English learners.[14] The percentage of non-fully credentialed teachers in schools containing 40 percent or more English learners increased from 3.7 percent in 1995 to 23.9 percent in 2000 (Gandara et al., 2003). Obviously, the type of instruction received and the preparation and quality of a student's teacher are integral parts of an EL student's educational experience.

Summary

Policies related to English learners have evolved over time as EL education has become an increasingly central issue in California. After requiring bilingual education in the 1970s, California's educational policy changed dramatically with the passage of Proposition 227 in 1998. The ramifications of this law, requiring that EL instruction be delivered "overwhelmingly in English," and several other educational reforms that occurred during this period are still being studied and evaluated. Proposition 227 implementation in individual schools and classrooms varies widely, and current research has found no conclusive evidence that the proposition has boosted EL achievement. Additionally, schools that continue to offer bilingual education or that had offered bilingual education before Proposition 227 educate significantly more challenging student bodies, making comparisons between instructional programs difficult.

State and federal programs provide supplemental funding for English learners, but these students must meet new accountability standards linked to their academic performance. The state offers training for community English tutors and funding for supplemental English-language instructional time. Title III of the NCLB Act authorizes federal per-pupil funding for English learners and immigrant students, but the funding is tied to improvements in English proficiency and

[14]See Jepsen and Rivkin (2002) for an extended discussion of the effects of class size reduction.

reclassification rates. Accountability standards from the state Public Schools Accountability Act and the NCLB Act require increases in the number of students meeting targets on academic assessment tests. Schools receiving Title I funding must meet these targets for the student body as a whole and also for English learners. Because English learners lag behind their English-speaking peers on achievement tests, these standards are especially difficult to meet. One may question the appropriateness of measuring English learner academic content knowledge in a language in which they are not yet proficient, but the current accountability system requires assessment to measure progress in the California school system. Accountability policies should thoughtfully address the standards demanded of English learners.

Proposition 227 changed the state make-up of instructional settings, as schools shifted from bilingual education to instruction through ELD and SDAIE. This instruction can vary across schools from assigning students to full-day classes with EL peers, to pull-out programs, to no special instruction received at all. English learners are more likely than their English-speaking peers to have a non-fully credentialed teacher. Class size reduction contributed to this problem by creating additional teaching positions in affluent schools (with few EL students) that were filled by experienced teachers migrating from high-poverty schools (with many EL students). Additionally, many teachers of English learners do not have specialized training to teach EL students. Even though NCLB mandates a highly qualified teacher for every student, it is unclear whether California will be able to meet this standard for its EL students. Undoubtedly, the education of English learners will remain of interest and will continue to be the subject of new and evolving state and federal policies given the expected growth in the EL student population in California.

4. Reclassification to Fluent English Proficient

Policies geared toward the specialized instruction of English learners are ultimately seeking to prepare a student to be reclassified as FEP. Once EL students reach English proficiency, they can presumably enter mainstream classrooms and strive toward higher levels of academic achievement alongside their English-speaking peers. Because reclassification triggers the withdrawal of special services, EL students' readiness to perform academically is very important. Multiple criteria are used in determining reclassification, and districts have flexibility and ultimate authority in interpreting and setting standards. In this chapter, we examine the process and factors that play a role in helping EL students achieve reclassification signifying their English proficiency.

Reclassification Process

In September 2002, the State Board of Education set several recommended guidelines for districts to use when assessing a student for reclassification. These criteria are merely suggestions, and districts have the ultimate authority to set autonomous reclassification standards. The CELDT was created by the California Department of Education not only to formulate a consistent assessment standard of English proficiency but also to serve as the primary indicator for initially identifying students as FEP. The CELDT score recommended as an indicator of English proficiency by the board is an overall score of early advanced or advanced (4 or 5 on a scale of 1 to 5), with no listening/speaking, reading, or writing subscores below intermediate (3). Additionally, students with an overall score in the upper range of intermediate may be considered for reclassification if additional measures demonstrate English proficiency. However, the CELDT score is only one factor considered, and individual districts may interpret CELDT scores according to their own standards.

English proficiency is not in and of itself a guarantee of academic success for reclassified English learners; EL students must also achieve academic language skills and content-area knowledge and abilities before they can be considered adequately prepared to enter a mainstream classroom (Grissom, 2004). Thus, in addition to the CELDT, the board suggested the following reclassification guidelines: acceptable student performance on the ELA CST, a teacher evaluation of the student's academic performance, and a parent consultation. Each district may set a cut-off score when assessing student performance on the ELA CST.[1] Students above the cut-off are then assessed through a teacher evaluation and parent consultation. Once a student is reclassified, California regulations and the federal NCLB Act dictate that districts monitor subsequent student performance for two years.

Although the state set reclassification guidelines, district practices vary significantly. Interviews in Parrish et al. (2003) revealed that the ELA CST criteria are not widely understood, and several districts and school administrators admitted to using the SAT-9 or CAT-6 (nationally normed achievement tests not based on state standards) as the academic achievement reclassification measure instead of the California Standards Test. Districts set varying proficiency thresholds among these tests as well. Although some districts used CELDT scores as the "trigger" for initiating reclassification review, other districts used CST or SAT-9/ CAT-6 scores. Some districts noted an incentive to reclassify by the end of grade 2 or grade 3, since English-language acquisition happens more quickly in early grades and reclassification criteria are less demanding.[2] Pressure from parents can also influence reclassification. Certain districts reviewed students continually, but other districts reviewed only once annually in March to report reclassified students in the Language Census.

The percentage of English learners being reclassified has changed over time. Parrish et al. (2003) note that between 1992 and 1997, the

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[1]State Board of Education guidelines suggest a cut-off in the beginning to middle range of a score of basic (3) on a five-point scale (where 1 = "far below basic").

[2]Grade-level standards on the CELDT and ELA CST become more demanding as a student's grade level increases.

reclassification rate increased gradually, and in the three years following Proposition 227, this increase accelerated. This suggests that the passage of the proposition may have increased school incentives to review EL students for reclassification and demonstrate success. Professional development for teachers became more focused on EL students during this period. In 2001, the year after the introduction of the CELDT, reclassification rates dropped from 9 percent to 7.8 percent of all EL students. In 2003, rates remained near 8 percent. The introduction of CELDT and CST guidelines in 2001 may have toughened standards for reclassification and thus reduced the pool of "qualified" students (Parrish et al., 2003).

Reclassification Counts

To examine the rate of students being reclassified, we compare the number of students designated as English learners[3] from the fall-administered CELDT with reclassification counts reported in the following spring's Language Census.[4] Because the data are collected at the school level, our unit of analysis is the school. Table 4.1 compares the number of reclassified students in California, as well as the number of students meeting CELDT reclassification guidelines (scoring early advanced and advanced overall, with no subscores below intermediate), to the total EL population in both 2002 and 2003.

From Table 4.1 we can also calculate the percentage of students meeting CELDT criteria who are actually reclassified—28.6 percent in 2002 and 24.5 percent in 2003. The school-level correlation of reclassified students versus CELDT-eligible students is 0.51 in 2002 and 0.61 in 2003, suggesting that although the CELDT score does play a role in reclassification, other factors also play strong determining roles. Indeed, Parrish et al. (2003) note that school and district administrators cite poor EL core subject academic performance more frequently than

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[3]The CELDT defines English learners as initial assessment students with an overall proficiency level of 3 or below or an overall level above 3 but with subscores below 3 plus all annual assessment test-takers.

[4]For our 2002 analysis, we use EL data from the 2002 CELDT and reclassification data from the 2003 Language Census. For our 2003 analysis, we use the 2003 CELDT and 2004 Language Census.

Table 4.1

Reclassification, CELDT Criteria, and Total ELs

	2002		2003	
	No.	% of Total ELs	No.	% of Total ELs
ELs reclassified to FEP	114,919	7.1	128,780	7.9
ELs meeting CELDT criteria	401,785	24.7	524,956	32.3
Total ELs	1,627,172		1,624,237	

SOURCES: Fall 2002 and 2003 CELDT and spring 2003 and 2004 Language Census.

NOTES: In our analysis for 2002, we exclude 24,291 students in 628 schools that serve only special needs students (alternative schools, continuation schools, etc.) and another 1,204 students in 71 schools where the Language Census counts more reclassified students than there are CELDT-defined English learners. In 2003, we exclude 38,166 students in 686 nonregular schools and another 768 students in 78 schools where the Language Census has a higher number of reclassified students than total EL students. Thus, our sample for analysis in 2002 included 1,627,172 EL students in 7,196 schools, and our 2003 sample included 1,624,237 EL students in 7,307 schools. Our reclassification count is less than the Language Census reclassification count because of our reduced sample.

lack of English proficiency as a factor prohibiting reclassification. Other significant factors preventing reclassification noted in their reports include high mobility and limited prior schooling.

It is interesting to note how reclassification rates vary across grade levels. Table 4.2 shows rates by elementary, middle, and high school.[5] Elementary schools reclassify fewer students than the mean reclassification rate (7.1 in 2002 and 7.9 in 2003), whereas middle and high schools reclassify more frequently. These results are similar to those of Parrish et al. (2003) who found that middle and high schools reclassify a larger portion of their total EL students than do elementary schools. Although standards are easiest to meet in elementary school, students in secondary schools have spent more years in school gaining English exposure and are at later stages of English language proficiency.

[5]A school is defined as an elementary school if it serves most of the grades in K through 5. Middle and high schools are defined as serving most of the grades in grades 6 through 8 and 9 through 12, respectively. A school that serves multiple grade spans (such as K–12 schools) is included in each grade span it serves.

Table 4.2

Mean Reclassification Rates, by Grade Level

	2002	2003
Elementary school	5.8	6.6
Middle school	9.2	10.7
High school	9.5	9.8

SOURCES: Fall 2002 and 2003 CELDT, fall 2002 and 2003 SIF, and spring 2003 and 2004 Language Census.

Reclassification Regression Analysis

In this section, we use multivariate regression analysis to examine the relationship between various school characteristics and reclassification. This analysis allows us to determine both the marginal effect of a school characteristic on reclassification while holding all other characteristics constant and the overall explanatory power of the school factors that we measure in explaining differences in reclassification rates. We present these relationships in terms of how reclassification rates would be affected by a change in a given school characteristic.

Because of the substantial differences in how districts apply state reclassification criteria, we control for individual district effects in these analyses. Thus, we are measuring the variation of school characteristics and this effect on reclassification *within* a school district. The cumulative amount of variation in reclassification explained by the characteristics in our analysis increases by 33 percentage points in both years once district effects are included. This increase suggests that district characteristics not controlled for in our analysis play a large explanatory role in reclassification rates. By controlling for districts, we are also capturing funding differentials that vary by district, so a school district's ability to raise money is not a consideration in our analysis. In fact, Rose et al. (2003) find that school district revenue is fairly equalized in California, with low-income districts actually receiving greater revenue levels per pupil (because of federal and state compensatory funding), so we do not believe that a lack of district funding plays a role in EL performance or reclassification.

Even after controlling for district-specific effects, certain measurable school variables are systematically related to school reclassification rates. The variables controlled for in this analysis include school characteristics, characteristics of the school's English learners from the CELDT, teacher education and experience, and a schoolwide average score for non-English learners on the ELA CST (see Appendix B for a complete list of control variables).[6] Our regression analysis uses EL student weights to compensate for differences in EL population sizes between schools, so that our results are not driven by schools with very small EL populations. Below, we present the results of our multivariate analysis of board guideline factors, language factors, and other school factors in reclassification rates.

State Board of Education Guideline Effects

Because the board suggested using EL scores on the CELDT and ELA CST to determine reclassification, one would expect that higher scores on both tests would have a positive effect on the percentage of English learners that a school reclassifies. Figure 4.1 shows how a one standard deviation change in each of these factors affects a school's reclassification rate.

The percentage of English learners in a school who are advanced, meaning that they have scored at or above board reclassification guidelines on the CELDT, indeed has a positive effect on the percentage of EL students who are reclassified. An increase of one standard deviation of advanced-scoring English learners corresponds to about a 1.2 percentage point increase in a school's reclassification rate. The mean reclassification rate in our sample in 2003 is 7.9 percent, so this effect is a nearly 15 percent increase on the current mean reclassification rate. A school's mean score on the ELA CST has an even greater positive effect on reclassification rates (2.4 percentage points in 2002 and 1.4

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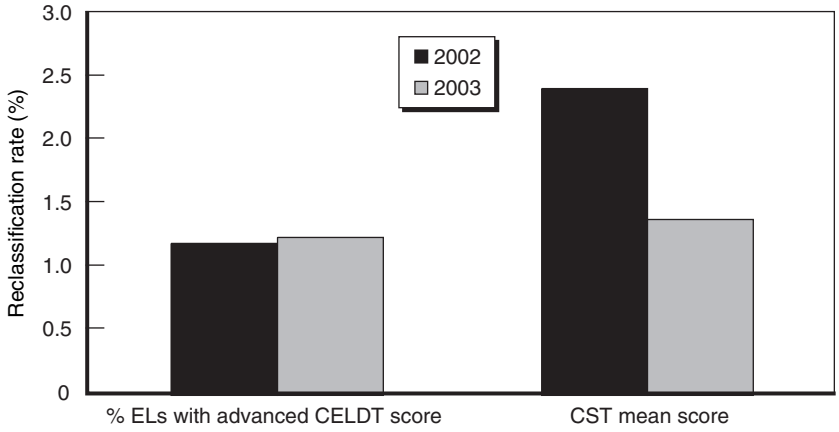
[6]The analysis was also performed using the ELA CST school average of all students and only EL students. Using EL scores raises endogeneity concerns, and many scores are invalid, so we report findings using a non-EL average. However the findings of the analysis are similar using all student ELA CST scores. This analysis is also robust to including only schools whose most frequently spoken language is Spanish (6,033 schools in 2002 and 6,222 schools in 2003).



SOURCES: Fall 2002 and 2003 CELDT and spring 2003 and 2004 Language Census.
NOTES: The figure reports effects statistically different from zero at a significance level of 5 percent. The effects for each variable are measured as the effect of an increase of one standard deviation. The model holds constant other school, teacher, and student background variables listed in Appendix B. This model controls for district fixed effects. See Appendix Tables B.1a and B.1b for the standard deviations of each variable.

