



What's Happening

August 2016

The achievement progress of English learner students in Nevada

Eric Haas
Min Huang
Loan Tran
Airong Yu
WestEd

Key findings

This study examined three cohorts of Nevada English learner students over six years. The cohorts were students in kindergarten, grade 3, and grade 6 at the start of the study. Using student scores from the previously administered English Language Proficiency Assessment and the criterion-referenced tests for math and reading, the study team found that at least 65 percent of English learner students in these cohorts were reclassified as fluent English proficient students over the six-year period. English learner students who were eligible for special education services had the lowest cumulative reclassification or passing rates on all three tests. English learner students in higher grades had lower cumulative passing rates on the reading and math content tests than English learner students in lower grades. With the exception of the kindergarten cohort, English learner students performed better on the English Language Proficiency Assessment and math content test than on the reading content test.

U.S. Department of Education

John B. King, Jr., *Secretary*

Institute of Education Sciences

Ruth Neild, *Deputy Director for Policy and Research*

Delegated Duties of the Director

National Center for Education Evaluation and Regional Assistance

Joy Lesnick, *Acting Commissioner*

Amy Johnson, *Action Editor*

OK-Choon Park, *Project Officer*

REL 2016–154

The National Center for Education Evaluation and Regional Assistance (NCEE) conducts unbiased large-scale evaluations of education programs and practices supported by federal funds; provides research-based technical assistance to educators and policymakers; and supports the synthesis and the widespread dissemination of the results of research and evaluation throughout the United States.

August 2016

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-IES-12-C-0002 by Regional Educational Laboratory (REL) West at WestEd. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

This REL report is in the public domain. While permission to reprint this publication is not necessary, it should be cited as:

Haas, E., Huang, M., Tran, L., & Yu, A. (2016). *The achievement progress of English learner students in Nevada* (REL 2016–154). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from <http://ies.ed.gov/ncee/edlabs>.

This report is available on the Regional Educational Laboratory website at <http://ies.ed.gov/ncee/edlabs>.

The study was replicated in two other states, Arizona and Utah, and those reports will also be available on the Regional Educational Laboratory website.

Summary

Before considering how to successfully educate growing numbers of English learner students, especially those who struggle to pass state English language arts/reading and math content tests, it is important that policymakers and educators first understand the patterns of these students' achievement progress. Representatives of the state department of education in Nevada requested this study of the English language proficiency and academic progress of the state's English learner students. (The state departments of education in Arizona and Utah requested similar studies, which Regional Educational Laboratory West also conducted and published separately.)

This study followed cohorts of English learner students in Nevada's two largest school districts, Clark County School District and Washoe County School District, over six school years to assess their progress in English proficiency and their academic progress in reading and math content knowledge. It analyzed three cohorts—which started at kindergarten, grade 3, and grade 6—from 2006/07 through 2011/12 by their level of English proficiency at the start of the study, eligibility for special education services, eligibility for the school lunch program (a proxy for low-income status), gender, and grade level.

To track the students' progress, the study used the tests Nevada administered during the study period: Nevada's English Language Proficiency Assessment and the criterion-referenced tests for reading and math.¹ This report describes the cumulative percentage of Nevada's English learner students in each grade cohort who reached each of three specific milestones during the study period: meeting the criteria for reclassification as fluent English proficient students, passing the reading content test for the first time, and passing the math content test for the first time. The study also compared the cumulative passing rates of English learner students taking the three tests. Finally, it compared the students' progress in English proficiency with Nevada's expectation that English learner students advance at least one proficiency level each year.

During the study period at least 65 percent of English learner students were reclassified as fluent English proficient students.

The largest differences in cumulative passing rates for all three tests were associated with student eligibility for special education services and with students' initial English language proficiency level (on a scale of 1, low, to 5, high). Smaller differences in cumulative passing rates were associated with student eligibility for the school lunch program and with student gender.

In all three grade cohorts English learner students who started the study at the two English language proficiency levels just below that needed for reclassification as fluent English proficient students generally had higher cumulative passing rates on all three tests than English learner students who started at the two lowest English language proficiency levels. In the grade 3 and grade 6 cohorts English learner students who started the study at the two lowest English language proficiency levels had final cumulative reclassification rates on the English Language Proficiency Assessment of less than 50 percent. English learner students in higher grades had lower cumulative passing rates on the reading and math content tests than English learner students in lower grades.

With the exception of the kindergarten cohort, English learner students performed better on the English Language Proficiency Assessment and math content test than on the reading content test. Within the kindergarten cohort 79 percent of English learner students passed the math content test, 66 percent passed the reading content test, and 65 percent passed the English Language Proficiency Assessment. Within the grade 3 cohort 81 percent passed the English Language Proficiency Assessment, 76 percent passed the math content test, and 61 percent passed the reading content test. Within the grade 6 cohort 67 percent passed the English Language Proficiency Assessment, 35 percent passed the math content test, and 34 percent passed the reading content test.

