

How Far Behind in Math and Reading are English Language Learners?

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As Congress considers the reauthorization of the No Child Left Behind (NCLB) law, an analysis of recent data from standardized testing around the country shows that the fast growing number of students designated as English language learners (ELL) are among those farthest behind. The analysis of national standardized testing scores shows that about 51% of 8th grade ELL students are behind whites in reading and math, meaning that the scores for one out of every two will have to improve for the group to achieve parity. In the 4th grade, 35% of ELL students are behind in math and 47% are behind in reading when compared with their white counterparts.

The analysis of demographic data shows that important changes in the composition of the limited English speaking population take place between the 4th and 8th grades, which help explain the decline in achievement from elementary to middle school. Many students are moved out of limited English speaking status as they acquire language skills while many newly arrived immigrant children are added to the group.

About this report: The achievement analysis is based on the 2005 National Assessment of Educational Progress, also known as the "Nation's Report Card," and 35 state-administered assessments mandated by the No Child Left Behind law. The report also uses demographic data, for the nation and for some states, to analyze some of the characteristics of limited English speaking students.

About the Pew Hispanic Center: Founded in 2001, the Pew Hispanic Center is a nonpartisan research organization supported by The Pew Charitable Trusts. The Pew Hispanic Center's mission is to improve understanding of the diverse Hispanic population and to chronicle Latinos' growing impact on the nation. The Pew Hispanic Center is a project of the Pew Research Center, a nonpartisan "fact tank" in Washington, D.C., that provides information on the issues, attitudes, and trends shaping America and the world; it does not advocate for or take positions on policy issues.

Executive Summary

As Congress considers the reauthorization of the No Child Left Behind (NCLB) law an analysis of recent data from standardized testing around the country shows that the fast growing number of students designated as English language learners are among those farthest behind.

The results of national testing conducted in 2005 shows that nearly half (46%) of 4th grade students in the English language learner (ELL) category scored “below basic” in mathematics in 2005—the lowest level possible. Nearly three quarters (73%) scored below basic in reading. In middle school achievement in mathematics was lower still, with more than two-thirds (71%) of 8th grade ELL students scoring below basic. Meanwhile, the same share (71%) of 8th grade ELL students scored below basic in reading.

The NCLB legislation is due for congressional reauthorization in 2007. In its current form the law requires that all students be proficient in math and reading by 2014 according to standards and testing programs developed individually by each state. Specific categories of students, including ELL students, must meet proficiency standards as a group. To produce a measure of how much achievement among ELL students might have to be improved in order to meet federal mandates, this report compares their scores to those of white, black and Hispanic students.¹

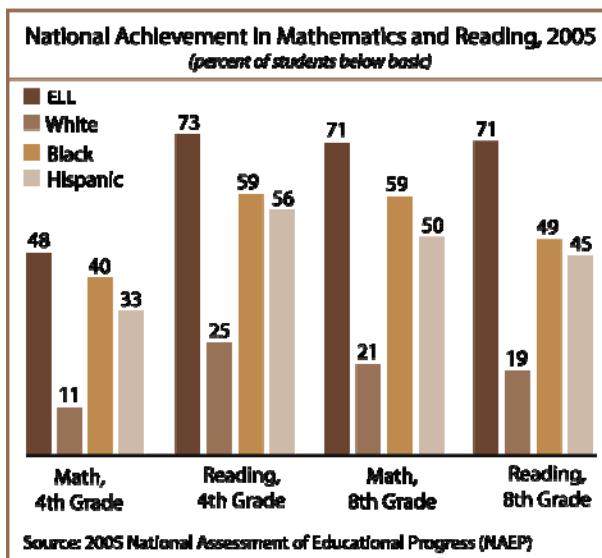
The analysis of national standardized testing scores shows that about 51% of 8th grade ELL students are behind whites in reading and math, meaning that the scores for one out of every two will have to improve for the group to achieve parity. In the 4th grade, 35% of ELL students are behind in math and 47% are behind in reading when compared with their white counterparts. The report also compares scores for ELL students to those of black and Hispanics students and finds smaller but still substantial gaps.

These findings are based on the 2005 National Assessment of Educational Progress (NAEP), also known as the “Nation’s Report Card,” which is the most authoritative source of standardized testing data for public school students across the country. The NAEP also allows for comparisons among many states because the testing program is the same nationwide. The NCLB law does not require proficiency measures based on NAEP scores. Nonetheless, this analysis offers the best available assessment of current achievement by ELL students as the effort to ensure that all students meet proficiency standards enters a critical phase.

¹ As used in this report, white refers to non-Hispanic whites; black refers to non-Hispanic blacks.

Moreover, this report also examines data from individual testing programs administered in many states that are the basis for meeting the federal mandates, and this data confirms the basic findings from the NAEP on the status of ELL students.

In addition, the report uses demographic data, for the nation and for some states, to analyze some of the characteristics of limited English speaking students at different grade levels. This analysis shows that important changes in the composition of the limited English speaking population take place between the 4th and 8th grades, which help explain the decline in achievement from elementary to middle school. Many students are moved out of limited English speaking status as they acquire language skills while many newly arrived immigrant children are added to the group.



About the Author

Richard Fry conducts empirical research on education and labor market characteristics of U.S. racial and ethnic populations. Before joining the Pew Hispanic Center, Fry was a senior economist at the Educational Testing Service, where he focused on trends in U.S. college enrollment.

A Note on Terminology

The terms Hispanic and Latino are used interchangeably in this report.

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Introduction

Under the No Child Left Behind Act of 2001 (NCLB), states are required to ensure that all public school students meet standards of proficiency in math and reading by 2014, and levels of achievement must be measured separately for several categories of students, including those designated as English Language Learner (ELL) students. To meet that mandate states and districts and schools will presumably need to focus attention and resources on the student groups that are farthest from meeting standards.

Congress is due to reauthorize the basic legislation underlying NCLB, the Elementary and Secondary Education Act, this year, and dozens of bills have been introduced to modify its provisions. Many address the ways that achievement is measured for students in the English language learner (ELL) category, the standards that schools and states need to meet for these students as well as the assistance and the sanctions that come into play when those standards are not accomplished.