Figure 4.1—Effects of State Board of Education Guidelines on Reclassification Rates

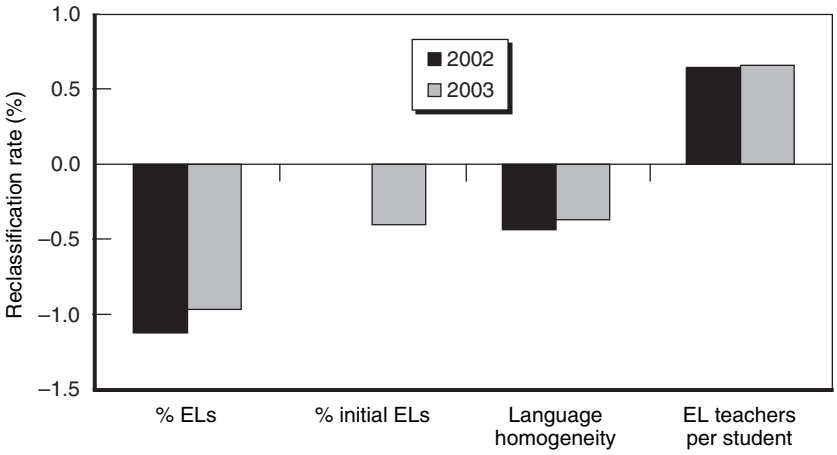
percentage points in 2003). This result suggests that a one standard deviation increase on the CST is related to an increase in the mean reclassification rate by one-third in 2002 and about 18 percent in 2003. Grissom (2004) supports this finding in a time-series cohort analysis of reclassification that showed reading test scores to be the strongest predictor of reclassification. Thus, English proficiency and especially academic achievement are highly valued when determining eligibility for reclassification. Other board guidelines—teacher evaluations and parent consultations—cannot be quantified, so they are not included in our analysis of reclassification, but they undoubtedly play a role as well.

Language Effects

The CELDT provides information on the native language of English learners, and we can use these data to determine how language characteristics at the school level affect the reclassification rates of that particular school. The number of English learners speaking any foreign

language at a given school is one interesting factor to examine. Figure 4.2 examines this measure and other effects of language on reclassification.

This analysis reveals that the percentage of English learners in a school negatively affects reclassification rates when other factors are controlled for. An increase of one standard deviation (24%) is related to a decrease in the percentage of EL students who are reclassified by about 1 percentage point. Schools with high EL populations do not reclassify as many EL students as lower EL population schools, even when advanced CELDT scores, CST scores, socioeconomic conditions, and other factors are held constant. Because of the extensive review process required for reclassification that includes subjective as well as objective criteria, schools with higher percentages of English learners face additional demands on their limited resources to adequately prepare EL students and then undertake the review process. Thus, schools with high EL populations face greater challenges in reclassifying their English learners. In 2003, the percentage of initial assessment EL test-takers had



SOURCES: Fall 2002 and 2003 CELDT and spring 2003 and 2004 Language Census.
NOTES: The figure reports effects statistically different from zero at a significance level of 5 percent. The effects for each variable are measured as the effect of an increase of one standard deviation. The model holds constant other school, teacher, and student background variables listed in Appendix B. This model controls for district fixed effects. See Appendix Tables B.1a and B.1b for the standard deviations of each variable.

Figure 4.2—Effects of Language on Reclassification Rates

a notable negative effect of about 0.5 percentage points. Initial EL students are likely to have lower English ability, so a larger share of initial EL students would decrease the school's overall reclassification rate.

The mix of languages spoken in a given school also seems to affect the rate of reclassification. The language homogeneity index (a scale from 0 to 1 where 0 is a school where each student speaks a different language and 1 is a school where all students speak the same language) is negatively associated with reclassification rates. Schools with less language diversity have lower reclassification rates in both years. This finding could indicate the peer effects of more heterogeneous schools, where students speaking a range of languages must learn English to be able to communicate. These schools appear more successful at transitioning English learners away from their native language, which is not widely spoken, and toward English proficiency. Additionally, because Spanish is by far the most commonly spoken language in California schools, the language homogeneity index is largely measuring how much Spanish is spoken in a given school.[7] Indeed, predominantly Spanish-speaking schools have reclassification rates below the overall mean, so it is difficult to say whether the effect of language homogeneity is due to peer effects or to lower rates of reclassification for Spanish speakers. In 2003, schools where the most common language is Spanish (reclassification rate mean of 7.4 percent in 6,222 schools) or Hmong (reclassification rate mean of 6.8 percent in 60 schools) reclassify fewer EL students than the overall mean (7.9%),[8] whereas other languages are above the overall mean. Schools where the modal language is Armenian reclassify the greatest percentage of English learners, 24 percent, but Armenian-speaking students are dominant among the EL population in only 21 California schools.

Finally, the effects of having more EL-trained teachers has a positive influence on reclassification. An increase of one standard deviation in the ratio of EL-authorized teachers to EL students raises reclassification

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[7]The correlation between our language homogeneity index and the percentage of Spanish speakers in a given school is 0.63 in 2003.

[8]Grissom (2004) also finds that Spanish-speaking students have a lower probability of reclassification in a cohort analysis, but this effect disappears when controlling for reading academic achievement scores.

by about 0.7 percentage points. We control for other qualities of teachers in this analysis, including education, experience, and credentialing, so this finding suggests that the targeted training of teachers to meet EL students' specific needs increases the number of ELs that are then reclassified. Again, this result suggests that individualized attention and resources for EL students can play an important role in students' progression to English proficiency.

School and Teacher Effects

In addition to the effects of board reclassification guidelines and language, several other factors controlled for in our analysis are related to determining differences between reclassification rates (see Table 4.3). Nontraditional school year calendars, which usually involve year-round schooling in predominantly low-income districts, have a small but

Table 4.3

Effects of Schools and Teachers on Reclassification Rates

	2002	2003
School attributes		
Alternative calendar	0.830	*
Charter school	*	1.868
Class size	1.103	0.893
School demographics		
Schoolwide Title I	*	*
% new to school	*	*
Teacher characteristics		
% with bachelor's degree or less	*	0.442
% with bachelor's degree + 30	0.530	*
Average experience	*	–1.536
Experience squared	*	1.166
% certified	*	*

SOURCES: Fall 2002 and 2003 CELDT and spring 2003 and 2004 Language Census, SIF, PAIF, and API.

NOTES: The effects for each variable are measured as the effect of an increase of one standard deviation. This model controls for district fixed effects. See Appendix Tables B.1a and B.1b for the standard deviations of each variable.

*Indicates that the effect is indistinguishable from zero at a significance level of 5 percent (two-sided test).

positive association with reclassification in 2002. Charter schools have a larger, positive effect in 2003. Larger class size also appears to be positively related to the number of EL students reaching proficiency in both years. This result is difficult to explain given that other results suggest the importance of individual attention, but a greater number of classmates may increase exposure to peers speaking English. Finally, certain teacher characteristics have inconsistent effects on reclassification, with education having a positive effect in 2002 and experience having a positive, curvilinear effect in 2003. Other teacher and school characteristics controlled for in our analysis did not have a relationship with reclassification, but these factors are being measured at the school level, so we cannot rule out their effects on individual student reclassification.

Considerations and Policies Affecting the Reclassification Process

Our results suggest that district effects can explain some of the differences across schools in reclassification rates, which coincide with the large district variation in reclassification procedures found by Parrish et al. (2003). In addition to CELDT scores, EL scores on the ELA CST provide the other mandated objective measure of student performance used for reclassification. English learners perform below their English-speaking peers on this test, as well as below the scores of initial and reclassified FEP students. However, this performance may reflect low English proficiency rather than low content knowledge. Recent research has highlighted the inadequacy of measuring EL academic performance with monolingual native-English-speaker-normed tests (Parrish et al., 2003). On the other hand, districts need to assess English learners' readiness to begin mainstream academic instruction. Table 4.4 shows statewide percentages at the basic level and above by grade level on the 2004 ELA CST.

In 2004, only between 25 and 54 percent of English learners scored at basic or above levels, varying by grade.[9] Thus, low performance on the ELA CST is most likely preventing English learners from being

[9]There is concern over the validity of CST scores for English learners. Many invalid scores were assigned to the "far below basic" level, which would bias mean scaled scores down for this language group.

Table 4.4

Percentage Scoring Basic and Above on English-Language Arts Portion of California Standards Test, 2004

	Grade									
	2	3	4	5	6	7	8	9	10	11
English learner	49	40	54	48	41	37	33	31	29	25
Initial FEP	81	77	87	85	85	83	81	80	77	73
Reclassified FEP	87	90	95	93	90	87	83	80	78	73
English only	74	71	80	79	79	76	76	74	71	68

SOURCE: STAR reports on California Department of Education website.

reclassified, and results from our analysis confirm this. As noted above, districts do not yet uniformly implement this criterion, so its effect on reclassification is still evolving. Until districts have a more standardized process, and without matched student-level data on CELDT scores, reclassification, and ELA CST scores, the exact relationship between these performance indicators is difficult to quantify. However, our research confirms that raising CST scores is an important component of progressing ELs to proficiency.

Funding components of English learner policy could also affect reclassification. Federal and state funding programs directed at English learners are allocated per pupil, so funding is lost when students are reclassified. De Cos (1999) states that students sometimes are not mainstreamed to normal classrooms after they are reclassified so that the school can continue to receive funds based on the number of EL students in the school.

New federal standards set by the NCLB Act also may affect reclassification. The legislation specifies that states define annual achievement objectives to measure and increase English attainment. California has defined two achievement objectives related to the CELDT: (1) annual progress in learning English and (2) attainment of English proficiency on the CELDT. For the first objective, the state requires that at least 51 percent of a district's ELs in 2003 improve at least one proficiency level (or remain at the same level if already proficient), increasing to 64 percent of ELs in 2013. For the second objective, English proficiency targets are assessed on the following cohort:

- Students with two years of CELDT scores who have been in U.S. schools for four or more years *or*
- Students at the intermediate level or above who did not reach English proficiency in the prior year *or*
- Students below the intermediate level the prior year who now meet the English proficient level.

State standards require that 30 percent of this cohort achieve proficiency on the CELDT in 2003, increasing to 46 percent in 2013. As with "adequate yearly progress" goals, if a district fails to make progress toward meeting proficiency criteria, it will face sanctions, including the loss of Title III funds after four consecutive years of failure.[10] In 2003, 87 percent of California districts met the annual progress target (objective 1) and 85 percent of districts met the proficiency target (objective 2).

These standards encourage reclassification in schools and districts, but schools face reverse incentives when considering reclassification. Title I accountability and the third Title III accountability objective require that English learners meet "adequate yearly progress" goals on the California Standards Tests in English-language arts and math. Thus, schools are encouraged to retain higher-performing students as English learners. If a school or district's EL subgroup does not meet annual measurable objectives for percentage proficient in English or math, or does not achieve 95 percent participation on the standards test, Title I schools face sanctions that increase with continued years of failure to meet standards. Schools must also meet achievement growth targets set by the 1999 Public Schools Accountability Act, regardless of the size of their EL population.

Title I schools are especially burdened in meeting NCLB criteria. In 2003, these schools made up 70 percent of schools failing to meet NLCB requirements (Avalos-Lavimodiere, 2003). Bruce Fuller, a UC Berkeley education professor, said that NCLB "places unreasonable demands on schools with diverse populations" (Helfand and Luna, 2001). The size of

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[10]Title III provides federal funds designated for English learner and immigrant students.

Title I apportionments dwarfs those of Title III, so districts and schools face stronger incentives to hold back high-performing English learners rather than reclassify them. Recent amendments to NCLB allow EL students to not be included in accountability measures in their first year of enrollment in U.S. schools, and, additionally, the new policy allows reclassified student assessment scores to be counted in the EL subgroup for up to two years. However, these new policies probably will not alleviate the significant challenges faced by schools with large EL populations in meeting NCLB standards. Parrish et al. (2003) advise that the state should reconsider reclassification within the context of new federal annual achievement objectives for English learners.

Thus, the NCLB Act creates contradictory incentives for schools and districts, which are held accountable for both EL academic performance and reclassification targets but which also receive funding based on the number of pupils who are EL students. As English learners struggle to perform on the CST—both to achieve reclassification and to meet accountability standards—policymakers should be aware of the conflicting interests in this process. Recent NCLB amendments that provide some concessions for EL accountability will help address this incentive structure, but the policy may not go far enough. Schools with large EL populations face greater challenges in meeting accountability measures, and perhaps EL students should not be held to the same standards of academic achievement as their English-speaking peers when they are still struggling to master English.

Summary

Reclassification is an important topic in the discussion of EL progress and proficiency. With the adoption of the CELDT, the State Board of Education has set guidelines for reclassification that include CELDT standards of proficiency, as well as academic achievement, and teacher and parent input. Although the CELDT plays an important role, in 2003 only one-quarter of the English learners who scored high enough on the CELDT to be considered for reclassification were actually reclassified. The guidelines give districts significant flexibility in interpreting reclassification criteria, and studies have shown that districts are not uniformly implementing these. Schools on average reclassified

between 7 and 8 percent of their English learners in the last two academic years.

A multivariate analysis of school-level reclassification rates revealed specific factors affecting reclassification. When controlling for district effects, the explanatory power of our analysis increased greatly, indicating that unobservable district variation is a strong determinant of differences in reclassification rates. However, certain school characteristics remained associated with reclassification variation within schools. As board guidelines suggest, increased scores on the CELDT and ELA CST are positively related to reclassification rates, with CST achievement scores having a larger effect. The percentage of English learners in the school and greater language homogeneity had negative effects, suggesting that EL students require individualized attention and resources, as well as exposure to peers who do not speak their native language. A greater EL teacher to student ratio also increases reclassification. Teachers trained to effectively instruct EL students can guide them toward reclassification. Other classroom factors play a role in reclassification, though of less magnitude. The NCLB Act mandates that schools and districts increase the percentage of students that they are reclassifying, but it also encourages the practice of continuing to designate high-performing students as English learners to meet achievement accountability requirements. The counteracting effects of these policies are difficult to measure.

Our analysis suggests that to increase reclassification rates, schools should strive to improve CELDT and CST performance, provide adequate resources for thorough individual reviews regardless of the size of the school's EL population, compensate for peer and community effects in more language-homogeneous (namely, Spanish-speaking) schools, and hire more EL-trained teachers to meet the specific needs of English learners. As districts continue to define reclassification for their own unique EL populations, policies should encourage and support students to reach the ultimate goal of English proficiency.

5. Effect of Language on CELDT Growth

The previous chapter investigated one measure of success for EL students, namely the reclassification from English learner to Fluent English Proficient. However, the vast majority of EL students are not reclassified, even those who meet the minimum suggested CELDT score. For these students, success is measured by growth in English proficiency. This chapter and the next look more closely at the determinants of growth in English proficiency.

This chapter documents the relationship between students' native language and their gains in English proficiency. We expect differences by language in the ability to learn English based on the similarity between the student's primary language and English. For example, most European languages have the same alphabet as English, as well as similar sentence structure. However, Asian languages (as well as Russian and Armenian) have different alphabets. Until recently, Hmong did not have a written form. In addition, speakers of each language have their own culture that will affect their ability to learn English.

As mentioned above, our focus is on growth in English proficiency. We examine the growth in CELDT scores from fall 2001 to fall 2002, as well as the growth from fall 2002 to fall 2003.[1] The focus is on growth, rather than levels, for two reasons. First, the NCLB Act requires increases in English proficiency. California defines an increase in English proficiency as growth in the CELDT score. Second, growth allows us to observe the value added by schools, teachers, and others. Looking at the test score levels alone tells us only how a student is doing at a point in time. It does not say whether that student is showing improvement. A

[1]The first administration of the CELDT was in fall 2001.

student who has a certain level of proficiency but no growth is not becoming more proficient in English.[2]

Growth is measured in proficiency levels. These levels are: 1 = beginning, 2 = early intermediate, 3 = intermediate, 4 = early advanced, and 5 = advanced. Therefore, the values for the growth variable range from –4 to 4. The results are similar when the measure of growth is scale scores. We choose proficiency levels because they are the unit of analysis used by state and federal policies regarding EL students.