Less than half of any group of English learner students made progress in English fluency at the expected annual rate of one level per year, as called for by Nevada's annual measurable achievement objective 1.

Contents

| | |
|--|----------------|
| Summary | i |
| Why this study? | 1 |
| What the study examined | 4 |
| What the study found | 6 |
| How many English learner students became proficient in English during the five-year study period and how quickly | 7 |
| How well English learner students did academically in reading and math | 10 |
| Comparison of cumulative passing rates across tests and cohorts | 16 |
| Comparison of cumulative passing rates with Nevada’s progress expectations | 17 |
| Implications of the study findings | 17 |
| Three findings are consistent with current research and suggest areas for focused interventions | 17 |
| Three findings expand the current research literature and point to areas for possible changes in practice or for further research | 18 |
| One finding was not consistent with the research literature and points to areas for additional research | 19 |
| Limitations of the study | 20 |
| Appendix A. Nevada programs that provide context for the study | A-1 |
| Appendix B. Data and methodology | B-1 |
| Appendix C. Additional findings | C-1 |
| Notes | Notes-1 |
| References | Ref-1 |
| Boxes | |
| 1 Previous studies show English learner students tend to lag behind native English speakers on academic achievement tests | 1 |
| 2 Key terms | 2 |
| 3 Data and methods | 5 |
| B1 Timing of English Language Proficiency Assessment and reading and math content tests | B-1 |
| Figures | |
| 1 For all three grade cohorts of English learner students the cumulative reclassification rate in becoming fluent English proficient followed a steady progression from the beginning to the end of the study period, 2006/07–2011/12 | 7 |
| 2 For the grade 3 and grade 6 cohorts English learner students at the two lowest initial English language proficiency levels made the slowest cumulative reclassification rate progress in becoming fluent English proficient, 2006/07–2011/12 | 8 |

| | | |
|----|--|-----|
| 3 | None of the three grade cohorts of English learner students who were eligible for special education services ever surpassed a cumulative reclassification rate of 50 percent as fluent English proficient, 2006/07–2011/12 | 9 |
| 4 | For the grade 3 and grade 6 cohorts the cumulative passing rate progress in reading slowed from the middle to the end of the study, 2006/07–2011/12 | 10 |
| 5 | The cumulative passing rate on the reading content test was 100 percent for English learner students who started the study in kindergarten at the advanced intermediate English language proficiency level but 11 percent for English learner students who started the study in grade 6 at the emerging level, 2006/07–2011/12 | 11 |
| 6 | English learner students who were eligible for special education services started with lower passing rates on the reading content test than students who were not eligible, and the difference increased over time, 2006/07–2011/12 | 12 |
| 7 | For English learner students in the grade 6 cohort cumulative passing rate progress on the math content test slowed after the first two years of the study period, 2006/07–2011/12 | 13 |
| 8 | In general, the higher the initial English proficiency level, the higher the cumulative passing rate on the math content test, 2006/07–2011/12 | 14 |
| 9 | Of English learner students who were eligible for special education services, only the kindergarten cohort ever surpassed a cumulative passing rate of 50 percent on the math content test, 2006/07–2011/12 | 15 |
| C1 | In the kindergarten and grade 6 cohorts English learner students who were not eligible for the school lunch program consistently achieved higher cumulative reclassification rates as fluent English proficient than did students who were eligible, 2006/07–2011/12 | C-1 |
| C2 | Across all three grade cohorts female English learner students consistently achieved higher cumulative reclassification rates as fluent English proficient students than did male English learner students, 2006/07–2011/12 | C-2 |
| C3 | English learner students who were not eligible for the school lunch program consistently had higher cumulative passing rates on the reading content test than did students who were eligible, 2006/07–2011/12 | C-3 |
| C4 | Female English learner students consistently had higher cumulative passing rates on the reading content test than did male English learner students, 2006/07–2011/12 | C-4 |
| C5 | English learner students who were not eligible for the school lunch program consistently had higher cumulative passing rates on the math content test than did students who were eligible for the school lunch program, 2006/07–2011/12 | C-5 |
| C6 | In the kindergarten and grade 3 cohorts final cumulative passing rates on the math content test were comparable for female and male English learner students, 2006/07–2011/12 | C-6 |

Tables

| | | |
|----|--|-----|
| 1 | Cumulative passing rates for each grade cohort for each test, 2006/07–2011/12 (percent of students passing the test) | 17 |
| A1 | Percentage of English learner students achieving reclassification as fluent English proficient within the expected number of years, by initial English language proficiency level, 2006/07–2011/12 | A-3 |
| B1 | Steps to getting an analytic sample for each test | B-3 |
| B2 | Characteristics of students in the analytic samples and the initial English learner population, 2006/07 | B-4 |

Why this study?