The gaps in achievement between black and Hispanic students and white students are well-known, long-standing, and widely researched (see, for example, Jencks and Phillips, 1998). NCLB designated English language learner (ELL) students as a distinct group for the reporting of state test results and required that the ELL achievement gap also be closed.

Using publicly available data on achievement in math and reading at the national and state levels, this report examines the performance of ELL students compared to white, Hispanic, and black students.² The National Assessment of Educational Progress (NAEP) and as well as assessments undertaken by individual states under NCLB requirements reveal that ELL students are achieving less than their black and Hispanic peers and are far behind their white peers in most states.³

The education of ELL students is important for reasons aside from the federal push to raise academic achievement to specific standards. Children with limited English skills are one of the fastest growing components of the school-aged

ELL students are generally not educated in the same public schools as other students. Almost 70% of elementary ELL students attended 5,000 schools (out of 50,000 elementary schools nationwide). These same schools educated fewer than 8% of the elementary students who were not English language learners (Cosentino de Cohen, et.al., 2005)

² NCLB mandated annual statewide testing (in certain grades) in math and reading/language arts by school year 2005-06. Mandated testing in science begins in school year 2007-08.

³ The National Assessment of Educational Progress does include private as well public school students. This report only presents achievement results for public school students.

population. Since 1979 the percentage of children speaking English with difficulty has nearly doubled (Federal Interagency Forum on Child and Family Statistics, 2005). According to the National Center for Education Statistics (NCES), there were 3.8 million public school students receiving ELL services in school year 2003-04, about 10.6 % of students nationally (NCES, 2006). The number of students who are English language learners will likely continue to grow given that the population of school-age children who have immigrant parents is projected to increase from 12 million in 2005 to 18 million in 2025 (Passel, 2007).

Though once concentrated in a few parts of the country, English language learners are now being educated in an increasing number of states, reflecting the dispersion of the foreign-born population in recent years. Tabulations from Census data indicate that California, Texas and New York educated 63% of limited English speaking students in public schools in 1990. By 2005, the top 3 states educated only 54% of limited English speaking students. Public schools in the South and Northwest have experienced sizable growth in their public ELL enrollments since 1990. Lagging achievement by these students is now a national issue.

Ultimately, measured achievement matters because it affects socioeconomic success later in life. The President's Council of Economic Advisers recently asserted: "Economic research suggests that educational attainment and test scores are important at both the individual level and the national level...Studies have also shown that higher test scores are associated with higher wages and more years of schooling. High school students with higher test scores are more likely to attend college and, if they attend, are more likely to graduate. Controlling for individuals' educational attainment and family background, those who score higher on achievement tests in high school have higher wages later in life (Economic Report of the President, 2006)".

There has not been much research on the consequences of the English language learner achievement gap. However, the consequences of the black-white achievement gap are likely informative. A recent NCES study compared the outcomes of blacks and whites with similar educational achievement levels. Parity in educational achievement is associated with narrowed differences later in life: "While blacks have lower levels of educational achievement, educational attainment, and earnings than whites, these disparities are frequently smaller, and are sometimes entirely absent, for individuals with similar levels of prior educational achievement (NCES, 2001)"

Demographics of Limited English Speaking Public School Students

In school year 2003-04 there were 3.8 million public school students receiving ELL services (NCES, 2006). This is an administrative count and little demographic information is available on this category of students.

Tabulations from the 2005 American Community Survey (ACS) indicate that 2.7 million public K-12 students (age 5 and above) spoke a language other than English at home and reported speaking English less than “very well,” up from 1.7 million students in the 1980 decennial census.

Over three-quarters of the 2.7 million limited English speaking students in the 2005 ACS spoke Spanish at home. Less than a majority (40%) of the limited English students were foreign-born. The racial/ethnic composition of the limited English speakers was 70% Hispanic, 13% Asian/Pacific Islander, 12% non-Hispanic white, and 4% non-Hispanic black. Over a third of the limited English speaking students resided in poverty (35%), in comparison to a poverty rate of 19% among public school students who were not limited English speakers.

The racial/ethnic origins of the 3.8 million public school students receiving ELL services are unknown. In the 2005 American Community Survey 9.4 million Hispanic children (age 5 and above) were enrolled in public school. About one-out-of-five of the Hispanic students spoke a language other than English at home and reported speaking English less than “very well.”

This suggests that narrowing achievement disparities could substantively narrow adult educational, labor market, and social differences. The first section of this report examines the achievement gaps between ELL students and other groups of students at the national level, based on the 2005 National Assessment of Educational Progress (NAEP). The next section examines the achievement gaps at the state level in NAEP and compares them to the performance gaps apparent in the results of the tests that states have administered to comply with NCLB.

The achievement gap between ELL students and other students as measured by NAEP is not the basis under NCLB for determining whether states are meeting the law’s mandate to meet proficiency standards for all students. NAEP does not have a role in determining the legal compliance of the states. Rather individual states must develop their own tests and benchmarks for proficiency in math and reading in order to meet the federal mandates. The NAEP results, however, are informative because they are comparable across states and indicative of the degree of parity between ELL students and other student subgroups. Moreover, the testing methodologies and proficiency standards developed by a number of states for ELL students face a variety of challenges and in some cases have been rejected by the U.S. Department of Education.

National ELL Achievement Gaps

Measuring the Gap

The NAEP, or the “Nation’s Report Card,” is the best-known assessment of student learning for the U.S. as a whole. NAEP assesses student learning in mathematics and reading at grades 4 and 8, providing national level results as well as results for some states.

For the nation as a whole, NAEP reveals that ELL students were far behind white students in their mathematics and reading skills in 2005. Performance on the main NAEP is reported in terms of four achievement levels: below basic, basic, proficient, and advanced. Since relatively few students from any NAEP student group perform at the advanced level—and ELL students nationally tend to be concentrated at the lower achievement levels—this report presents the NAEP achievement gap in terms of performance at or above the basic level of achievement. The National Center for Education Statistics also reports NAEP results in this fashion (NCES, 2005). The basic achievement level identifies “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work.”