The CELDT is divided into four grade levels: K–2, 3–5, 6–8, and 9–12. Scale scores are applicable only within grade levels. Although the proficiency levels are constructed to be constant across grade levels, the Legislative Analyst's Office (2004a) illustrates the difficulty of trying to interpret across these four grade spans. Therefore, our analysis is done separately by grade span.

Early Elementary Grades (K–2)

Although Spanish is the dominant language, EL students in California speak many languages. The Legislative Analyst's Office (2004a) found that Korean and Mandarin speakers experienced the most growth in CELDT proficiency levels in 2002, whereas Hmong and Khmer (Cambodian) speakers experienced the least growth. Their report looks in particular at CELDT reading scores in grade 2, as well as at overall CELDT scores in grades K through 3.

Table 5.1 contains the predicted growth rate by language for 2002 and 2003. Because EL students in kindergarten and grade 1 took the listening and speaking portion of the test, but not the reading and writing portions, the analysis for this grade span covers only growth on the listening and speaking section. Kindergarten is the first grade where the CELDT is offered, so the only students in kindergarten with growth in their CELDT score are those who are repeating kindergarten. The analysis thus focuses on grades 1 and 2.

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[2]We have also estimated models that examine the current CELDT proficiency level (rather than CELDT growth). These models, which include the previous CELDT proficiency level as a control variable, have nearly identical results to the reported results from growth models.

Table 5.1

CELDT Growth for Grades K–2, by Language and Year

	Fall 2002		Fall 2003	
	Uncontrolled	Controlled	Uncontrolled	Controlled
Spanish	0.75	1.47	0.80	0.92
Comparison of other languages to Spanish				
Armenian	–0.10**	0.09**	–0.14*	–0.04
Cantonese	–0.04	0.06**	0.04	0.16**
Filipino	–0.01	0.07**	–0.07**	0.08**
Hmong	–0.15**	–0.25**	–0.07**	–0.14**
Khmer	–0.15**	–0.04	–0.13**	0.02
Korean	0.17**	0.12**	0.14**	0.16**
Mandarin	0.22**	0.20**	0.21**	0.27**
Russian	0.31**	0.17**	0.24**	0.15**
Vietnamese	0.07**	0.04*	0.10**	0.11**
Other	0.06**	0.09**	0.00	0.09**
Range	0.46	0.45	0.37	0.40

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: The sample size is 254,598 students for 2002 and 317,859 students for 2003.

*Indicates estimates statistically different from Spanish speakers at the 5 percent level.

**Indicates estimates statistically different at the 1 percent level.

For each year, the table contains two growth rates. The first, labeled the uncontrolled growth rate, is the average growth rate for each language. This rate contains no control variables. The second rate, labeled the controlled rate, is the predicted growth rate for each language after we control for each student's previous CELDT proficiency level as well as other student and school-level attributes.[3] In other words, the controlled growth rate for a language is equal to its regression coefficient from the model outlined in Appendix B.

[3]Student-level attributes include previous year's CELDT score, gender, EL and non-EL program receipt, mobility information, and age. School-level attributes include school information such as charter school status and type of calendar attendance as well as teacher characteristics. For a complete list of attributes, see Appendix Table B.2a.

Because Spanish speakers constitute over 80 percent of EL students, they provide a useful reference group. Therefore, the uncontrolled and controlled growth rates for Spanish speakers are presented at the top of the table. The growth rates for other languages are compared to Spanish: Positive numbers indicate more growth than Spanish speakers, whereas negative numbers indicate less growth. The table also contains the range of predicted growth rates across languages, to provide a measure of the overall diversity across languages.

The uncontrolled growth rates in Table 5.1 illustrate sizable differences by language, similar to the findings in the Legislative Analyst's Office (2004a). The range between languages lessens substantially between 2002 and 2003, from 0.46 to 0.37 proficiency levels. Spanish speakers have an average growth of 0.75 proficiency levels in fall 2002 and 0.80 in fall 2003. Speakers of Korean, Mandarin, and Russian have the highest gains, generally exceeding that of Spanish speakers by as much as 0.31 proficiency levels. Vietnamese speakers also have larger gains than Spanish speakers, although the difference is about 0.10 proficiency levels. On the other hand, speakers of Armenian, Hmong, and Khmer (Cambodian) have the lowest uncontrolled growth rates, below Spanish speakers by 0.07 to 0.15 proficiency levels.

In our controlled model, we investigate whether these large differences in uncontrolled growth rates can be explained by differences in student and school attributes. The low performance of Armenian and Khmer speakers is explained by student and school characteristics. In fact, Armenian speakers have higher controlled growth rates than Spanish speakers in 2002. The controlled growth rates between Spanish and Armenian speakers are indistinguishable in 2003, as are the differences between Spanish and Khmer speakers in both years.[4] In contrast, the gap between Hmong and Spanish speakers is not explained by differences in student and school characteristics. In fact, Hmong speakers have lower previous test scores than Spanish speakers (i.e., more opportunity for growth), but lower growth. Therefore, the controlled

[4]The gap between Spanish and Armenian speakers can be explained entirely by differences in previous test scores (regardless of whether we control for student or school characteristics).

gap (which includes a control for previous test score) is greater than the uncontrolled gap.

All languages other than Armenian, Hmong, and Khmer have higher controlled growth rates than Spanish. The size of the gap depends on the language and the year, although the gap with Spanish is generally larger in 2003 than in 2002. These results suggest that much of the high performance of certain languages, especially in 2003, are not merely the result of favorable schools, teachers, or other factors available in CELDT data. Below, we explore the role of parental background in explaining language differences.

Later Elementary Grades (3–5)

As mentioned above, the CELDT test scores are divided into four grade levels. This section contains results by language for grades 3 to 5. We focus on grades 4 and 5. Grade 3 students who were in grade 2 or below in the previous year are excluded from the analysis because their previous year's CELDT score is from a different grade level and thus is not comparable to the current year's score. Also, our focus in this grade range is on growth in the overall CELDT score, which incorporates all three portions of the test (listening and speaking, reading, and writing).

Table 5.2 contains the results by year and by language. In many ways, the results are similar to those for the K–2 grade span. For Spanish speakers, the "raw" gains were around 0.80 proficiency levels for both years. Speakers of Korean, Mandarin, and Russian have the highest uncontrolled and controlled CELDT growth, with gains between 0.10 and 0.30 proficiency levels higher than gains for Spanish speakers. Another similar result to the K–2 grade span is the low performance of Hmong speakers in grades 3 through 5. Controlling for student and school characteristics reduces but does not eliminate the gap with Spanish speakers. In 2003, the gap in controlled growth is 0.13 proficiency levels, compared with an uncontrolled gap of 0.17.

There are some noticeable differences in the CELDT growth of students in later elementary grades. For example, the uncontrolled growth rate of Vietnamese speakers is actually below that of Spanish

Table 5.2

CELDT Growth for Grades 3–5, by Language and Year

	Fall 2002		Fall 2003	
	Uncontrolled	Controlled	Uncontrolled	Controlled
Spanish	0.79	1.14	0.80	0.37
Comparison of other languages to Spanish				
Armenian	–0.01	0.09*	–0.22**	–0.09**
Cantonese	0.002	0.12**	–0.03	0.11**
Filipino	0.01	0.10**	–0.06**	0.08**
Hmong	–0.11**	–0.08**	–0.17**	–0.13**
Khmer	–0.12**	–0.03	–0.26**	–0.15**
Korean	0.21**	0.21**	0.18**	0.19**
Mandarin	0.30**	0.32**	0.18**	0.25**
Russian	0.14**	0.18**	0.10**	0.14**
Vietnamese	–0.05**	0.08**	–0.05**	0.04**
Other	0.06**	0.11**	–0.05**	0.04**
Range	0.42	0.39	0.44	0.39

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: The sample size is 228,824 students for 2002 and 273,218 students for 2003.

*Indicates estimates statistically different from Spanish speakers at the 5 percent level.

**Indicates estimates statistically different at the 1 percent level.

speakers. However, when we control for student and school attributes, Vietnamese speakers have higher growth rates than Spanish speakers. Specifically, the lower uncontrolled growth for Vietnamese students is a result of their higher test scores in the previous year. Once we control for previous test scores, Vietnamese speakers have higher growth than Spanish speakers.[5] A similar situation occurs for Khmer speakers. They have lower uncontrolled growth than Spanish speakers but higher previous test scores. In 2002, all of this difference can be explained by higher previous test scores, but in 2003 less than half of the difference

[5]The gap becomes positive whether or not we also control for student and school characteristics (in addition to controlling for previous CELDT score).

can be explained.[6] More generally, student and school attributes explain only a portion of the difference among languages in 2003; the range of language estimates is 0.44 in the uncontrolled sample and 0.39 in the controlled sample.

Middle School Grades (6–8)

The previous sections showed that elementary school students on average had sizable gains in English proficiency. This section looks at the gains for middle school students, grades 6 to 8. Grade 6 students who were in grade 5 or below in the previous year are excluded from the analysis because their previous year's CELDT score is from a different grade span.

There are several reasons to expect lower gains for middle school students. Fewer middle school students are English learners, so the infrastructure for helping EL students may not be as prevalent as in elementary schools. EL students at the middle and high school levels have the added difficulty of learning advanced academic material in specific subjects in addition to learning English. Also, many EL students in middle school grades arrived in elementary school grades but have not been reclassified. These students did not learn English as quickly as FEP students who also arrived in elementary school (and were EL students) but who have been reclassified. More generally, students learn faster in elementary school grades than in later grades (de Cos, 1999).

Table 5.3 illustrates the growth rates for students in grades 6 through 8. The amount of growth is noticeably lower than in earlier grades. Without any controls, Spanish speakers had an average growth of 0.56 proficiency levels in 2002 and 0.46 in 2003. However, the range between the largest and smallest growth rate was 0.78 proficiency levels in 2003. This range was reduced by half with controls for previous CELDT score, student characteristics, and school characteristics. In 2002, these controls reduced the range of estimates from 0.46 to 0.30. In other words, student and school attributes explain between one-third and one-half of the raw differences in CELDT growth by language.

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[6]The 2002 gap disappears when we control for previous year's CELDT, whether or not we also control for student or school characteristics.

Table 5.3

CELDT Growth for Grades 6–8, by Language and Year

	Fall 2002		Fall 2003	
	Uncontrolled	Controlled	Uncontrolled	Controlled
Spanish	0.56	1.19	0.46	0.99
Comparison of other languages to Spanish				
Armenian	0.22**	0.17**	–0.01	0.05
Cantonese	0.09**	0.06*	0.13**	0.18**
Filipino	0.07*	0.11**	0.07**	0.19**
Hmong	0.02	–0.01	–0.13**	0.02
Khmer	0.02	0.03	–0.25**	–0.09**
Korean	0.34**	0.22**	0.45**	0.31**
Mandarin	0.47**	0.29**	0.53**	0.29**
Russian	0.32**	0.24**	0.26**	0.26**
Vietnamese	0.06**	0.09**	0.01	0.08**
Other	0.12**	0.11**	0.03	0.09**
Range	0.46	0.30	0.78	0.40

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: The sample size is 143,712 students for 2002 and 179,599 students for 2003.

*Indicates estimates statistically different from Spanish speakers at the 5 percent level.

**Indicates estimates statistically different at the 1 percent level.

The large range of estimates, especially in the columns without controls, is the result of the large growth experienced by Korean, Mandarin, and Russian speakers. These students experienced uncontrolled gains between 0.26 and 0.53 proficiency levels higher than Spanish speakers. Even the controlled estimates were 0.22 to 0.31 proficiency levels. These students are outperforming Spanish speakers, partially because of differences in student and school attributes. These languages have the highest CELDT growth for all grade levels.

As in elementary grade levels, the languages with the lowest growth are Hmong and Khmer. In 2002, these languages had similar growth rates to Spanish speakers, but in 2003 both languages had lower "raw" (i.e., uncontrolled) growth than Spanish speakers. For Hmong speakers, the lower growth disappeared when we added student and school

controls.[7] For Khmer speakers, adding these controls reduced the gap by nearly two-thirds.

High School Grades (9–12)

Middle school EL students have lower CELDT growth than do elementary school EL students. There is similar concern that EL students in high school will have lower growth, given the demanding high school curriculum and the fact that high-performing EL students have already been reclassified in earlier grades. Chapter 2 noted that most EL students in high school are not recent arrivals to California's schools. Many of these students have been in California schools since middle school if not elementary school. By the time they reach high school, this pool of EL students is at a serious disadvantage in their ability to learn English, not to mention their struggles to learn academic subjects generally taught in English.

This section contains CELDT gains for high school students in grades 9 to 12. Grade 9 students who were in grade 8 or below in the previous year are excluded from the analysis because their previous year's CELDT score is from a different grade level. Table 5.4 shows that CELDT growth rates in grades 9 through 12 are lower than in other grade levels. For Spanish speakers, average growth without controls is around 0.40 proficiency levels in both years.

The table illustrates substantial differences between 2002 and 2003. In 2002, most of the differences across languages became insignificant when we added student and school controls. The exceptions were the low growth for Khmer speakers (0.13 proficiency levels below Spanish speakers) and high growth for Korean and Russian speakers (0.09 and 0.17 proficiency levels above Spanish speakers, respectively). In 2003, the student and school controls reduced the gaps between languages from 0.60 to 0.36 proficiency levels. However, gaps remained with all

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[7]School characteristics in particular appear to explain most of the gap between Hmong and Spanish.

Table 5.4

CELDT Growth for Grades 9–12, by Language and Year

	Fall 2002		Fall 2003	
	Uncontrolled	Controlled	Uncontrolled	Controlled
Spanish	0.37	0.25	0.41	1.27
Comparison of other languages to Spanish				
Armenian	0.13	0.04	0.16**	0.12**
Cantonese	0.06*	–0.03	0.19**	0.13**
Filipino	–0.05	0.03	0.02	0.12**
Hmong	–0.10**	–0.04	–0.20**	–0.06**
Khmer	–0.19**	–0.13**	–0.22**	–0.15**
Korean	0.18**	0.09**	0.18**	0.14**
Mandarin	0.17**	–0.0002	0.38**	0.21**
Russian	0.27**	0.17**	0.13*	0.07
Vietnamese	–0.01	–0.02	0.13**	0.15**
Other	0.04*	0.03**	0.04*	0.08**
Range	0.46	0.30	0.60	0.36

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: The sample size is 118,698 students for 2002 and 151,505 students for 2003.

*Indicates estimates statistically different from Spanish speakers at the 5 percent level.

**Indicates estimates statistically different at the 1 percent level.

languages.[8] As in previous grade levels, Hmong and Khmer speakers had lower growth than Spanish speakers, whereas all other languages had higher growth than Spanish speakers. Mandarin speakers had by far the highest growth, 0.21 proficiency levels above Spanish. In comparison, the gap before adding controls was 0.38 proficiency levels.