Across the United States, particularly in states served by Regional Educational Laboratory (REL) West, concern is widespread about how to successfully educate growing numbers of English learner students, especially those who struggle to pass state English language arts/reading and math content tests (Horwitz et al., 2009; Olsen, 2010; Quality Counts, 2009). The members of REL West’s English Learner Alliance, which includes representatives of state departments of education in Arizona, Nevada, and Utah, requested studies of the English language proficiency and academic progress of English learner students in their states. This study is for Nevada.²

Having a better understanding of the progress of English learner students in both English language proficiency and subject matter knowledge will enable English Learner Alliance members to more effectively target interventions for English learner students who are not achieving English language proficiency within expected timeframes and for those not passing English language arts/reading and math content tests.

While previous studies examined some of these issues, the study periods were generally shorter than in this study (box 1). Few, if any, studies directly examined the progress of cohorts of English learner students over five or more years, and none examined English learner students’ progress on subject matter tests in English language arts/reading and math, based both on students’ initial English language proficiency level and on their initial grade level. This report addresses this gap in the literature by providing empirical evidence on the progress of grade cohorts of English learner students in English language proficiency and in reading and math content knowledge over several years. It also examined how these outcomes differed by student subgroups. See box 2 for definitions of key terms used in the report.

Box 1. Previous studies show English learner students tend to lag behind native English speakers on academic achievement tests

English learner students, as a group, tend to lag behind native English speakers in their rate of academic achievement (Kindler, 2002; Massachusetts Department of Elementary and Secondary Education, 2012; Olsen, 2010; Ruiz-de-Velasco & Fix, 2000; Short & Fitzsimmons, 2007). This gap largely reflects English learner students’ need to simultaneously learn English and master subject matter knowledge (Genesee, Lindholm-Leary, Saunders, & Christian, 2005). However, English learner students are a diverse group with different strengths and needs, depending on a number of characteristics (Kindler, 2002).

Characteristics that appear to be related to academic achievement for English learner students specifically, and for students generally, for which most states and districts collect data include initial English language proficiency when students first enroll in school (Cook, Linquanti, Chinen, & Jung, 2012; Collier, 1989, 1992; Halle, Hair, Wandner, McNamara, & Chien, 2012). They also include grade level (Genesee et al., 2005); low-income status (Goldenberg, 2008; Mulligan, Halle, & Kinukawa, 2012; Rathbun & West, 2004; Roberts, 2009; Roberts & Bryant, 2011); disability status (Liasidou, 2013; McCardle, McCarthy-Mele, Cutting, Leos, & D’Emilio, 2005; Nguyen, 2012); and gender (Perie, Moran, & Lutkus, 2005).

Initial English language proficiency and grade level. Research shows that English learner students at the same English language proficiency level tend to make greater year-to-year progress

Having a better understanding of the progress of English learner students in both English language proficiency and subject matter knowledge will enable more effective targeting of interventions for English learner students who are not achieving English proficiency within expected timeframes and for those not passing English language arts/reading and math content tests

(continued)

Box 1. Previous studies show English learner students tend to lag behind native English speakers on academic achievement tests *(continued)*

in English language proficiency and subject matter knowledge in the lower grades than they do in the higher grades (Cook, Wilmes, Boals, & Santos, 2008; Grissom, 2004; Kieffer, 2008, 2010, 2011; Salazar, 2007).

Low-income status. English learner students from homes of lower socioeconomic status generally score lower on subject matter tests and are less likely to achieve reclassification as fluent English proficient students than their peers of higher socioeconomic status (Mulligan et al., 2012; Roberts & Bryant, 2011).

English learner students with disabilities. Nearly 400,000 English learner students in the United States in grades K–12 were identified as needing special education services in 2001/02 (McCardle et al., 2005). While a learning disability can affect a student’s academic achievement, it is often difficult to determine whether English learner students struggle to develop literacy and other academic benchmarks because of their limited English proficiency or because they have a learning disability (Klingner, Artiles, & Barletta, 2006; Nguyen, 2012).

Gender. Differences in academic achievement by gender have been found among K–12 students, including small but persistent gender disparities in math favoring male students (McGraw, Lubienski, & Strutchens, 2006; Perie et al., 2005) and small gender disparities in reading favoring female students (Perie et al., 2005).

Box 2. Key terms

Annual measurable achievement objective 1. In annual measurable achievement objective 1 the No Child Left Behind Act of 2001 asked states to set expectations for how quickly English learner students should progress from one English language proficiency level to the next, measured by annual increases in the number or percentage of students making progress in learning English. Nevada, like about half the states, set an expectation of increasing one English language proficiency level, for example from entry (level 1) to emerging (level 2), per school year. That means that English learner students in the study should have been reclassified as fluent English proficient students within one to four years of the start of the study, depending on the level at which they started in 2006/07. See appendix A.