The 2005 assessment indicated that 46% of ELL students nation-wide achieved at the below basic level in math in grade 4 (Table 1). In reading 73% of ELL fourth grade test-takers were below basic. Among white fourth-graders nationally, 11% were at the below basic level in math and 25% were below basic in reading.

Table 1
National Performance in Mathematics and Reading
(percent of students in achievement level)

Achievement Level	MATH		READING	
	Grade 4	Grade 8	Grade 4	Grade 8
ELL Students				
Advanced	1	1	1	0
Proficient	11	5	6	4
Basic	43	23	21	24
Below Basic	46	71	73	71
White Students				
Advanced	7	7	10	3
Proficient	40	30	30	34
Basic	42	42	35	43
Below Basic	11	21	25	19
Black Students				
Advanced	1	1	2	0
Proficient	12	8	11	11
Basic	47	33	29	40
Below Basic	40	59	59	49
Hispanic Students				
Advanced	1	1	2	1
Proficient	18	12	13	13
Basic	48	38	29	41
Below Basic	33	50	56	45

Source: 2005 National Assessment of Educational Progress (NAEP)

National Assessment of Educational Progress

The National Assessment of Educational Progress (NAEP) is the nation's only nationally representative assessment of educational achievement. Begun in 1969, NAEP is conducted by the National Center for Education Statistics under the direction of the National Assessment Governing Board.

In education circles, NAEP is often referred to as the gold standard of educational assessments. States can elect to participate in the state NAEP. The state assessment is identical to the national assessment in content. In 2005 all states and the District of Columbia participated in the grade 4 and 8 math and reading assessment, but state-level results for ELL students are not available for all states.

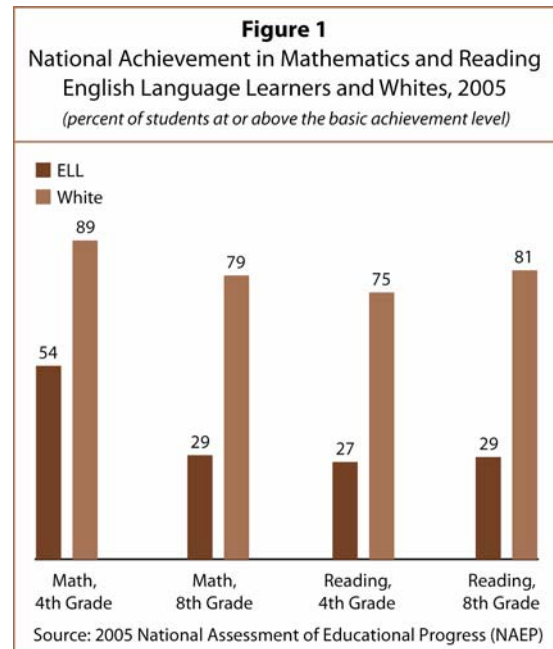
In 2005 a large sample of about 172,000 fourth-graders and 162,000 eighth graders participated in NAEP nationwide. NAEP does not provide scores for individual students or schools. Achievement is measured for students by grade and subgroups within those grades.

This report focuses on the reading and math abilities of students, but the NAEP has also assessed abilities in science, writing, U.S. history, civics, geography, and the arts. NAEP results are available at the NAEP Data Explorer:
<http://nces.ed.gov/nationsreportcard/nde/>

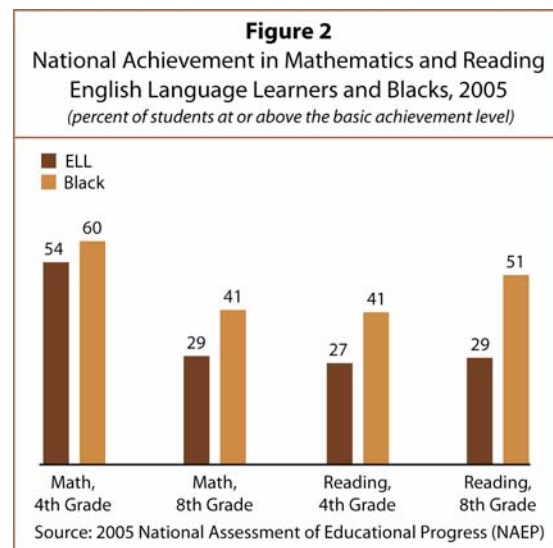
In the grade 4 math assessment 46% of ELL students performed at the below basic level and 54% performed at or above the basic achievement level. Among white fourth graders, 89% were at or above the basic achievement level in math.

This report assesses the gap in achievement as the difference in the percentages at or above the basic level for ELL students and a comparison group. For example, the gap in grade 4 math achievement between white and ELL student is 35 percentage points (89% for whites versus 54% for ELL students) (Figure 1). In conceptual terms, the 35 point gap is how far the ELL student group as a whole lags behind in demonstrating at least “partial mastery of prerequisite” skills.

Compliance with NCLB mandates will be determined not by performance on the NAEP but rather by testing programs developed and administered separately by each of the states. However, measuring the achievement gaps in the NAEP is a way of illustrating how much ground needs to be covered to accomplish the goal of having students of all groups meet the same standards of minimum proficiency.

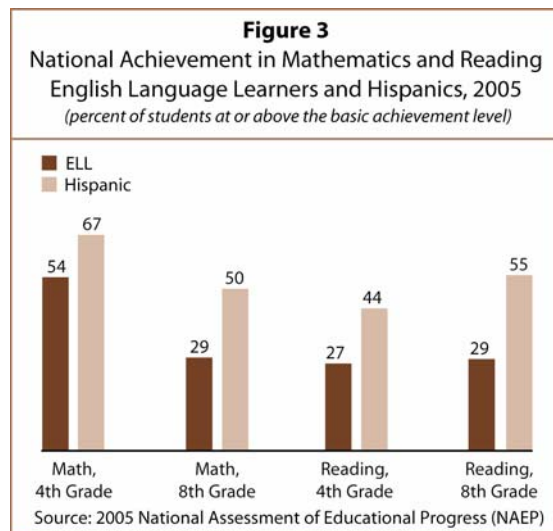


In the 2005 NAEP, English language learner students significantly trailed black students in math and reading skills at the national level, although the national achievement gaps between ELL and black students were not as large as the gap between ELL and white students. For example, in grade 4 math, 60% of black students performed at or above the basic level. The ELL to black math achievement gap for grade 4 was 6 percentage points (Figure 2).