Another potential explanation for the low growth rates in high school is that some EL students may drop out of high school. Reliable dropout numbers are not available for EL students or any students, so the extent of this concern is not clear. On average, high school dropouts have lower academic achievement, so they likely have lower English

[8]The gap between Spanish and Russian is not statistically different from zero, but this result is due to the imprecision of the coefficient on Russian (in part because of the small sample of Russian speakers).

proficiency skills (and thus higher potential for proficiency gains) than EL students who remain in school. Thus CELDT gains for high school students might be higher if all high-school-age youth were enrolled in school.

Role of Family Background

For all grade levels, students who speak Korean, Mandarin, and Russian have the highest CELDT gains, and students who speak Hmong, Khmer, and sometimes those who speak Armenian have the lowest CELDT gains. Differences in nonlanguage student and school characteristics included in our controlled model explained little of the difference between the students speaking these languages. However, information on parental income and education, two strong determinants of educational achievement (Haveman and Wolfe, 1995), is available only at the school level, not at the student (or language) level. Thus, we are not able to account for the specific effect of these determinants in our model.

Table 5.5 presents 2000 Census data on the relationship between language and family background, along with average CELDT growth for fall 2003. Hmong and Khmer speakers in California's public schools have lower parental education and family income than speakers of other languages. Spanish speakers also have relatively low levels of parental education and income, and Armenian speakers have modest family incomes. Although not shown in the table, the results are similar for both U.S.-born and foreign-born children.

On the other hand, speakers of the languages with the most CELDT growth have relatively affluent parents. Mandarin speakers have the most advantaged family backgrounds with an average family income above $90,000 and an average parental education of more than 16 years. Although Korean speakers have slightly more modest family incomes, they have highly educated parents. Russian speakers have above-average levels of both parental attributes. Although they have average CELDT growth, speakers of Filipino languages have relatively affluent parental backgrounds. The results in the table suggest that family background is at least a partial explanation for the differences in CELDT growth by language.

Table 5.5

Parental Education and Income from the 2000 Census, by Language

	Family Income ($)	Years of Education	Fall 2003 CELDT Growth
Armenian	43,519	13.6	0.42
Cantonese	58,775	10.7	0.58
Filipino	68,476	14.9	0.48
Hmong	31,581	6.1	0.31
Khmer	28,892	7.3	0.25
Korean	63,286	15.2	0.76
Mandarin	92,189	16.2	0.82
Russian	62,705	15.1	0.65
Spanish	40,676	9.6	0.46
Vietnamese	49,408	11.7	0.55
Other	74,475	13.9	0.48

SOURCES: 2000 Census 5 percent file for California and fall 2003 CELDT file.

NOTES: The sample is limited to public school students in grades K–12, age 21 or under. Parental education is the education level of the higher-educated parent.

Summary

There are sizable differences in CELDT growth by grade span, language, and year. For all grade levels, EL students who speak Korean, Mandarin, and Russian have the highest rates of CELDT growth. These students have relatively well-educated and high-earning parents. In contrast, speakers of Hmong and Khmer, particularly in middle and high school, have much lower gains on the CELDT. Speakers of these two languages have the most disadvantaged parents. Parents of Spanish speakers also have low educational and income levels. Spanish speakers' gains on the CELDT are usually below the gains of speakers of most other languages.

Students in elementary schools gain more on the CELDT than do students in later grades. At the same time, most of the EL students start in U.S. public schools in elementary school grades. Thus, the students who arrived in elementary school but remain classified as EL students in high school likely have lower ability or motivation than their classmates who have been reclassified as FEP. Under this scenario, lower growth

among middle and high school students is to be expected. Even for elementary school students, the average growth rate for most languages is still below 1 proficiency level, the unit of analysis for the "adequate yearly progress" goal in NCLB.

The student and school characteristics in our controlled model explain some but not all of these differences by language. In the next chapter, we explore these characteristics in more detail to learn how they affect CELDT growth.

6. Effect of Student and School Factors on CELDT Growth

The previous chapter showed that CELDT growth varies dramatically by language. Some of these differences disappeared once we controlled for student and school factors, whereas other differences persisted. In this chapter, we explore these student and school attributes in more detail. We look at the effect of specific attributes, and we also look more broadly at the overall effect of schools. As in the previous chapter, the outcome of interest in this chapter is growth in CELDT proficiency levels. The results are nearly identical if the outcome of interest is the current CELDT proficiency level instead.[1]

Previous CELDT Level

Each student's previous CELDT level affects his or her CELDT growth.[2] Students with higher CELDT scores the year before have less room to improve the CELDT score in the following year. Table 6.1 illustrates this relationship. The negative effect of the previous year's CELDT level is strongest in the K–2 grade span and weakest in the 3–5 and 6–8 grade spans. The effects are stronger in 2003.

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[1]The results change only slightly when we use CELDT scale scores in place of proficiency levels.

[2]Each CELDT record contains the previous year's CELDT score, as well as demographic information. We checked the validity of this score by matching the CELDT datasets across years using this demographic information. The two measures of the CELDT score were identical for students we were able to match.

Table 6.1

Effect of Previous CELDT Level on CELDT Growth, by Grade Level

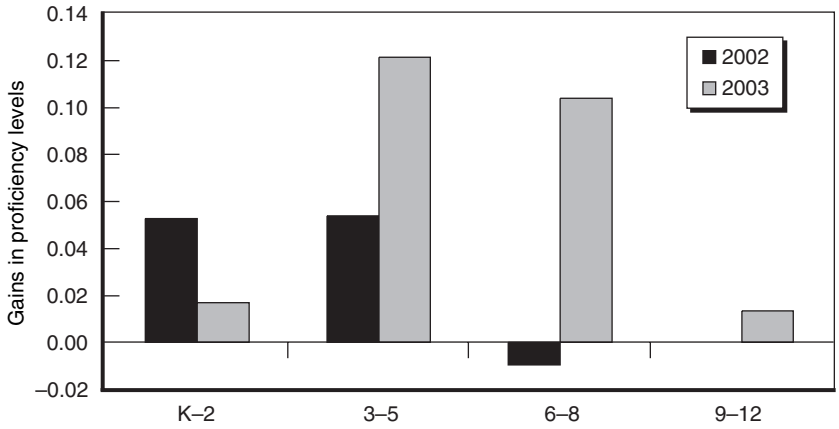
Grade	2002	2003
K–2	–0.483	–0.540
3–5	–0.316	–0.461
6–8	–0.317	–0.470
9–12	–0.412	–0.519

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTES: All effects are statistically different from zero at a significance level of 5 percent. The table reports the effect of a one standard deviation change in the previous year's CELDT proficiency level after controlling for differences in other attributes, as listed in Appendix B. One standard deviation in previous CELDT level is approximately one proficiency level.

Gender

Another student characteristic of interest is gender. Figure 6.1 illustrates the gains for females relative to males, controlling for other student and school attributes (such as previous CELDT level). In 2002, females in the middle school grade span (6–8) have lower CELDT gains than males, although the difference is only 0.01 proficiency levels. In 2003, females in the same grade span (6–8) have higher CELDT gains of 0.1 proficiency levels. In all other grade spans, females have higher gains in English proficiency in both years. The smallest gains are for high school students (indistinguishable from zero in 2002 and less than 0.02 proficiency levels in 2003). The size of the advantage for females in elementary school depends on the grade span and year, although the advantage is slightly smaller for Spanish speakers than for speakers of other languages. In their study of academic achievement in San Diego, Betts, Zau, and Rice (2003) find higher gains for female students than for male students in elementary school, both for EL students and for all



SOURCES: Fall 2002 and fall 2003 CELDT.
NOTES: The figure reports only effects that are statistically different from zero at a significance level of 5 percent. It also reports the effect of being female after controlling for differences in other attributes, as listed in Appendix B.

Figure 6.1—Effects of Being Female on CELDT Growth, by Grade Level

students.[3] However, in high school, they find similar or even lower gains for females relative to males. Overall, females generally have higher achievement than males for English proficiency as well as for academic performance.

Mobility

Student mobility is captured with two variables: years in the current school and years in the current district. The school-level variable captures the challenges in switching schools, whereas the district-level variable is a proxy for years as an EL student.[4] As shown in the left panel of Table 6.2, students derive small benefits from additional years at the same school. The benefits are larger for the early grades (K–5) than for later grades. In all cases, the effect is less than 0.03 proficiency levels.

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[3]Similarly, Krueger (1999) finds higher gains in academic achievement for females in his analysis of Tennessee's class size experiment.

[4]Although the CELDT data contain a variable measuring the years in U.S. schools, this variable is missing for nearly half the students in 2002. Therefore, years in the current school district is the best measure available for total time spent as an EL student.

Table 6.2

Student Mobility and CELDT Growth, by Grade Level

	Years in Current School		Years in Current District	
Grade	2002	2003	2002	2003
K–2	0.023	0.025	0.019	0.044
3–5	0.029	0.027	0.026	0.056
6–8	*	0.014	0.060	0.056
9–12	*	*	0.028	0.031

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTES: The table reports the effect of a one-standard deviation change in the number of years attending the current school and district after controlling for differences in other attributes, as listed in Appendix B. See Appendix Tables B.2a, B.2b, B.2c, and B.2d for the standard deviations of each variable (by grade level).

*Indicates that effect is indistinguishable from zero at a significance level of 5 percent (two-sided test).

Overall time as an EL student (approximated as years in current district) also has a positive association with CELDT growth for all grade spans. In elementary grades, the effect in 2003, around 0.04 proficiency levels, is roughly double the effect in 2002. The effect for later grades is more constant between the two years, although the effect is much larger in the 6–8 grade span than in the 9–12 grade span. In general, the positive effect of increased tenure at the current school and district is modest in size. Hanushek, Kain, and Rivkin (2004) find larger benefits of time spent in the current school and district for low-income students—both EL students and non-EL students—in Texas.

Disadvantaged Students

This section looks at CELDT gains for disadvantaged students. The CELDT data contain information on two areas of disadvantage: Title I receipt and special education status. Title I is a federal program targeting economically disadvantaged students. Table 6.3 presents CELDT

Table 6.3

Effects of Title I Receipt on CELDT Growth, by Grade Level

Grade	2002	2003
K–2	–0.034	–0.026
3–5	–0.074	–0.048
6–8	–0.051	–0.036
9–12	*	*

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: The table reports the effect of Title I receipt after controlling for differences in other attributes, as listed in Appendix B.

*Indicates that effect is indistinguishable from zero at a significance level of 5 percent (two-sided test).

growth for EL students who receive Title I services.[5] In most cases, Title I recipients have modestly lower CELDT growth than otherwise identical students. The effect is largest in the later elementary grades and smallest (and indistinguishable from zero) in the high school grades.

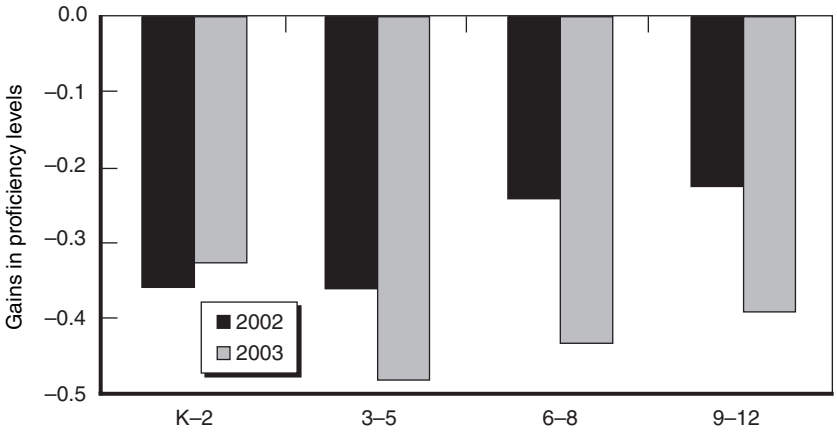
The receipt of special education services is defined on the CELDT,[6] but the results for this variable should be interpreted with caution. Students take an alternative assessment if their learning disabilities make them unable to take the regular version of the CELDT. The CELDT data do not contain test scores for alternative assessments, so we exclude these students (approximately 3% of special education students taking the CELDT annual assessment). If these EL students have lower CELDT growth than other EL special education students, then our reported difference between special education students and other

[5]We do not distinguish between schoolwide Title I receipt, where all students in the school are eligible for Title I, and targeted Title I receipt, where only economically disadvantaged students in the school receive Title I services.

[6]The 2003 CELDT contains a single "special education" variable. The 2002 CELDT differentiates between an individualized education plan (for students eligible under 13 specific disability categories) and a 504 plan (for students with any physical or mental impairment), both of which we define as special education.

students would understate the discrepancy between the two groups. Given this concern, the reported special education effects are approximations of the "true" effect.

Figure 6.2 compares gains in English proficiency between EL special education students and other EL students. Students identified as receiving special education services have much lower gains than other EL students. This finding holds for both years and for all grade levels. In 2003, the disadvantage for special education students ranges from 0.33 to 0.48 proficiency levels, with the largest effect for students in grades 3–5. The effect is smaller in 2002 than in 2003 for all grade levels except K–2. Even though these findings are an estimate of the "true" effect of special education, the figure shows sizable gaps between special education students and other students.[7]



SOURCES: Fall 2002 and fall 2003 CELDT.
NOTES: All effects are statistically different from zero at a significance level of 5 percent. The figure reports the effect of special education after controlling for differences in other attributes, as listed in Appendix B.

Figure 6.2—Special Education and CELDT Growth, by Grade Level

[7]Betts, Zau, and Rice (2003) report lower test score growth in mathematics for EL students in middle school and high school who receive special education compared to other EL students. They find no difference for elementary school students in mathematics or reading at all grade levels.

Instructional Practices

One of the most controversial issues regarding the instruction of English learners is bilingual education. Although limited under Proposition 227, around 6.5 percent of returning EL students received bilingual education in 2003 (defined as receiving primary-language instruction for academic subjects). Proponents cite evidence of higher achievement for students in bilingual programs, and opponents cite evidence of lower achievement for students in bilingual programs. However, data availability limits the interpretations that can be drawn from the research on this topic (Parrish et al., 2003). The most comprehensive study of EL instructional practices in California is the state-mandated study of Proposition 227 by Parrish et al. (2003). Because their achievement data are largely at the school level, they define instructional practices at the school level.

Here, we define the receipt of EL programs at the student level, as reported in the CELDT. The definition is only a proxy for true EL program receipt, as schools (or districts) self-report their EL programs. Rossell (2003) illustrates the ambiguity in defining instructional practices. In her visits to California classrooms, she found that the definition of EL programs varied greatly across schools. In other words, two schools would offer nearly identical EL programs but would classify them with different titles. The California Department of Education attempted to clarify program definitions by 2003, but there is the possibility that such ambiguity remains. We focus on 2003 to reduce the amount of self-reporting bias. Furthermore, the 2003 categories for program participation are more extensive than those in 2002.

The categories for instructional practice in 2003 are ELD only, ELD and academic subjects in the primary language (bilingual education), ELD and SDAIE, and ELD and SDAIE with primary language support (but most instruction in English). ELD is designed for students who are just starting to learn English, whereas SDAIE teaches academic courses to students with more advanced English skills.

Table 6.4 contains the results for the 2003 CELDT. The effects of each program are relative to receiving "other" EL services or no EL services. The effects of program participation are similar in 2002, even

Table 6.4

Effects of Instructional Practices on CELDT Growth in 2003, by Grade Level

	K–2	3–5	6–8	9–12
ELD only	0.116	*	–0.062	–0.074
ELD and SDAIE	0.147	0.079	*	*
ELD and SDAIE with primary language support	0.088	*	–0.069	–0.106
ELD and academic subjects in the primary language	–0.320	–0.048	–0.161	–0.444

SOURCE: Fall 2003 CELDT.

NOTE: The table reports the effect of instructional practices after controlling for differences in other attributes, as listed in Appendix B.

*Indicates that the effect is indistinguishable from zero at a significance level of 5 percent (two-sided test).

though the data on instructional practices are not as detailed as in 2003. The effects in both years are nearly identical when we look only at Spanish speakers.

The table shows differences by both instructional setting and grade level. ELD, with or without SDAIE (in either English or in the primary language), is associated with larger CELDT gains in the elementary grade spans and smaller CELDT gains in later grade spans. ELD and SDAIE, the most common instructional setting (as shown in Appendix Tables B.2a through B.2d), is associated with the largest gains (K–5) or the smallest losses (6–12). A possible explanation for the positive effects in early grades is that children are most able to absorb an entirely new language at younger ages (de Cos, 1999).

On the other hand, ELD and academic subjects in the student's primary language (i.e., bilingual education) are associated with negative CELDT growth (i.e., losses) in all grade levels, compared to not receiving EL services. The losses are particularly large in the K–2 grade span (0.320) and in the 9–12 grade span (0.444). The Legislative Analyst's Office (2004a) finds low levels of initial English proficiency for kindergarten students in bilingual programs in 2002, as well as lower CELDT growth rates. Similarly, 2003 CELDT data show that EL students in bilingual programs attend schools with many more

disadvantages (as measured by participation in free- or reduced-price lunch programs and parental education) than other EL students.[8] In other words, EL students in bilingual programs—before they enter these programs—are at a disadvantage relative to other EL students.

Although our results are consistent with the literature, they are merely suggestive. They rely on self-reported program participation and do not fully control for other unobservable differences between students receiving different instructional practices. Further research (beyond the state-mandated evaluation) is needed to explain *why* CELDT growth is lower for EL students in bilingual education programs.

Teacher Characteristics

Teachers play an important role in student learning, because they spend many hours each day with EL students. But researchers have struggled to link specific teacher attributes with student achievement. The recent availability of state administrative data (such as the CELDT) allow more sophisticated and accurate assessments of the relationship between teachers and student achievement. Studies using these data often find that individual teachers matter, but that the observable characteristics of teachers such as education and years of experience are not good measures of teacher quality (Rivkin, Hanushek, and Kain, forthcoming; Jepsen, forthcoming; Rockoff, 2004). Similarly, Betts, Zau, and Rice (2003) find few specific teacher characteristics that are associated with gains in academic achievement for EL students in San Diego. Our analysis adds to this literature by considering the role of teachers in helping EL students learn English.

CELDT data do not contain information about individual teachers. Instead, we use school-level information on teachers. Specifically, we use teacher information from the previous school year. Since the CELDT is administered in fall, most of the time in school between CELDT tests occurs in the previous school year rather than the school year in which the test was taken. Consequently, our teacher characteristics, as well as

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[8]Parrish et al. (2003) also document the disparities in parental income and education between the schools attended by bilingual education students and the schools attended by other EL students.

our school characteristics more generally, are imprecise measures of teachers' (and schools') influence on CELDT growth.

Table 6.5 contains the relationship between teacher characteristics and CELDT growth. In the top row, EL authorization is measured as the number of EL-authorized teachers per EL student. The goal of this variable is to measure the access of EL students to teachers with a specific authorization to teach them: A higher number (more teachers per student) is equivalent to more access. The number of EL-authorized teachers needed by a school depends on the number of EL students. Therefore, our measure of access is more informative than simply including the number of EL-authorized teachers or the percentage of teachers who are EL-authorized. The table shows little effect of EL authorization on gains in English proficiency. Although the effect is positive (and often significant), it is always less than 0.02 proficiency levels.

Table 6.5

Effects of Teacher Characteristics on CELDT Growth, by Grade Level

	K–2		3–5		6–8		9–12	
	2002	2003	2002	2003	2002	2003	2002	2003
EL authorized teachers	0.011	0.011	0.012	*	0.010	*	*	*
% certified	*	*	*	*	0.027	*	*	–0.023
% with bachelor's degree or less	*	*	*	*	*	–0.036	*	*
% bachelor's degree + 30	–0.023	–0.015	–0.015	*	*	–0.031	*	*
Average experience, years	*	*	*	*	*	*	*	–0.107
Experience squared	*	*	*	*	*	*	*	0.105

SOURCES: Fall 2002 and fall 2003 CELDT.

NOTES: The table reports the effect of a one standard deviation change in each teacher characteristic after controlling for differences in other attributes, as listed in Appendix B. See Appendix Tables B.a through B.d for the standard deviations of each variable (by grade level).

*Indicates that the effect is indistinguishable from zero at a significance level of 5 percent (two-sided test).

The remaining rows of the table contain information on general teacher attributes: certification, education, and experience. As in the literature on academic achievement, we find few specific teacher characteristics associated with gains in English proficiency. There is some evidence that a school's percentage of teachers with only a bachelor's deee or with a bachelor's degree plus 30 credits is associated with slightly lower CELDT gains than a school's percentage of teachers with a master's degree (the comparison group).

Teacher certification, education, and experience are closely related. Inexperienced teachers are less likely to have certification or advanced degrees. Therefore, we also estimated models that included only one of these three attributes. For example, we estimated a model that included teacher certification but excluded teacher education and experience.[9] The results from these models were not substantively different from the results in the table.

The results in this section do not definitively show that teacher characteristics are unrelated to gains in English proficiency. They merely show that these observable characteristics, measured at the school level, are weakly associated with CELDT growth. Alternative data sources are needed to link EL students with their specific teachers.

School Characteristics

School characteristics also play an important role in the education of EL students. Many of the policies affecting these students are set at the school or district level. Chapter 4 examined the importance of school and district characteristics on school reclassification rates. In this section, we investigate the relationship between several school characteristics and CELDT growth.

Of the school attributes, the average CST score had the strongest effect on reclassification in 2002. Figure 6.3 illustrates the relationship

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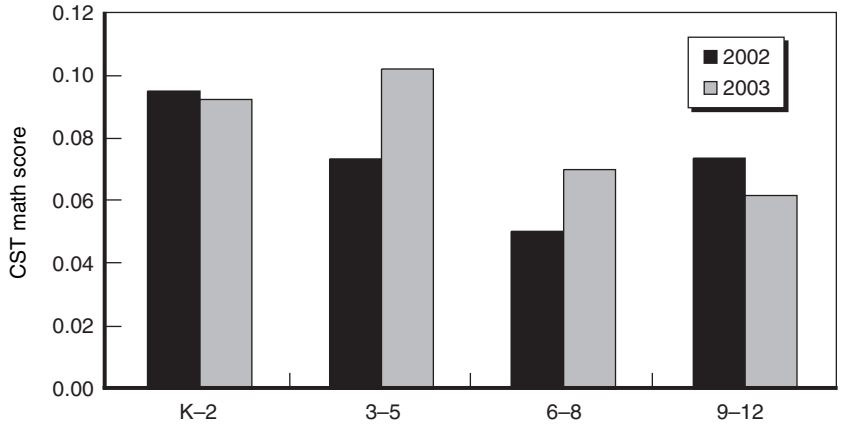
[9]These models included all other variables in Appendix B, including EL authorization (which is not strongly correlated with certification, education, or experience).



SOURCES: Fall 2002 and fall 2003 CELDT.
NOTES: All effects are statistically different from zero at a significance level of 5 percent. The figure reports the effect of a one standard deviation change in school average CST math score after controlling for differences in other attributes, as listed in Appendix B. See Appendix Tables B.2a through B.2d for the standard deviations of CST scores by grade level.

Figure 6.3—Effects of School Average CST Math Score on CELDT Growth, by Grade Level

between CST score and CELDT growth.[10] The school-level CST score has a large, positive relationship with individual-level CELDT growth. The effect is larger for elementary school students than for secondary school students. In other words, schools with success in mathematics (measured by the CST) also have success with English proficiency (and, as we saw in Chapter 4, with reclassification to FEP).

Table 6.6 contains the effects of other school characteristics on CELDT growth. The effects of these school attributes are not as strong as the CST score, nor as consistently strong as the effect of these attributes on reclassification rates (see Chapter 4). School demographics have inconsistent effects on CELDT growth. For the early grades, the percentage of students who are English learners has a modest, negative relationship with CELDT growth. This result perhaps reflects the importance of adequate resources for EL students, which are more

[10] In the figure, CST scores are measured only for non-EL students. However, we find a similar effect if we use the CST score of all students instead.

Table 6.6

Effects of School Characteristics on CELDT Growth, by Grade Level

	K–2		3–5		6–8		9–12	
	2002	2003	2002	2003	2002	2003	2002	2003
School demographics								
% EL	–0.059	–0.055	–0.035	–0.013	*	–0.023	*	*
Language homogeneity	*	0.020	*	*	*	0.024	*	*
% new to school	*	*	–0.011	*	*	*	*	*
School attributes								
Alternative calendar	*	–0.024	0.031	*	*	*	–0.082	*
Charter school	0.100	*	*	*	*	–0.095	*	*
Class size	*	*	–0.013	*	*	*	*	*

SOURCES: Fall 2002 and fall 2003 CELDT.

NOTES: The table reports the effect of school characteristics after controlling for differences in other attributes, as listed in Appendix B. See Appendix Tables B.2a through B.2d for information on standard deviations of the variables.

*Indicates that the effect is indistinguishable from zero at a significance level of 5 percent (two-sided test).

difficult to achieve with larger EL populations. The language homogeneity index ranges from 0 to 1, where a higher score indicates more language homogeneity (more students speaking the same language). Given the dominance of Spanish speakers among EL students, this variable is highly correlated with the percentage of Spanish speakers in the school. Language homogeneity is unrelated to CELDT growth in 2002, but it has a positive effect for the K–2 and 6–8 grade spans in 2003. Similarly, the effects of alternative calendars (primarily year-round calendars) and charter schools do not follow any consistent pattern. The percentage of students who are new to a school and the school's average class size have essentially no effect on CELDT growth.

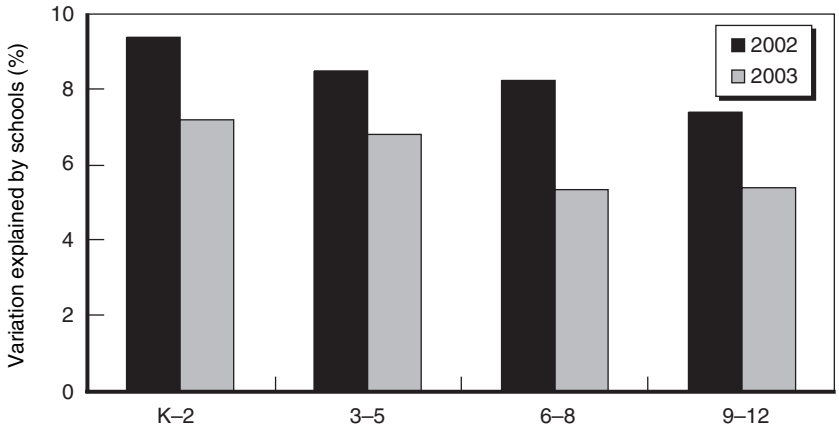
Overall School Effects

The findings in the previous section suggest that the easily observable characteristics of schools (such as their student demographics) play only a limited role in promoting CELDT growth. In this section, we attempt to look at the overall effect of schools on CELDT achievement, without attempting to identify which school attributes are

responsible for the effect. Our measure of the school effect is the amount of variation in student-level CELDT growth that is attributable to schools after we control for student-level factors including language (as listed in Appendix B).[11] Although this effect is measured at the school level, it may contain student-level factors that we cannot observe (and for which we cannot control).

Figure 6.4 presents the school effects for each year and grade span. Recall that the measure is the percentage of variation explained by schools, not the gain in CELDT scores (as in previous tables and figures). The figure illustrates that schools account for between 5.4 and 9.4 percent of the variation in CELDT gains. The school effects are larger in 2002 than in 2003, and the effects are somewhat smaller in grades 6–12 than grades K–5.

In absolute terms, school effects of roughly 5 to 10 percent sound rather small. But in relative terms, these effects suggest a potentially important role for schools. For example, the set of school attributes



SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

Figure 6.4—Overall School Effects as a Percentage of Variation in CELDT Growth, by Grade Level

[11]Specifically, school fixed effects are our measure of schools, as discussed in Appendix A.

discussed above explain around 1 percent (if not less) of the variation in CELDT gains. The set of student-level attributes—excluding previous test score—discussed in previous chapters explain less than 5 percent of the variation.[12] Only previous test scores explain more variation (about 20%) in CELDT growth. In analyses of test score growth generally (i.e., not limited to English learners or to tests of English proficiency), much of the variation is due to student-level factors (such as ability) that are difficult to observe. Such factors likely apply to our analysis of CELDT growth, but the data do not allow us to test this hypothesis. Future work is needed to understand more completely the role of students and schools.

We also consider the overall effect of districts, since many policies, including reclassification, are set at the district level. Our results suggest that schools have more of an overall effect on student-level CELDT gains than do districts. District effects are around 2 to 4 percent, much lower than the school or student effects. This finding suggests that schools, more than districts, are the entities affecting growth in English proficiency.

Summary

This chapter finds substantial differences in CELDT growth, depending on student characteristics. Many of the findings are similar across years and grade levels. Female students have higher growth rates than male students. Students receiving Title I or special education services have substantially lower growth than other students. CELDT growth increases modestly as students spend more time in their current school or district.

The CELDT contains information on instructional practices, allowing a cursory exploration of the controversial issue of bilingual education versus immersion. Use of English-dominant programs corresponds with higher gains in English proficiency, whereas primary language programs (including bilingual education) correspond with

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[12]Because of data limitations, we cannot estimate a student-level effect in exactly the same way as we calculate the school effect. Instead, we measure the student effect as the percentage of variation explained by specific student attributes.

lower gains in early grades. These results should be interpreted with caution because they represent school or district self-reports of instructional practices.

Teacher and school characteristics appear to have a weak relationship with gains in English proficiency, but the true effect of schools and teachers is difficult to measure. CELDT data contain no information on teachers, so we cannot link students to their teachers. Instead, we use average teacher characteristics at the school level, which are imperfect measures of the contribution of teachers. Despite these limitations, we do find a small positive relationship between access to EL-authorized teachers and CELDT gains.

Our measures of school characteristics are not ideal, either. Data on the type of school and student demographics provide overview information about the school but provide little information about how the school teaches English to EL students. We do see that schools with higher school-average CST mathematics scores are associated with slightly higher CELDT gains, but other characteristics are not systematically related to gains in English proficiency. Schools as a whole appear to be related to CELDT growth, but the specific school attributes that matter are difficult to identify with available data.