The performance of ELL students may also be compared to Hispanic students. ELL students and Hispanic students were clearly not mutually exclusive categories as some of the same students were both Hispanic and ELL designated.

Yet, a majority of Hispanic students were not also English language learners.⁴ And some English language learner students were of Asian or Pacific Islander racial origin and not Hispanic.



In terms of learning, the 2005 NAEP indicates that ELL students trailed behind Hispanic students in their math and reading abilities (Figure 3). For example, in grade 4 math 67% of Hispanic students performed at or above the basic level, so ELL fourth graders trailed 13 percentage points behind their Hispanic peers.

Widening Gap, Changing Population Between 4th and 8th Grades

The ELL achievement gap widens at higher grades. For example, in fourth grade math, ELL students were 35 points behind white fourth graders. In grade 8, ELL students were 50 points behind white eighth graders (Figure 1). The widening of the ELL to white gap at higher grades is not unique to the 2005 NAEP assessment. It is also apparent in assessments the states are required to administer under No Child Left Behind (see the Appendix). In California, for example, student achievement results on the Stanford Achievement Test demonstrated large achievement gaps that increased at the higher grades (Gandara, *et. al.*, 2003).

Is this widening gap from 4th to 8th grades evidence of failure on the part of the schools and the students, or are there other factors to consider? Indeed, change in the composition of the ELL population across these grades appears to explain some of the difference: Higher achieving students are removed from the ELL population while newly arrived immigrants just starting out in U.S. schools are added to it. These factors, explored below, help explain why ELL students fall

⁴ The National Center for Education Statistics indicated that 3.8 million students received ELL services. It also reports that 8.9 million Hispanics were enrolled in school year 2003-04 (NCES, 2006). Thus, even if all English language learner students were Hispanic, less than a majority of Hispanic students could be ELL designated.

further behind white students from grade 4 to grade 8. But these changes in composition do not diminish the challenges faced by students and schools in attempting to close the gap as mandated by federal policy.

ELL status is not permanent. Between 4th and 8th grade some students succeed in learning English. They are reclassified and no longer counted as English language learners. Meanwhile, because of immigration, new foreign born English language learners are added to the ELL population after 4th grade.

The U.S. Department of Education's administrative data on English language learners (collected in the Common Core of Data) has little information on these students other than their school district. Using Census data, however, the characteristics of limited English speaking students can be examined. Limited English ability in the Census only refers to speaking abilities. ELL status depends on reading and writing abilities, in addition to speaking abilities, as well as other test scores, grades and teacher input (Jepsen and de Alth, 2005). The limited English population is frequently used as a proxy for the ELL population (Capps, *et.al* 2005).

	PUBLIC SCHOOL ENROLLMENT	
	Students Speaking English Less Than "Very Well" ¹	All Students
Grades 1 to 4 in 2001	941,127	14,596,003
Foreign born	285,614	608,210
Native born	655,513	13,987,793
Grades 5 to 8 in 2005	661,311	14,771,870
Foreign born	291,860	865,082
Native born	369,451	13,906,788
Foreign Born Grades 5 to 8 in 2005	291,860	865,082
Arrived at least 4 years ago	160,577	641,939
Arrived less than 4 years ago	131,283	223,143

Source: Pew Hispanic Center analysis of 2001 and 2005 U.S. Census Bureau American Community Survey (ACS)
Notes: The American Community Survey asks respondents 5 years of age and older if they speak a language other than English at home. Those responding affirmatively self-report their English speaking ability. School enrollment counts are limited to children residing in households.

Table 2 reports on public school enrollment in 2001 in grades 1 to 4. By 2005, most of these students had been promoted to grades 5 to 8. The number of limited English speakers enrolled in public schools clearly decreases from elementary school to middle school. There were 941,000 limited English speaking students in grades 1 to 4 in 2001. By 2005 there were 661,000 limited English speakers in grades 5 to 8. In addition to showing the decline in the number of limited English

speaking students, Table 2 reveals the change in the composition of the limited English speaking students.

The number of native-born limited English speaking students declined from 656,000 in 2001 to 369,000 in 2005, or 44%. The share of limited English speaking students who were native-born fell from 70% in 2001 to 56% in 2005.

Although the number of foreign-born limited English speaking students remained roughly unchanged at 290,000 from elementary school to middle school, many foreign-born, limited-English speaking students in grades 1 to 4 did learn to speak English by 2005. Unlike native-born students, the total number of foreign-born students increased from 608,000 students in 2001 to 865,000 in 2005 due to immigration.

Many of the new arrivals were limited English speaking students. Of the 292,000 foreign-born, limited-English speakers in grades 5 to 8 in 2005, only 161,000 had been in the U.S. at least 4 years earlier and thus could have been in the U.S. grade 1 to 4 cohort in 2001. It appears that about 125,000 of the 286,000 foreign-born, limited-English speakers in grades 1 to 4 in 2001 learned to speak English by grades 5 to 8, a decline of 44%. Thus, foreign born limited English speakers in elementary schools appear to learn English at the same rate as native-born limited English speakers. However, those students were replaced in grades 5 to 8 by 131,000 foreign-born students who arrived less than four years ago and were not enrolled in grades 1 to 4 in the U.S.

Consequently, the middle school ELL population is composed of two student groups: newly-arrived, foreign-born students who were not in U.S. schools as well as ELL students from elementary school who have not mastered English. It is likely that the acquisition of English language skills and academic achievement are highly related. Those elementary school students who learned English rapidly also tended to score higher on their math and reading assessments. These students departed the ELL population by middle school and their higher achievement is no longer reflected in middle school achievement gap. The ELL to white achievement gap widens from elementary school to middle school possibly because the highest achieving ELL students in elementary school have departed by middle school.