7. Conclusion and Policy Implications

This report examines English proficiency and reclassification for English learners in California's public schools. There are over one and a half million EL students in the state, and the number is increasing. The majority are concentrated in elementary schools, where over 30 percent of the students are English learners. EL students are most common in the Los Angeles area, but substantial numbers are found throughout the state. Over 80 percent speak Spanish.

Providing English proficiency and the ability to succeed academically in mainstream classrooms is the ultimate goal of educating English learners. NCLB reinforces this goal by requiring annual increases in the number of ELs being reclassified. English ability as defined by the CELDT is only one factor suggested in evaluation for reclassification as English proficient. Students must demonstrate academic proficiency as well, since they will be held to the same standards as their English-speaking peers. In fact, only about one-quarter of the English learners meeting State Board of Education guidelines for reclassification on the CELDT are actually reclassified.

Our analysis finds several interesting factors relating to reclassification. Districts have authority to set reclassification policies and criteria, and we found that their combined unobservable traits are associated with one-third of the variation in reclassification rates in the state. At the school level, higher scores on the CELDT and the ELA CST are related to higher rates of reclassification, with a one-standard-deviation increase on the CST corresponding to an increase in reclassification rates of between one-fifth and one-third. Greater percentages of students in the school who are English learners and the increased homogeneity of languages spoken in a school are related to lower rates of reclassification, demonstrating the effects of EL peers on

reclassification. Increasing the ratio of teachers with EL training to EL students is also associated with increased reclassification. Schools need to have the resources necessary to successfully guide a student to English proficiency and adequately assess each EL in the reclassification review process.

Academic and accountability testing of English learners highlights the need for policymakers to craft a delicate balance. Although testing EL students in academic subjects when they are not yet proficient in English may not reflect their true ability—and EL students consistently perform far below their English-speaking peers—we must be able to evaluate EL progress in mastering academic content and their potential for joining a mainstream classroom. Accountability standards in NCLB create counterincentives when it comes to reclassifying EL students: The standards mandate increases in reclassification rates but also hold EL students to the same performance standards as English-speaking students on academic content tests. Recent amendments allow districts to count reclassified students as English learners in achievement score reports for a period of time, but this does not go far enough to address the challenges EL students face in meeting academic accountability standards. Policies directed toward reclassification should attempt to resolve this incentive discrepancy and minimize the burden on EL students when meeting accountability targets. Additionally, if districts applied state reclassification guidelines more uniformly instead of adopting individual standards, the process of reclassification would be easier to monitor and effectively modify at the state level.

Because the CELDT is an underlying component of reclassification, our report describes factors associated with gains in EL scores as they progress toward English proficiency. Although Spanish is the dominant foreign language in California schools (and is more similar to English than most other languages), Spanish speakers do not experience the greatest gains in English proficiency. In secondary grades, the average gains for Spanish speakers are well below the gains made in elementary grades. This is not surprising, given that most English learners enter American schools as elementary school students, and students who remain classified as EL students in the upper grades are those with the most difficulty in becoming proficient. Policymakers may want to focus

special attention in targeting the needs of EL students in upper grades who have struggled over many years to attain English and academic skills. Teaching English to these students may require special methods. As these students prepare to leave school and enter the workforce, their English proficiency and educational preparation will be especially important in providing them with the tools to lead successful lives.

In contrast to Spanish students, speakers of Korean, Mandarin, and Russian have the highest CELDT gains. These students tend to have well-educated and high-earning parents. On the opposite end of the spectrum, Hmong and Khmer speakers show much lower growth on the CELDT than other EL students. Speakers of these two languages have lower levels of parental income and education than do speakers of other languages. Some differences between languages in CELDT growth remain even when we control for other student and school characteristics, suggesting that unobservable family and cultural background qualities are important factors in a student's progress in learning English.

Certain student factors besides language are associated with English proficiency gains. As one would expect, a higher score on the CELDT in the previous year provides a student less room to achieve large gains in the current year. Once students reach a certain level of English ability on the CELDT, they must focus on improving their academic vocabulary and understanding before they can truly be English proficient. Similar to other student achievement findings, female students have greater CELDT gains than male students, and special education students have lower gains than other students. Students who have spent more time in a given school and district, our proxy for time as an EL student, have higher CELDT gains than more recent arrivals. Students who receive Title I compensatory funding for disadvantaged students show less improvement on the CELDT from year to year than nondisadvantaged students do.

Understanding these differences in student demographics will help policymakers target EL students who are at a disadvantage in terms of CELDT growth. In some cases, such as special education or economic disadvantage, the difficulties are well known. But in the case of male students or those who have been classified as EL students for shorter

periods of time, the disadvantage and appropriate response is less well understood. Despite their limitations, CELDT data provide a valuable—but underutilized—resource for understanding how EL students gain proficiency in English. One recommendation of the Legislative Analyst's Office (2004a) is for the legislature to help districts more extensively use CELDT data to evaluate individual district challenges and the resulting mechanisms to address these.

Our examination of the effects of EL instructional services on CELDT growth provides some support that students educated in bilingual settings experience lower gains in proficiency, whereas EL students in certain immersion settings demonstrate greater gains. Our results show that ELD, either in combination with SDAIE or not, has consistently positive effects on CELDT growth for K–2 grade levels. However, these effects disappear at higher grade levels. But bilingual education has a negative association with students' CELDT growth in all grade levels, compared to students receiving no or other EL services. Although the CELDT data are not designed to address the bilingual education debate, they suggest that bilingual instruction does not produce gains in English proficiency. Research has shown, however, that students educated in bilingual settings come from more disadvantaged backgrounds than other EL students. The benefits of English immersion education, at least in terms of English proficiency, are less well understood.

The limitations of the CELDT data also inhibit our analysis of the role of teachers and schools. Because we cannot link students to their individual teachers, we must measure teacher attributes at the school level. Access to teachers who are authorized to teach EL students corresponds with slight improvements in CELDT growth, but other teacher characteristics have little if any effect. Schools that are effective in achieving high average math scores on the CST are also associated with greater gains on the CELDT, especially in elementary grades. Schools with larger English learner populations have lower CELDT growth in elementary grades, but other particular school attributes do not appear to have a consistent influence on CELDT growth. Yet, the overall effect of a given school once student and school attributes are controlled for can explain between 5 and 10 percent in the variation of

CELDT growth between EL students. This effect is most likely due to student-level factors that were unobservable in our findings, but it suggests that characteristics of good schools correspond to growth on the CELDT.

Our analysis highlights the benefits and limitations of California administrative education data. CELDT data are available for all EL students in the state. They contain information on numerous student characteristics and provide extensive test score information. The availability of previous and current CELDT scores for each year allows us to study test score growth. But the biggest limitation of CELDT data—and of California K–12 administrative data more generally—is that they cannot be linked to other sources. For instance, we cannot match students and their teachers, and we cannot link students' CELDT scores to their academic achievement test scores. English proficiency is a major goal for EL student policy, but academic achievement is also important to track and assess as a criterion for EL reclassification.

At the school or district level, such links between databases are possible. However, budget shortages prevent most schools and districts from creating these links and reaching the full potential of the CELDT data. Again, there is a role for policymakers to encourage more research at the district level until more comprehensive statewide data are available. Foundations provide some assistance for such research, as illustrated by recent support to the San Diego Unified School District to evaluate their recent reforms using linked student-level data.

The structure of the CELDT also limits its applicability. Students in kindergarten and grade 1 take the listening and speaking portion of the test, but they do not take the reading and writing portions. Because listening and speaking proficiency is easier to achieve than reading and writing proficiency, overall CELDT proficiency (as well as growth) declines in grade 2. The CELDT contains four grade levels (K–2, 3–5, 6–8, and 9–12), and scale scores are consistent only within grade levels. Proficiency levels are intended to be consistent across grade levels. However, the Legislative Analyst's Office (2004a) documents the differences in CELDT growth for students who change CELDT grade spans and growth for students who do not. Specifically, they report that students in grades 3, 6, and 9 have significantly lower CELDT gains

(measured in proficiency levels) than do students in other grades. The California Department of Education is currently addressing this issue. The Legislative Analyst's Office (2004a) has encouraged the California Department of Education and policymakers more generally to continue to monitor the CELDT so that it is an effective tool for measuring English proficiency.

There is hope for future data collection efforts as well. SB 1453, enacted in 2002, establishes a statewide student ID. Once implemented, the state could follow students over time and across tests and schools, vastly improving the quality of state administrative data. In terms of EL students, the state would be able to study long-term growth in CELDT scores, as well as the relationship between CELDT growth, academic achievement, and reclassification. Yet SB 1453 will not enable students to be matched to their teachers to further study instructional practices and the various qualities of an effective teacher. Subsequent legislation is needed to create a system where student IDs and teacher IDs can be linked.

There is also hope for future research on EL students. Our report extends the Legislative Analyst's Office (2004a) analysis of differences in CELDT performance across demographic and language groups by considering the determinants of CELDT growth and reclassification. It is a first pass at determining why some students learn English faster than others. The evaluation of Proposition 227 is not complete, and future research will likely use CELDT data more extensively (Parrish et al., 2003). Many districts collect detailed data on EL students that have further potential to address critical policy issues for this large and growing population. The future of California—at least to some extent—depends on its ability to address the specific educational needs of English learners.

Appendix A

Data Sources

Our primary data sources are all from the California Department of Education. This appendix provides a description of these data sources.

CELDT

The CELDT data are from the California Department of Education.[1] We use data from the fall 2002 and the fall 2003 administration of the CELDT. Each file contains test score and demographic information for each student, as well as an identifier for each school. Student identifiers are not available, so we cannot link the two years of CELDT data.

CELDT demographic data contain information on primary language, gender, age, program participation (for both EL programs and other programs), and mobility information. The non-EL programs include special education and Title I receipt. Other programs are included, but many of them affect few EL students (such as Indian education and gifted and talented education). Data on mobility are available for the years in the current school, years in the current district, and years in U.S. schools. Unfortunately, many schools did not provide information on years in U.S. schools, especially in 2002, so we are unable to use that information.

The test score data in the CELDT are extensive. Scale scores and proficiency levels are available for each portion of the test (listening and speaking, reading, and writing), as well as for the overall score. Scale scores are also available for the previous administration of the CELDT. We checked the validity of these previous scores by matching a subset of students across years (by date of birth, gender, language, and school). For example, we matched the 2002 and 2003 CELDT data so that we would have two measures of the 2002 CELDT score: the current score

[1]The contractor for the CELDT is CTB McGraw-Hill.

from the 2002 CELDT and the previous year's score (2002) in the 2003 CELDT. For our subset of students, the two scores matched exactly for about 95 percent of the students. Thus, we believe that the previous year score data in the CELDT are accurate.

In our analysis, we did not include student observations from the CELDT that contained incomplete records for certain variables: grade, previous grade, CELDT score (either listening/speaking or overall, depending on grade span of analysis), and language. We also excluded students in nonregular schools, those with previous grade values greater than current grade, and those for whom modifications or an alternative assessment were allowed on the CELDT (these scores are coded as the minimum). We could not evaluate student growth in kindergarten, grade 3 (entering from the K–2 grade span), grade 6 (entering from the grades 3–5 span), and grade 9 (entering from the grades 6–8 grade span) because of variance in CELDT scoring across grade spans. In 2002, we start with 1,297,435 annual assessment student observations directly from the CELDT. Our final sample is 745,832 students, mainly as a result of missing 2001 CELDT scores (224,400) or because the student was in a different grade span in the previous year (276,402). In 2003, we start with 1,357,754 annual assessment observations. Our final sample includes 922,181 students, largely because of missing 2002 CELDT scores (68,179) or because the student was in a different grade span in the previous year (329,420). Our results are qualitatively similar if we include students with missing CELDT scores or if we measure student levels instead of growth, so we do not believe that these excluded observations affect our analysis.

CBEDS[2]

CBEDS is maintained and supported by the California Department of Education. This report uses two CBEDS datasets, the Professional Assignment Information Form (PAIF) and the SIF. Both are collected annually, in October.

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[2]The information on data sources other than the CELDT is based on a discussion of data sources in Appendix A of Jepsen and Rivkin (2002).

The PAIF contains extensive data on individual-level teachers and classrooms. From these data, we calculate average class size at the school level. We also calculate school-level averages of teacher experience, education, certification, and EL authorization. Certification refers to overall certification to teach in California public schools, whereas authorization refers to authorization to teach EL students.

The SIF contains detailed school demographic information for each school. We use information about the type of school (charter school or not, type of school year calendar, regular school or alternative) and the total enrollment of the school (used to calculate the school's percentage of EL students).

The Language Census

The Language Census contains school-level data on student demographics, reclassification, and teacher characteristics concerning EL and FEP students. It is collected each March and covers the current school year. This report uses Language Census data on the number of teachers who possess different types of EL authorization and on the number of students reclassified to FEP.

Free or Reduced-Price Lunch Enrollment

This dataset comes from the California Department of Education Finance Division, Form Number CFP-2 School Level AFDC Report, collected each October. We use data collected for each school on the percentage of students who receive free or reduced-price lunch.

Standardized Test Scores and API

The data on standardized test scores come from the Standards, Curriculum, and Assessment Division of the California Department of Education. We use data from the Stanford Achievement Test, Ninth Edition (SAT-9), and from the CST. We create school-level averages for non-EL students by taking the weighted average across grades. The weight is the number of test-takers in that grade. We use non-EL test

score performance to avoid unwanted correlation with our measures of EL student performance from the CELDT.[3]

We use API data to calculate mobility by school.

2000 Census

We supplement the California Department of Education data with 2000 Census information. The data come from the California sample of the 5 percent file. These data are the most extensive individual-level data available to the public. We use these data to calculate average parental education and income by language.

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[3]Results are similar when we use the overall CST score instead of the score for non-EL students. Results are also similar when we use the API instead of the CST.

Appendix B

Empirical Methods and Results

This appendix contains the empirical methods used in both sets of analyses: the analysis of school reclassification rates (Chapter 4) and the analysis of student-level CELDT growth (Chapters 5 and 6). It also includes tables with results from these methods.

Reclassification

In Chapter 4 we consider the effect of school characteristics on school-level reclassification rates. The analysis uses school-level data from 2002 and 2003.[1] We also limit the sample to students in regular schools serving K–12 grades. Examples of non-regular schools include county offices of education, continuation schools, and alternative schools. Charter schools are considered regular schools. We exclude schools that do not have information on the number of EL students (from the CELDT) or on the number of students reclassified (from the Language Census). We also exclude schools that appear to have reclassification rates above 100 percent (about 1 percent of the observations). In other words, these schools report that the number of students reclassified in the spring of a given year is greater than the number of EL students in the preceding fall. Many of these schools reported reclassification rates in excess of 200 percent, suggesting that the two datasets are not consistent rather than suggesting slight discrepancies resulting from mobility or other factors.

$$RECLASSIFY_s = SCH_s\beta + DISTFE_d + \varepsilon_s \quad (1)$$

Equation (1) contains the empirical method for the analysis of reclassification. $RECLASSIFY_s$ is the school's reclassification rate

[1] Recall that we refer to school years by fall of the year, so the 2002 reclassification rates cover the 2002–2003 school year and the 2003 rates cover the 2003–2004 school year.

(defined above). SCH_s is a set of school-level attributes listed in Appendix Tables B.1a and B.1b. $DISTFE_d$ is a set of district fixed effects (i.e., a set of dummy variables for each district). We include these district fixed effects to capture the district-specific effects of each district's reclassification policy. Parrish et al. (2003) illustrate that the differences across districts in reclassification policies are difficult to quantify.

Table B.1a

Descriptive Statistics for Reclassification (School-Level Analysis)

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
Reclassification rate	7.062	8.955	7.929	8.236
Testing characteristics				
% with advanced CELDT score	24.692	14.078	32.320	14.476
% CELDT initial assessment	21.322	12.893	18.201	10.691
Average ELA CST score	320.992	39.864	326.181	43.813
Teacher characteristics				
EL-authorized teachers per EL student	0.070	0.082	0.074	0.093
% fully certified	85.858	16.014	88.454	17.066
% with bachelor's degree or less	24.718	17.916	22.801	17.668
% with bachelor's degree +30	45.265	21.211	45.668	21.727
Average experience, years	10.982	3.226	11.557	3.514
Average experience squared	131.018	71.088	145.921	77.764
School characteristics				
Charter school	0.014	0.119	0.016	0.126
Alternative calendar	0.361	0.480	0.339	0.473
Language homogeneity index	0.779	0.250	0.783	0.254
Class size	23.622	4.693	23.990	5.349
% EL	46.279	24.454	45.267	24.217
% new to school	17.197	11.618	17.312	12.359
Schoolwide Title 1	0.751	0.432	0.749	0.434
Observations	7,196		7,307	

SOURCES: Fall 2002 and fall 2003 CELDT and spring 2003 and spring 2004 Language Census files.

Table B.1b

Regression Results for Reclassification (School-Level Analysis)

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
Testing characteristics						
% with advanced CELDT score	0.083	0.012	7.70	0.084	0.010	8.24
% CELDT initial assessment	–0.010	0.010	0.82	–0.038	0.012	3.05
Average ELA CST score	0.060	0.007	7.67	0.031	0.004	7.86
Teacher characteristics						
EL-authorized teachers per EL student	7.856	1.706	5.78	7.034	1.138	6.18
% fully certified	–0.012	0.011	0.82	0.003	0.015	0.22
% with bachelor's degree or less	0.019	0.010	1.39	0.025	0.012	2.11
% with bachelor's degree +30	0.025	0.007	2.27	0.01	0.010	0.98
Average experience, years	–0.053	0.199	0.31	–0.437	0.159	2.75
Average experience squared	0.000	0.008	0.06	0.015	0.006	2.37
School characteristics						
Charter school	0.639	0.844	0.87	1.868	0.674	2.77
Alternative calendar	0.830	0.227	3.34	0.239	0.240	0.99
Language homogeneity index	–1.751	0.590	2.36	–1.466	0.691	2.12
Class size	0.235	0.038	6.37	0.167	0.033	5.04
% EL	–0.046	0.006	6.72	–0.04	0.007	6.08
% new to school	–0.002	0.010	0.22	0.014	0.008	1.83
Schoolwide Title 1	0.439	0.269	1.74	–0.382	0.244	1.57
Observations	7,196			7,307		
R-squared	0.51			0.48		

NOTES: Dependent variable is the reclassification rate (number of students reclassified divided by the number of English learners). The model controls for district fixed effects and is weighted by a school's EL population.

CELDT Growth

Our analysis of CELDT growth uses data from the 2002 and 2003 CELDT annual assessments.[2] Separate equations are estimated for each year and for each grade span (K–2, 3–5, 6–8, and 9–12). As in the previous section, we limit the sample to regular schools serving K–12 grades, not other schools such as county offices of education and

[2]Data from the 2001 CELDT, as well as initial assessment data, contain students taking the CELDT for the first time. CELDT growth does not exist for these students.

alternative schools. We do not include students who have missing or invalid values for the following variables of interest: CELDT growth, language, and grade. Invalid CELDT growth occurs for students with alternative assessments (who are assigned the lowest possible score) and for students who had an invalid listening and speaking exemption. Invalid grades exist when the current grade is below the previous grade or when the current grade is not offered by the school. Invalid languages are two-digit language codes that do not correspond to a language defined by the California Department of Education.

$$GROW_{it} = LANG_{it}\alpha + STU_{it}\beta + SCH_{it-1}\gamma + \varepsilon_{it} \qquad (2)$$

Equation (2) describes our analysis of gains in English proficiency ($GROW_{it}$) for student i in cohort t (2002 or 2003). Note that $GROW_{it} = CELDT_{it} - CELDT_{it-1}$. $LANG_{it}$ is a set of dummy variables for each of the 10 most populous languages (as well as a dummy variable for speaking another language); STU_{it} is a set of student-level variables; and SCH_{it-1} is a set of school-level variables. Because most of the growth in CELDT scores occurred in the school year $t-1$ (as opposed to the school year t), the set of school attributes are measured in $t-1$. Appendix Tables B.2a through B.2d provide descriptive statistics for the variables included in the estimation of Equation (2).[3] The results from these regressions are in Appendix Tables B.3a through B.3d.

The tables in Chapter 5 contain uncontrolled and controlled CELDT growth by language. The uncontrolled growth is the average CELDT growth for students of that language. The controlled growth is the regression coefficient for that language. Note that we compare all languages to Spanish (i.e., we subtract the coefficient for Spanish from the coefficient for each language), and we report the controlled growth for Spanish (i.e., the coefficient for Spanish).

Chapter 6 contains results of the overall effect of schools or districts, without attempting to identify the specific school attribute or attributes responsible for that effect. School (or district) fixed effects capture these

[3]We also include dummy variables for whether a given variable is missing, with the exception of CELDT growth, language, and grade.

Table B.2a

Descriptive Statistics for Grades K–2

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
CELDT growth	0.754	0.996	0.802	1.000
Language				
Armenian	0.006	0.077	0.007	0.081
Cantonese	0.018	0.133	0.017	0.129
Filipino	0.011	0.103	0.012	0.109
Hmong	0.014	0.119	0.012	0.107
Khmer	0.006	0.079	0.005	0.072
Korean	0.010	0.098	0.010	0.098
Mandarin	0.005	0.070	0.006	0.079
Russian	0.004	0.066	0.004	0.063
Spanish	0.854	0.353	0.852	0.355
Vietnamese	0.026	0.158	0.027	0.162
Other	0.046	0.210	0.049	0.215
Student characteristics				
Previous year's proficiency level	2.366	0.946	2.528	1.038
Female	0.487	0.500	0.484	0.500
Title I	0.742	0.437	0.768	0.422
Special education	0.041	0.199	0.049	0.215
Years in current school	2.229	0.740	2.218	0.698
Years in current district	2.342	0.698	2.333	0.656
Age in months	87.26	11.39	85.29	10.27
Age squared	7743.5	1800.0	7379.0	1719.7
Grade 0	0.011	0.105	0.015	0.120
Grade 1	0.460	0.498	0.482	0.500
Instructional services				
ELD only	0.686	0.464	0.144	0.351
ELD and SDAIE			0.329	0.470
ELD and SDAIE with primary language support			0.331	0.471
SDAIE	0.323	0.468		
Bilingual education	0.152	0.359	0.116	0.320
Teacher characteristics				
EL-authorized teachers per EL student	0.091	0.117	0.097	0.131
% fully certified	84.533	14.293	88.140	12.349
% with bachelor's degree or less	29.719	20.794	25.394	18.936
% with bachelor's degree +30	45.167	21.459	47.821	21.574
Average experience, years	11.137	3.028	10.861	2.957
Average experience squared	133.2	72.7	126.7	69.9

Table B.2a (continued)

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
School characteristics				
Charter school	0.016	0.125	0.015	0.123
Alternative calendar	0.482	0.500	0.446	0.497
Language homogeneity index	0.808	0.229	0.805	0.228
Class size	18.866	1.854	19.153	1.497
% EL	56.556	24.069	54.028	23.532
% new to school	16.766	9.049	17.333	10.085
Average math score	322.3	39.1	329.8	36.5
Los Angeles Unified School District	0.273	0.446	0.221	0.415
Observations	254,598		317,859	

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

overall effects, as presented in Equation (3). $GROW_{it}$, $LANG_{it}$, and STU_{it} are defined as in Equation (1), and $SCHFE_{st}$ is a set of school effects (i.e., a set of dummy variables with one dummy variable for each school *s*). The district fixed-effect model is set up analogously, except that $DISTFE_{dt}$ replaces $SCHFE_{st}$.

$$GROW_{it} = LANG_{it}\alpha + STU_{it}\beta + SCHFE_{st}\gamma + \varepsilon_{it} . \quad (3)$$

In all the analyses in the report, $GROW_{it}$ is defined as growth in proficiency levels. We also calculated all models where $GROW_{it}$ is defined as growth in scale scores. The results from the specifications using scale scores are qualitatively similar to those using proficiency levels.

Table B.2b

Descriptive Statistics for Grades 3–5

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
CELDT growth	0.790	0.854	0.788	0.911
Language				
Armenian	0.008	0.089	0.007	0.086
Cantonese	0.016	0.124	0.014	0.119
Filipino	0.010	0.101	0.011	0.106
Hmong	0.017	0.128	0.016	0.124
Khmer	0.008	0.088	0.006	0.080
Korean	0.009	0.095	0.009	0.097
Mandarin	0.004	0.061	0.004	0.064
Russian	0.004	0.064	0.004	0.062
Spanish	0.860	0.347	0.865	0.341
Vietnamese	0.023	0.151	0.020	0.141
Other	0.041	0.199	0.042	0.201
Student characteristics				
Previous year's proficiency level	2.415	0.905	2.636	1.027
Female	0.483	0.500	0.480	0.500
Title I	0.799	0.401	0.812	0.391
Special education	0.081	0.273	0.093	0.291
Years in current school	3.892	1.722	3.892	1.695
Years in current district	4.527	1.509	4.552	1.477
Age in months	122.64	13.75	121.74	12.01
Age squared	15230.1	2604.3	14963.8	2408.6
Grade 3	0.026	0.158	0.015	0.123
Grade 4	0.525	0.499	0.516	0.500
Instructional services				
ELD only	0.669	0.470	0.132	0.338
ELD and SDAIE			0.393	0.488
ELD and SDAIE with primary language support			0.327	0.469
SDAIE	0.381	0.486		
Bilingual education	0.112	0.316	0.070	0.255
Teacher characteristics				
EL-authorized teachers per EL student	0.085	0.103	0.091	0.111
% fully certified	84.484	14.348	87.694	12.495
% with bachelor's degree or less	28.884	20.349	26.147	19.038
% with bachelor's degree +30	45.420	21.377	47.187	21.250
Average experience, years	11.132	3.071	10.794	2.962
Average experience squared	133.3	73.0	125.3	69.3

Table B.2b (continued)

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
School characteristics				
Charter school	0.017	0.128	0.017	0.128
Alternative calendar	0.476	0.499	0.450	0.498
Language homogeneity index	0.807	0.230	0.813	0.224
Class size	28.461	3.637	28.722	3.393
% EL	56.556	23.950	54.494	23.116
% new to school	17.343	9.694	17.796	10.827
Average math score	322.8	33.6	330.8	27.3
Los Angeles Unified School District	0.242	0.428	0.241	0.428
Observations	228,824		273,218	

SOURCE: Fall 2002 and fall 2003 CELDT annual assessment files.

Table B.2c

Descriptive Statistics for Grades 6–8

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
CELDT growth	0.577	0.804	0.466	0.882
Language				
Armenian	0.008	0.089	0.007	0.082
Cantonese	0.013	0.115	0.011	0.104
Filipino	0.012	0.107	0.012	0.108
Hmong	0.020	0.139	0.019	0.138
Khmer	0.011	0.103	0.009	0.092
Korean	0.009	0.094	0.009	0.094
Mandarin	0.005	0.070	0.005	0.072
Russian	0.005	0.071	0.004	0.063
Spanish	0.845	0.362	0.863	0.344
Vietnamese	0.023	0.151	0.018	0.131
Other	0.049	0.217	0.044	0.205
Student characteristics				
Previous year's proficiency level	2.828	0.925	3.020	1.042
Female	0.466	0.499	0.466	0.499
Title I	0.682	0.466	0.729	0.445
Special education	0.097	0.296	0.105	0.307
Years in current school	2.352	1.613	2.298	1.487
Years in current district	5.932	2.834	5.989	2.819
Age in months	157.93	17.29	157.21	14.13
Age squared	25241.2	3709.1	24913.8	3248.4
Grade 6	0.023	0.150	0.008	0.087
Grade 7	0.520	0.500	0.511	0.500
Instructional services				
ELD only	0.449	0.497	0.206	0.405
ELD and SDAIE			0.525	0.499
ELD and SDAIE with primary language support			0.124	0.330
SDAIE	0.565	0.496		
Bilingual education	0.035	0.183	0.022	0.147
Teacher characteristics				
EL-authorized teachers per EL student	0.060	0.070	0.066	0.082
% fully certified	82.090	13.984	83.678	13.455
% with bachelor's degree or less	27.354	17.644	26.807	17.523
% with bachelor's degree +30	42.395	19.879	42.955	19.971
Average experience, years	11.930	3.078	11.056	2.921
Average experience squared	151.8	75.1	130.8	67.3

Table B.2c (continued)

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
School characteristics				
Charter school	0.012	0.109	0.011	0.102
Alternative calendar	0.258	0.438	0.262	0.440
Language homogeneity index	0.766	0.237	0.794	0.230
Class size	27.809	3.046	28.044	3.196
% EL	37.388	19.399	37.307	18.643
% new to school	18.364	13.057	19.032	14.520
Average math score	319.3	31.3	326.6	24.0
Los Angeles Unified School District	0.179	0.383	0.194	0.395
Observations	143,712		179,599	

SOURCE: Fall 2002 and fall 2003 CELDT annual assessment files.