The widening of the ELL achievement gap from grade 4 to grade 8 is distinctive in reading. In the national NAEP, the black-to-white achievement gap and the Hispanic-to-white achievement gap widens in math from grade 4 to grade 8. But those gaps tend to diminish in reading from grade 4 to grade 8.⁵ In the national NAEP, reading gaps narrow as the grades progress for black and Hispanic students. But not for ELL students. The English language learner population may be unique in featuring widening reading gaps between elementary school and middle school.

Nationally ELL students tend to trail further behind their peers in reading than in math. In grade 4, ELL students trailed 35 points behind white students in math, but the gap was 47 points in reading (Figure 1).

⁵ The change in the black—white achievement gap as grades progress is the subject of considerable research. The assertion that the black to white and Hispanic to white reading gaps narrow is simply based on the NAEP and grade level comparisons within a NAEP assessment. It is not based on following the same cohort of children as grades progress. More sophisticated analysis also finds that the black-white math gap widens as children age but the reading gap remains relatively constant (Phillips, Crouse, and Ralph (1998)).

State ELL Achievement Gaps

Findings from the NAEP

The 2005 NAEP results on ELL academic performance are available at the state level for 39 states in math and 34 states in reading. The same broad findings on the size and persistence of the achievement gap reported above for the national data are evident in these states to varying degrees.

Regardless of grade or subject, ELL students trail far behind their white counterparts in the state in the proportion of students that perform at or above the basic achievement level. All available states had double digit gaps between white and ELL students and the gap often exceeded 50 percentage points (see the Appendix). Table 3 reports the NAEP achievement gaps between white and ELL students for the ten states with the largest ELL populations.

	MATHEMATICS		READING	
	Grade 4	Grade 8	Grade 4	Grade 8
California	37	48	48	49
Texas	26	60	44	61
New York	41	60	55	62
Florida	34	48	44	49
Illinois	52	51	60	50
Arizona	46	51	51	54
New Jersey	31	–	–	–
Washington	35	47	45	48
Massachusetts	27	59	46	62
Georgia	46	48	53	
North Carolina	19	40	44	36

Source: 2005 National Assessment of Educational Progress (NAEP)
Notes: ¹The percentage of white students at or above the basic achievement level minus the percentage of ELL students at or above the basic achievement level.
States listed in descending order of their 2005 public school ELL enrollment.

In many states for which NAEP results are available, ELL students trail behind black students in academic achievement (Table 4). In 2005 that was particularly apparent in reading. For example, in Texas in 2005, 49% of black fourth graders performed at or above the basic level in reading. Among ELL fourth graders, 35% performed at or above basic in reading, yielding a 14 percentage point gap between ELL and black fourth graders in reading.

Table 4
English Language Learner to Black Student Achievement Gaps¹
States with the Largest ELL Student Populations
(in percentage points)

	MATHEMATICS		READING	
	Grade 4	Grade 8	Grade 4	Grade 8
California	3	9	15	20
Texas	6	27	14	35
New York	14	23	25	25
Florida	10	9	13	20
Illinois	10	3	17	19
Arizona	14	22	15	28
New Jersey	5	–	–	–
Washington	21	24	27	37
Massachusetts	5	24	18	39
Georgia	20	15	19	–
North Carolina	-7	11	12	6

Source: 2005 National Assessment of Educational Progress (NAEP)
Notes: ¹The percentage of black students at or above the basic achievement level minus the percentage of ELL students at or above the basic achievement level.
States listed in descending order of their 2005 public school ELL enrollment.

Examining the size of the gap between ELL students and white students, the achievement gap widens in most states between grade 4 and grade 8. Particularly in math, eighth grade ELL students are further behind their white counterparts than fourth grade ELL students.

Table 5
Number of California English Language Learners in Public Schools
(by grade through time)

	Number in 2005-2006	School year when in kindergarten	Number when in kindergarten
Kindergarten	179,622	2005-2006	179,622
First grade	174,081	2004-2005	170,559
Second grade	166,015	2003-2004	166,248
Third grade	159,172	2002-2003	172,828
Fourth grade	147,241	2001-2002	177,638
Fifth grade	123,164	2000-2001	165,210
Sixth grade	112,156	1999-2000	165,776
Seventh grade	100,599	1998-1999	164,643
Eighth grade	90,520	1997-1998	166,682

Source: California State-level Language Census Student Data Files

As with the national data, evidence from the states suggests that the decline in ELL performance from elementary school to middle school likely reflects change in the ELL population across grades. Administrative counts at the state level make clear that the ELL population decreases in size at higher grades. For example the state of California has detailed counts on ELL students over time. The second column of Table 5 reports the number of ELL students in each grade in school year 2005-06 in California public schools. Using prior school year data,

the fourth column reports the number of ELL students when that grade was in kindergarten.

In California the number of ELL students rises from kindergarten to first grade. After the second grade the number of ELL students decreases and it continues to decrease each grade thereafter. Similar patterns of ELL counts by grade were apparent in the states of Florida, Illinois, and Arizona (see the Appendix). The ELL student population is smaller in middle school than in early elementary school. Students learning English most rapidly were the students who departed the ELL population. It seems plausible that these students were the highest achieving ELL students. Their performance is not reflected in the middle school ELL results, widening the measured gap between white and ELL students.

Comparison with NCLB State Assessment Results

The No Child Left Behind Act requires states to test students annually in reading and math in grades 3 to 8. State participation in NAEP is not a substitute for the state's own assessment of all students, so states have developed their own standards-based reading and mathematics assessments. Because each state assessment is unique, results on states assessments cannot be compared across states to measure student achievement. Analysis has shown that the state tests vary widely across states and that the meaning of “proficient” differs between states. In short, “to compare scores between states, one must rely on NAEP (McLaughlin, 2005).”

However, on the basis of each states’ reading and mathematics assessment, it is possible to compare how ELL students performed in that state compared to white students in that state. In each state, the percentage of ELL students that “meets or exceeds the state standard” can be compared to the percentage of white students that meet or exceed the state standard and the gap in performance can be measured.

Using the most recent year available for the state assessment results, the gap between white and ELL test-takers was tabulated in the percent of students meeting or exceeding the state standard (see the Appendix for the measured gaps).

The ELL-to-white performance gaps based on the state assessments largely mirror the gaps based on state NAEP. In both math and reading, and regardless of grade, ELL students trail their white counterparts in the percent of students meeting or exceeding the state standard. The state-based gaps were typically in the double digits and tend to widen as the grade level progresses.

In states that have available results for their fourth and eighth grade assessments and also that participated in NAEP, the state-based assessment gap can be compared with the gap based on NAEP. The states that demonstrate the largest gaps between white and ELL students on the basis of NAEP also demonstrate the largest gaps in their state assessments.

For example, in the 2005 NAEP in Arizona, 86% of white test-takers were at or above the basic level of achievement compared with 40% of ELL test-takers in grade 4 math. That produced a NAEP-based gap of 46 points (Table 3). Results of Arizona's Instrument to Measure Standards (AIMS) in 2006 indicated that 85% of white fourth graders "meets or exceeds the standard" in math, compared to 42% of ELL fourth graders, resulting in a 43 point AIMS based gap between white and ELL fourth graders in math in Arizona. States with larger NAEP-based gaps also show larger gaps based on their own state assessment (Appendix figures A1-A4).

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Appendix: Tables and Figures

	MATHEMATICS		READING	
	Grade 4	Grade 8	Grade 4	Grade 8
50 States and D.C.	35	50	47	52
1 California	37	48	48	49
2 Texas	26	60	44	61
3 New York	41	60	55	62
4 Florida	34	48	44	49
5 Illinois	52	51	60	50
6 Arizona	46	51	51	54
7 New Jersey	31	–	–	–
8 Washington	35	47	45	48
9 Massachusetts	27	59	46	62
10 Georgia	46	48	53	–
11 North Carolina	19	40	44	36
12 Michigan	25	–	–	–
13 Pennsylvania	36	–	34	–
14 Colorado	47	54	50	53
15 Virginia	17	33	20	–
16 Oregon	37	37	42	37
17 Maryland	25	–	–	–
18 Minnesota	32	41	34	47
19 Nevada	44	52	49	48
20 New Mexico	41	49	48	46
21 Indiana	13	–	–	–
22 Wisconsin	24	28	32	–
23 Connecticut	43	57	47	–
24 Utah	29	39	39	36
25 Missouri	22	–	–	–
26 Oklahoma	20	31	33	25
27 Kansas	21	50	37	–
28 Hawaii	49	52	47	58
29 Arkansas	15	–	26	–
30 Iowa	35	–	43	–
31 Nebraska	45	59	49	–
32 Rhode Island	57	62	55	52
33 Idaho	27	35	43	27
34 South Dakota	54	–	60	–
35 Delaware	23	–	39	–
36 District of Columbia	62	–	72	–
37 Alaska	35	31	50	39
38 Montana	45	57	47	52
39 Wyoming	23	40	46	33

Source: 2005 National Assessment of Educational Progress (NAEP)

Notes: ¹The percentage of white students at or above the basic achievement level minus the percentage of ELL students at or above the basic achievement level. States listed in descending order of their 2005 public school ELL enrollment. Results are not available for all states because of an insufficient number of English language learner test-takers in some states.

Table A2
NAEP English Language Learner to Black Student Achievement Gaps¹
By Select States and D.C.
(in percentage points)

	MATHEMATICS		READING	
	Grade 4	Grade 8	Grade 4	Grade 8
50 States and D.C.	6	12	14	22
1 California	3	9	15	20
2 Texas	6	27	14	35
3 New York	14	23	25	25
4 Florida	10	9	13	20
5 Illinois	10	3	17	19
6 Arizona	14	22	15	28
7 New Jersey	5	-	-	-
8 Washington	21	24	27	37
9 Massachusetts	5	24	18	39
10 Georgia	20	15	19	-
11 North Carolina	-7	11	12	6
12 Michigan	-19	-	-	-
13 Pennsylvania	6	-	0	-
14 Colorado	19	15	23	34
15 Virginia	-7	1	-11	-
16 Oregon	16	10	18	11
17 Maryland	-6	-	-	-
18 Minnesota	-4	-8	-8	11
19 Nevada	11	13	19	25
20 New Mexico	4	21	27	-
21 Indiana	-14	-	-	-
22 Wisconsin	-21	-25	-8	-
23 Connecticut	8	10	9	-
24 Missouri	-11	-	-	-
25 Oklahoma	-11	-4	6	-5
26 Kansas	-1	11	5	-
27 Hawaii	24	-	27	-
28 Arkansas	-21	-	-13	-
29 Iowa	15	-	14	-
30 Nebraska	1	3	9	-
31 Rhode Island	17	22	25	27
32 Delaware	0	-	8	-
33 District of Columbia	4	-	9	-
34 Alaska	14	3	34	18

Source: 2005 National Assessment of Educational Progress (NAEP)

Notes: ¹The percentage of black students at or above the basic achievement level minus the percentage of ELL students at or above the basic achievement level. States listed in descending order of their 2005 public school ELL enrollment. Results are not available for all states because of an insufficient number of English language learner test-takers in some states.

Table A3
NAEP English Language Learner to Hispanic Student Achievement Gaps¹
By Select States and D.C.
(in percentage points)

	MATHEMATICS		READING	
	Grade 4	Grade 8	Grade 4	Grade 8
50 States and D.C.	13	21	17	26
1 California	9	16	11	21
2 Texas	13	37	18	38
3 New York	20	28	27	36
4 Florida	21	26	29	35
5 Illinois	23	25	26	31
6 Arizona	17	20	19	24
7 New Jersey	12	–	–	–
8 Washington	13	18	15	25
9 Massachusetts	5	28	6	30
10 Georgia	32	20	26	–
11 North Carolina	6	17	16	14
12 Michigan	1	–	–	–
13 Pennsylvania	7	–	2	–
14 Colorado	21	19	20	24
15 Virginia	3	12	5	–
16 Oregon	5	4	9	11
17 Maryland	6	–	–	–
18 Minnesota	2	9	6	17
19 Nevada	17	23	21	25
20 New Mexico	15	20	19	25
21 Indiana	-1	–	–	–
22 Wisconsin	-1	0	7	–
23 Connecticut	15	15	12	–
24 Utah	2	8	8	11
25 Missouri	-1	–	–	–
26 Oklahoma	6	5	11	1
27 Kansas	8	23	12	–
28 Hawaii	27	30	31	35
29 Arkansas	1	–	8	–
30 Iowa	11	–	17	–
31 Nebraska	15	27	19	–
32 Rhode Island	19	18	20	22
33 Idaho	5	6	11	5
35 Delaware	3	–	17	–
36 District of Columbia	15	–	18	–
37 Alaska	12	15	32	27
38 Montana	36	–	47	–
39 Wyoming	13	17	19	17