Table B.2d

Descriptive Statistics for Grades 9–12

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
CELDT growth	0.380	0.828	0.427	0.919
Language				
Armenian	0.013	0.112	0.011	0.103
Cantonese	0.023	0.150	0.019	0.136
Filipino	0.016	0.124	0.016	0.127
Hmong	0.026	0.160	0.023	0.151
Khmer	0.013	0.112	0.012	0.108
Korean	0.015	0.120	0.015	0.123
Mandarin	0.011	0.104	0.011	0.103
Russian	0.007	0.086	0.006	0.079
Spanish	0.772	0.419	0.797	0.402
Vietnamese	0.034	0.182	0.027	0.163
Other	0.070	0.255	0.062	0.242
Student characteristics				
Previous year's proficiency level	3.098	1.059	3.116	1.116
Female	0.462	0.499	0.462	0.499
Title I	0.493	0.500	0.559	0.496
Special education	0.090	0.287	0.099	0.299
Years in current school	2.481	1.329	2.568	1.411
Years in current district	5.775	3.815	5.958	3.891
Age in months	200.62	18.65	199.17	17.69
Age squared	40596.4	5953.4	39981.0	5711.1
Grade 9	0.055	0.227	0.030	0.172
Grade 10	0.399	0.490	0.408	0.492
Grade 11	0.315	0.465	0.322	0.467
Instructional services				
ELD only	0.418	0.493	0.220	0.414
ELD and SDAIE			0.450	0.498
ELD and SDAIE with primary language support			0.099	0.299
SDAIE	0.546	0.498		
Bilingual education	0.039	0.193	0.024	0.152
Teacher characteristics				
EL-authorized teachers per EL student	0.067	0.070	0.075	0.094
% fully certified	86.102	9.525	86.612	9.313
% with bachelor's degree or less	23.186	13.985	23.769	13.258
% with bachelor's degree +30	40.799	17.322	40.730	17.190
Average experience, years	13.716	2.591	12.580	2.510
Average experience squared	194.8	72.6	164.6	62.0

Table B.2d (continued)

	2002		2003	
	Mean	Std Dev	Mean	Std Dev
School characteristics				
Charter school	0.004	0.060	0.007	0.080
Alternative calendar	0.135	0.342	0.151	0.358
Language homogeneity index	0.691	0.249	0.725	0.242
Class size	27.607	2.890	28.075	3.218
% EL	27.714	15.284	26.872	14.894
% new to school	12.981	11.776	14.321	13.332
Average math score	325.0	22.2	329.9	19.2
Los Angeles Unified School District	0.153	0.360	0.171	0.377
Observations	118,698		151,505	

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

Table B.3a

Regression Results for Grades K–2

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
Language						
Armenian	1.280	0.218	5.87	0.888	0.181	4.90
Cantonese	1.260	0.214	5.89	1.088	0.177	6.15
Filipino	1.268	0.213	5.96	1.002	0.176	5.71
Hmong	0.935	0.210	4.44	0.787	0.174	4.51
Khmer	1.154	0.215	5.37	0.942	0.176	5.34
Korean	1.335	0.214	6.23	1.081	0.179	6.04
Mandarin	1.414	0.219	6.45	1.191	0.179	6.65
Russian	1.365	0.215	6.34	1.071	0.177	6.05
Spanish	1.201	0.213	5.65	0.925	0.175	5.28
Vietnamese	1.249	0.215	5.82	1.039	0.176	5.90
Other	1.295	0.213	6.07	1.013	0.176	5.77
Student characteristics						
Previous year's proficiency level	–0.511	0.004	–125.56	–0.520	0.003	–151.99
Female	0.053	0.004	14.06	0.017	0.003	5.33
Title I	–0.034	0.013	–2.69	–0.026	0.011	–2.46
Special education	–0.360	0.010	–34.61	–0.327	0.009	–36.15
Years in current school	0.031	0.009	3.40	0.036	0.007	4.85
Years in current district	0.027	0.011	2.38	0.067	0.010	6.96
Age in months	0.001	0.0005	2.31	0.001	0.001	2.06
Age squared	0.000	0.000	–0.32	0.000	0.000	–0.23
Grade 0	0.022	0.026	0.85	–0.025	0.030	–0.84
Grade 1	0.130	0.010	13.10	0.064	0.009	7.15
Instructional services						
ELD only	0.052	0.012	4.48	0.116	0.018	6.37
ELD and SDAIE				0.147	0.016	9.20
ELD and SDAIE with primary language support				0.088	0.018	4.85
SDAIE	0.052	0.012	4.38			
Bilingual education	–0.261	0.018	–14.78	–0.320	0.021	–15.32
Teacher characteristics						
EL-authorized teachers per EL student	0.098	0.031	3.19	0.087	0.022	3.97
% fully certified	0.0000	0.001	0.02	0.000	0.001	0.08
% with bachelor's degree or less	–0.001	0.001	–0.84	–0.001	0.001	–1.42
% with bachelor's degree +30	–0.001	0.0005	–2.28	–0.001	0.000	–1.98
Average experience, years	–0.016	0.010	–1.66	–0.008	0.009	–0.95
Average experience squared	0.001	0.0004	1.75	0.000	0.000	0.63

Table B.3a (continued)

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
School characteristics						
Charter school	0.100	0.040	2.48	0.043	0.045	0.96
Alternative calendar	0.001	0.013	0.09	–0.024	0.011	–2.22
Language homogeneity index	–0.027	0.031	–0.87	0.088	0.025	3.59
Class size	0.001	0.004	0.14	0.003	0.004	0.76
% EL	–0.002	0.0003	–7.27	–0.002	0.000	–8.71
% new to school	–0.001	0.001	–1.81	0.001	0.001	1.23
Average math score	0.002	0.0004	5.51	0.003	0.000	7.26
Los Angeles Unified School District	–0.013	0.023	–0.58	0.140	0.018	7.68
Observations	254,598			317,859		
R-squared	0.51			0.56		

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: Dependent variable is growth in CELDT proficiency level.

Table B.3b

Regression Results for Grades 3–5

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
Language						
Armenian	1.044	0.153	6.83	0.275	0.145	1.89
Cantonese	1.087	0.150	7.25	0.473	0.144	3.28
Filipino	1.059	0.149	7.09	0.447	0.142	3.16
Hmong	0.878	0.148	5.92	0.234	0.140	1.66
Khmer	0.928	0.150	6.18	0.221	0.141	1.57
Korean	1.183	0.152	7.78	0.557	0.144	3.86
Mandarin	1.289	0.154	8.37	0.614	0.145	4.22
Russian	1.134	0.153	7.41	0.509	0.144	3.53
Spanish	0.961	0.148	6.49	0.368	0.140	2.62
Vietnamese	1.043	0.151	6.93	0.410	0.142	2.89
Other	1.069	0.148	7.20	0.405	0.141	2.87
Student characteristics						
Previous year's proficiency level	–0.349	0.004	–80.30	–0.448	0.003	–129.47
Female	0.054	0.003	15.91	0.122	0.003	36.88
Title I	–0.074	0.010	–7.37	–0.048	0.010	–4.72
Special education	–0.361	0.008	–44.71	–0.483	0.007	–66.93
Years in current school	0.017	0.003	6.63	0.016	0.002	7.33
Years in current district	0.025	0.003	8.62	0.038	0.003	14.92
Age in months	0.005	0.001	3.89	0.006	0.001	7.37
Age squared	0.000	0.000	–4.50	0.000	0.000	–9.80
Grade 3	–0.469	0.026	–18.26	–0.557	0.018	–31.06
Grade 4	–0.083	0.011	–7.28	–0.171	0.008	–21.89
Instructional services						
ELD only	0.001	0.009	0.09	0.027	0.016	1.73
ELD and SDAIE				0.079	0.014	5.63
ELD and SDAIE with primary language support				0.003	0.015	0.19
SDAIE	0.024	0.009	2.70			
Bilingual education	–0.070	0.014	–5.15	–0.048	0.019	–2.55
Teacher characteristics						
EL-authorized teachers per EL student	0.113	0.033	3.42	0.001	0.026	0.04
% fully certified	0.0002	0.0005	0.50	0.001	0.000	1.71
% with bachelor's degree or less	0.0003	0.001	0.57	0.000	0.000	0.36
% with bachelor's degree +30	–0.001	0.0003	–2.16	0.000	0.000	0.53
Average experience, years	0.007	0.008	0.94	0.011	0.007	1.50
Average experience squared	–0.0004	0.0003	–1.24	–0.001	0.000	–1.77

Table B.3b (continued)

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
School characteristics						
Charter school	0.044	0.033	1.33	0.046	0.041	1.13
Alternative calendar	0.031	0.010	3.09	–0.004	0.009	–0.47
Language homogeneity index	–0.0004	0.024	–0.02	0.039	0.022	1.74
Class size	–0.004	0.001	–2.70	0.001	0.001	0.57
% EL	–0.001	0.0002	–6.03	–0.001	0.000	–2.43
% new to school	–0.001	0.001	–2.26	0.001	0.000	1.67
Average math score	0.002	0.0003	7.13	0.004	0.000	12.17
Los Angeles Unified School District	0.016	0.018	0.88	0.163	0.015	11.17
Observations		228,824			273,218	
R-squared		0.53			0.56	

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: Dependent variable is growth in CELDT proficiency level.

Table B.3c

Regression Results for Grades 6–8

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
Language						
Armenian	1.258	0.228	5.51	1.040	0.222	4.68
Cantonese	1.142	0.225	5.08	1.170	0.222	5.26
Filipino	1.198	0.223	5.37	1.189	0.219	5.42
Hmong	1.061	0.218	4.87	1.014	0.219	4.64
Khmer	1.104	0.224	4.93	0.903	0.225	4.01
Korean	1.302	0.227	5.74	1.304	0.223	5.84
Mandarin	1.369	0.228	6.00	1.289	0.226	5.70
Russian	1.322	0.222	5.95	1.253	0.222	5.63
Spanish	1.080	0.222	4.87	0.994	0.219	4.53
Vietnamese	1.175	0.224	5.25	1.073	0.220	4.87
Other	1.186	0.223	5.33	1.080	0.220	4.92
Student characteristics						
Previous year's proficiency level	–0.343	0.006	–57.07	–0.451	0.006	–75.93
Female	–0.009	0.004	–2.27	0.104	0.004	26.72
Title I	–0.051	0.016	–3.18	–0.036	0.013	–2.71
Special education	–0.242	0.012	–20.56	–0.434	0.009	–46.83
Years in current school	0.005	0.003	1.50	0.010	0.003	2.99
Years in current district	0.021	0.002	9.34	0.020	0.002	9.50
Age in months	0.005	0.001	6.52	0.009	0.001	17.51
Age squared	0.000	0.000	–8.67	0.000	0.000	–19.58
Grade 6	–0.345	0.029	–11.78	–0.451	0.030	–15.04
Grade 7	–0.073	0.010	–7.38	–0.140	0.008	–17.85
Instructional services						
ELD only	–0.025	0.013	–1.91	–0.062	0.021	–2.99
ELD and SDAIE				–0.002	0.019	–0.10
ELD and SDAIE with primary language support				–0.069	0.022	–3.15
SDAIE	0.045	0.013	3.52			
Bilingual education	–0.137	0.041	–3.37	–0.161	0.060	–2.71
Teacher characteristics						
EL-authorized teachers per EL student	0.146	0.072	2.04	0.059	0.049	1.21
% fully certified	0.002	0.001	2.10	0.000	0.001	–0.58
% with bachelor's degree or less	–0.0003	0.001	–0.39	–0.002	0.001	–2.70
% with bachelor's degree +30	–0.0005	0.001	–0.87	–0.002	0.000	–3.12
Average experience, years	–0.016	0.013	–1.24	–0.029	0.015	–1.88
Average experience squared	0.000	0.000	0.93	0.001	0.001	1.63

Table B.3c (continued)

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
School characteristics						
Charter school	–0.026	0.061	–0.43	–0.095	0.035	–2.71
Alternative calendar	–0.042	0.028	–1.48	–0.022	0.018	–1.22
Language homogeneity index	–0.032	0.032	–1.01	0.105	0.035	3.00
Class size	–0.001	0.005	–0.11	0.001	0.002	0.53
% EL	–0.001	0.0005	–1.73	–0.001	0.000	–2.49
% new to school	0.001	0.001	1.13	0.000	0.000	–1.07
Average math score	0.002	0.001	2.78	0.003	0.001	5.58
Los Angeles Unified School District	–0.144	0.032	–4.45	0.025	0.024	1.02
Observations		143,712			179,599	
R-squared		0.44			0.43	

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: Dependent variable is growth in CELDT proficiency level.

Table B.3d

Regression Results for Grades 9–12

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
Language						
Armenian	0.431	0.301	1.43	1.391	0.307	4.54
Cantonese	0.361	0.295	1.22	1.398	0.305	4.59
Filipino	0.420	0.300	1.40	1.396	0.304	4.59
Hmong	0.345	0.294	1.17	1.208	0.302	4.00
Khmer	0.258	0.307	0.84	1.121	0.305	3.68
Korean	0.478	0.301	1.58	1.416	0.307	4.61
Mandarin	0.387	0.301	1.29	1.483	0.309	4.80
Russian	0.561	0.300	1.87	1.339	0.307	4.36
Spanish	0.393	0.297	1.32	1.272	0.304	4.18
Vietnamese	0.381	0.299	1.27	1.426	0.307	4.64
Other	0.424	0.298	1.42	1.353	0.305	4.43
Student characteristics						
Previous year's proficiency level	–0.389	0.008	–48.50	–0.465	0.008	–55.10
Female	0.007	0.005	1.66	0.014	0.005	2.66
Title I	0.030	0.022	1.39	0.037	0.019	1.94
Special education	–0.226	0.012	–18.77	–0.393	0.012	–33.05
Years in current school	0.015	0.008	1.79	0.006	0.004	1.48
Years in current district	0.007	0.002	3.06	0.008	0.002	3.31
Age in months	0.008	0.001	12.72	0.010	0.001	17.56
Age squared	0.000	0.000	–14.75	0.000	0.000	–19.71
Grade 9	–0.299	0.035	–8.65	–0.523	0.030	–17.66
Grade 10	–0.164	0.020	–8.27	–0.299	0.017	–17.88
Grade 11	–0.077	0.012	–6.42	–0.137	0.012	–11.70
Instructional services						
ELD only	–0.027	0.017	–1.62	–0.074	0.023	–3.17
ELD and SDAIE				–0.030	0.022	–1.41
ELD and SDAIE with primary language support				–0.106	0.029	–3.68
SDAIE	0.019	0.015	1.24			
Bilingual education	–0.181	0.031	–5.94	–0.444	0.037	–11.93
Teacher characteristics						
EL-authorized teachers per EL student	–0.037	0.088	–0.42	0.026	0.053	0.50
% fully certified	0.0002	0.001	0.18	–0.002	0.001	–2.11
% with bachelor's degree or less	–0.001	0.001	–0.50	0.001	0.001	1.01
% with bachelor's degree +30	–0.002	0.001	–1.88	0.000	0.001	0.51
Average experience, years	0.006	0.025	0.26	–0.043	0.017	–2.44
Average experience squared	–0.0002	0.001	–0.24	0.002	0.001	2.56

Table B.3d (continued)

	2002			2003		
	Coeff	Std Err	T-stat	Coeff	Std Err	T-stat
School characteristics						
Charter school	–0.052	0.105	–0.50	–0.014	0.124	–0.11
Alternative calendar	–0.082	0.037	–2.25	0.002	0.027	0.08
Language homogeneity index	–0.019	0.040	–0.48	0.014	0.037	0.37
Class size	0.003	0.003	0.93	–0.001	0.003	–0.48
% EL	–0.001	0.001	–1.07	0.000	0.001	–0.10
% new to school	0.001	0.001	1.71	0.000	0.001	–0.32
Average math score	0.003	0.001	4.48	0.003	0.001	4.39
Los Angeles Unified School District	–0.035	0.040	–0.88	0.078	0.028	2.77
Observations		118,698			151,505	
R-squared		0.36			0.42	

SOURCES: Fall 2002 and fall 2003 CELDT annual assessment files.

NOTE: Dependent variable is growth in CELDT proficiency level.

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