Source: 2005 National Assessment of Educational Progress (NAEP)

Notes: ¹The percentage of Hispanic students at or above the basic achievement level minus the percentage of ELL students at or above the basic achievement level. States listed in descending order of their 2005 public school ELL enrollment. Results are not available for all states because of an insufficient number of English language learner test-takers in some states.

Table A4
Number of California English Language Learners In Public Schools
(by grade over school years)

Grade in 2005-2006	2005-2006	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000	1998-1999	1997-1998
Kindergarten	179,622	-	-	-	-	-	-	-	-
First Grade	174,081	170,559	-	-	-	-	-	-	-
Second Grade	166,015	171,472	166,248	-	-	-	-	-	-
Third Grade	159,172	173,889	179,123	172,828	-	-	-	-	-
Fourth Grade	147,241	164,203	177,561	183,892	177,638	-	-	-	-
Fifth Grade	123,164	147,057	161,301	171,167	173,093	165,210	-	-	-
Sixth Grade	112,156	130,638	151,207	165,935	175,274	174,661	165,776	-	-
Seventh Grade	100,599	113,873	131,026	149,832	162,217	173,513	171,863	164,643	-
Eighth Grade	90,520	102,303	113,809	127,525	138,420	152,619	168,557	171,980	166,682

Source: California State-level Language Census Student Data Files

Table A5
Number of Florida and Illinois
English Language Learners In Public Schools
(by grade over school years)

Grade in 2003-2004	SCHOOL YEAR	
	2003-2004	2002-2003
Florida		
Kindergarten	32,603	–
First Grade	35,998	34,410
Second Grade	32,189	35,258
Third Grade	33,075	33,571
Fourth Grade	21,147	30,351
Fifth Grade	19,771	26,156
Sixth Grade	17,625	20,376
Seventh Grade	16,704	18,501
Eighth Grade	14,960	17,306
Illinois		
Kindergarten	21,938	–
First Grade	22,372	21,297
Second Grade	21,004	21,257
Third Grade	19,091	20,493
Fourth Grade	16,860	17,861
Fifth Grade	11,874	14,482
Sixth Grade	9,700	13,797
Seventh Grade	6,669	9,421
Eighth Grade	5,907	7,690

Source: Florida Department of Education, Office of Academic Achievement through Language Acquisition (AALA), and Illinois State Board of Education Data Analysis and Progress Reporting Division, annual Illinois Bilingual Education Programs Evaluation Report

Table A6
Number of Arizona English Language Learner Test-takers
(by grade over school years)

Grade Spring 2006	Assessment	
	Spring 2006	Spring 2005
Third Grade	14,022	
Fourth Grade	12,721	14,309
Fifth Grade	10,291	11,925
Sixth Grade	9,430	11,360
Seventh Grade	9,322	10,488
Eighth Grade	8,955	9,905

Source: Arizona Department of Education, Accountability Division, Research and Evaluation Section, Arizona's Instrument to Measure Standards (AIMS) Math Assessment

Table A7
English Language Learner to White Student Achievement Gaps¹ in Mathematics
Based on State Assessments
(in percentage points)

	Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
1 California	2006	32	32	40	44	45	47
2 Texas	2005-2006	16	20	28	35	51	52
3 Arizona	2006	42	43	52	57	56	55
4 Washington	2005-2006	42	42	51	48	44	44
5 Massachusetts	2006	34	30	35	41	37	37
6 North Carolina	2004-2005	20	14	17	23	30	29
7 Michigan	2005	14	20	22	25	31	31
8 Pennsylvania	2004-2005	35	–	37	–	–	40
9 Colorado	2006	41	44	47	50	47	49
10 Virginia	2005-2006	8	21	15	21	23	25
11 Oregon	2005	18	–	21	–	–	35
12 Maryland	2006	30	30	35	45	47	42
13 Minnesota	2004	39	–	41	–	48	–
14 Nevada	2004-2005	32	–	41	–	–	45
15 Wisconsin	2005-2006	35	35	35	34	40	36
16 Connecticut	2006	35	35	35	47	54	40
17 Tennessee	2004-2005	28	22	24	31	32	29
18 South Carolina	2006	8	13	12	12	15	21
19 Missouri	Spring 2005	–	16	–	–	–	10
20 Oklahoma	2006	23	21	20	27	33	25
21 Kansas	2004	–	25	–	–	43	–
22 Louisiana	Spring 2005	–	13	–	–	–	25
23 Kentucky	Spring 2006	–	–	16	–	–	20
24 Alabama	2005-2006	20	19	25	26	31	29
25 Idaho	2005-2006	16	19	21	23	33	–
26 South Dakota	Spring 2006	47	53	47	54	51	46
27 New Hampshire	Fall 2005	30	35	33	32	34	36
28 Delaware	Spring 2005	31	–	32	–	–	33
29 Mississippi	Spring 2006	5	8	20	15	23	25
30 West Virginia	2005-2006	4	3	8	6	4	20
31 Alaska	Spring 2006	29	29	31	32	32	35
32 Montana	2005	–	42	–	–	–	48
33 North Dakota	2005-2006	27	29	30	31	32	41
34 Wyoming	2004-2005	–	21	–	–	–	29

Notes: ¹The percentages of white students meeting or exceeding the state standard minus the percentages of ELL students meeting or exceeding the state standard. States listed in descending order of their 2005 public school ELL enrollment.

Table A8
English Language Learner to White Student Achievement Gaps¹ in Reading
Based on State Assessments
(in percentage points)

	Year	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
1 California	2006	40	45	50	53	54	56
2 Texas	2005-2006	14	29	44	33	61	61
3 Arizona	2006	52	59	63	66	65	66
4 Washington	2005-2006	45	35	55	54	51	47
5 Massachusetts	2006	45	42	55	58	57	64
6 Georgia	2004	27	-	-	-	-	-
7 North Carolina	2004-2005	32	33	29	44	39	41
8 Michigan	2005	18	22	25	25	28	32
9 Pennsylvania	2004-2005	48	-	48	-	-	53
10 Colorado	2006	48	56	57	63	63	64
11 Virginia	2005-2006	11	11	10	18	26	31
12 Oregon	2005	22	-	30	-	-	43
13 Maryland	2006	31	35	44	54	57	57
14 Minnesota	2004	47	-	47	-	56	-
15 Nevada	2004-2005	42	-	48	-	-	54
16 Wisconsin	2005-2006	38	37	35	37	42	38
17 Connecticut	2006	50	53	54	60	62	63
18 Tennessee	2004-2005	48	39	39	33	34	50
19 South Carolina	2006	19	26	25	34	38	40
20 Missouri	Spring 2005	23	-	-	-	28	-
21 Oklahoma	2006	22	21	30	36	34	40
22 Kansas	2004	-	-	24	-	-	22
23 Louisiana	Spring 2005	-	20	-	-	-	34
24 Kentucky	Spring 2006	-	18	-	-	32	-
25 Alabama	2005-2006	26	23	28	30	38	39
26 Idaho	2005-2006	21	24	28	33	30	41
27 South Dakota	Spring 2006	46	42	36	47	47	45
28 New Hampshire	Fall 2005	32	43	36	39	41	42
29 Delaware	Spring 2005	25	-	42	-	-	54
30 Mississippi	Spring 2006	18	15	24	28	34	33
31 West Virginia	2005-2006	16	14	17	10	10	14
32 Alaska	Spring 2006	29	35	37	40	37	33
33 Montana	2005	-	51	-	-	-	53
34 North Dakota	2005-2006	29	32	33	43	34	35
35 Wyoming	2004-2005	-	28	-	-	-	27

Notes: ¹The percentages of white students meeting or exceeding the state standard minus the percentages of ELL students meeting or exceeding the state standard. States listed in descending order of their 2005 public school ELL enrollment.

Table A9
English Language Learner to White Achievement Gap in NCLB State Assessments versus NAEP
(In percentage points)

State	MATHEMATICS						READING					
	Grade 4			Grade 8			Grade 4			Grade 8		
	NCLB state assessment gap ¹	NAEP gap ²	Difference (3)-(4)	NCLB state assessment gap ¹	NAEP gap ²	Difference (6)-(7)	NCLB state assessment gap	NAEP gap	Difference (9)-(10)	NCLB state assessment gap	NAEP gap	Difference (12)-(13)
1 California	32	37	-5	47	48	-1	45	48	-3	56	49	7
2 Texas	20	26	-6	52	60	-8	29	44	-15	61	61	0
3 Arizona	43	46	-3	55	51	4	59	51	8	66	54	12
4 Washington	42	35	7	44	47	-3	35	45	-10	47	48	-1
5 Massachusetts	30	27	3	37	59	-22	42	46	-4	64	62	2
6 North Carolina	14	19	-5	29	40	-11	33	44	-11	41	36	5
7 Michigan	20	25	-5	31	-	-	22	-	-	32	-	-
8 Pennsylvania	-	36	-	40	-	-	-	34	-	53	-	-
9 Colorado	44	47	-3	49	54	-5	56	50	6	64	53	11
10 Virginia	21	17	4	25	33	-8	11	20	-9	31	-	-
11 Oregon	-	37	-	35	37	-2	-	42	-	43	37	6
12 Maryland	30	25	5	42	-	-	35	-	-	57	-	-
13 Minnesota	-	32	-	-	41	-	-	34	-	-	47	-
14 Nevada	-	44	-	45	52	-7	-	49	-	54	48	6
15 Wisconsin	35	24	11	36	28	8	37	32	5	38	-	-
16 Connecticut	35	43	-8	40	57	-17	53	47	6	63	-	-
17 Tennessee	22	-	-	29	-	-	39	-	-	50	-	-
18 South Carolina	13	-	-	21	-	-	26	-	-	40	-	-
19 Missouri	16	22	-6	10	-	-	-	-	-	-	-	-
20 Oklahoma	21	20	1	25	31	-6	21	33	-12	40	25	15
21 Kansas	25	21	4	-	50	-	-	37	-	22	-	-
22 Louisiana	13	-	-	25	-	-	20	-	-	34	-	-
23 Kentucky	-	-	-	20	-	-	18	-	-	-	-	-
24 Alabama	19	-	-	29	-	-	23	-	-	39	-	-
25 Idaho	19	27	-8	-	35	-	24	43	-19	41	27	14
26 South Dakota	53	54	-1	46	-	-	42	60	-18	45	-	-
27 New Hampshire	35	-	-	36	-	-	43	-	-	42	-	-
28 Delaware	-	23	-	33	-	-	-	39	-	54	-	-
29 Mississippi	8	-	-	25	-	-	15	-	-	33	-	-
30 West Virginia	3	-	-	20	-	-	14	-	-	14	-	-
31 Alaska	29	35	-6	35	31	4	35	50	-15	33	39	-6
32 Montana	42	45	-3	48	57	-9	51	47	4	53	52	1
33 North Dakota	29	-	-	41	-	-	32	-	-	35	-	-
34 Wyoming	21	23	-2	29	40	-11	28	46	-18	27	33	-5

Notes: ¹The percent of white students meeting or exceeding the state standard on the state assessment minus the percent of ELL students meeting or exceeding the state standard on the state assessment.
²The percent of white students at or above the basic achievement level in NAEP minus the percent of ELL students at or above the basic achievement level in NAEP. States listed in descending order of their 2005 public school ELL enrollment.