Cohorts. Students were grouped into three analytic cohorts based on their grade level in 2006/07: kindergarten, grade 3, and grade 6. Within each cohort students’ initial English language proficiency level was determined based on the 2006/07 Nevada English Language Proficiency Assessment. The first subject matter tests were also administered in 2006/07. The study covered six school years: 2006/07–2011/12. Thus the kindergarten cohort followed students from kindergarten to grade 5, the grade 3 cohort from grade 3 to grade 8, and the grade 6 cohort from grade 6 to grade 11 (see also box 3).

English language proficiency levels. During the study period Nevada had five levels of English language proficiency: entry (level 1), emerging (level 2), intermediate (level 3), advanced intermediate (level 4), and proficient (level 5). Prior to 2009/10, English learner students were reclassified as fluent English proficient if they achieved the proficient level for their overall test score. In 2009/10 English learner students were reclassified as fluent English proficient when

(continued)

Box 2. Key terms *(continued)*

they achieved the proficient level for their overall test score and achieved advanced intermediate or higher for each of the four test domains of listening, speaking, reading, and writing. The levels are based on the Nevada English Language Proficiency Assessment (see below). Throughout this report English language proficiency level refers to the English language proficiency level in the first year of the study period.

English learner. Students are classified as English learner students if they fall into levels 1–4 on the English Language Proficiency Assessment. Students are asked to take the test when they initially register as new students if their family speaks a language other than English at home.

Fluent English proficient students. Before 2009/10 students were reclassified from English learner students to fluent English proficient students when they achieved level 5, proficient, on the English Language Proficiency Assessment. Starting in 2009/10, English learner students were reclassified as fluent English proficient when they achieved the proficient level for their overall test score and achieved advanced intermediate or higher for each of the four test domains of listening, speaking, reading, and writing.

Nevada's criterion-referenced tests and High School Proficiency Examination for reading and math content tests. Nevada administers state tests in several subjects, including reading and math. Students take subject matter tests annually in grades 3–8 and in grades 10–12 in high school; there are no subject matter tests in grade 9. The criterion-referenced tests and High School Proficiency Examination have four performance levels: emergent/developing, approaches standard, meets standard, and exceeds standard. Students must score at or above meets standard to pass the reading and math content tests. Nevada administers its criterion-referenced tests and High School Proficiency Examination each spring. Nevada no longer administers the criterion-referenced tests, having replaced them with the Smarter Balanced Assessment Consortium content tests in English language arts and math.

Nevada's English Language Proficiency Assessment. This test makes the initial determination of whether a student is classified as an English learner and places the student at one of five levels of English proficiency. The test measures proficiency in four domains: listening, speaking, reading, and writing. As described above (see English language proficiency levels), Nevada used two different standards to determine reclassification as fluent English proficient: one before 2009/10 and another starting in 2009/10. Nevada administers its English language proficiency test each fall, between October and December. In 2012/13, after the conclusion of the study period, Nevada switched to the WIDA ACCESS as its English language proficiency test. See appendix A.

Special education services. All special education services and individualized education programs under this Nevada Department of Education designation in the state dataset were included in this study sample. Data were not collected on individual types of learning disabilities or special education services within this general category.

What the study examined

This study is a descriptive analysis of the progress of three grade cohorts of Nevada English learner students in English language proficiency and in reading and math content knowledge over 2006/07–2011/12. The cohorts comprised English learner students in Nevada’s two largest school districts, Clark County School District and Washoe County School District.³ Student English language proficiency scores and reading and math content test scores were followed over the study period.

Three cohorts of students were examined based on their grade level in 2006/07: kindergarten, grade 3, and grade 6. Students’ initial English language proficiency level was based on results on Nevada’s 2006/07 English Language Proficiency Assessment (see box 2).

The study examined the cumulative percentages of students in each of these cohorts who reached each of three specific academic milestones over the course of the study (2006/07–2011/12):

- Scoring at or above the level for reclassification as fluent English proficient students on Nevada’s English Language Proficiency Assessment.
- Passing the reading content test for the first time.
- Passing the math content test for the first time.

The study also examined how meeting these criteria varied by students’ initial English language proficiency level (see box 2), eligibility for special education services, eligibility for the school lunch program (a proxy for low-income status), gender, and grade level (which, of course, changed over the study period).

First, to determine how many English learner students became proficient in English and how quickly, the study looked at cumulative reclassification rates:

- What was the cumulative percentage of English learner students from each cohort who were reclassified as fluent English proficient students after the baseline year (2006/07)?
- How did the cumulative percentage of English learner students who achieved reclassification as fluent English proficient students vary by students’ initial English language proficiency level, eligibility for special education services, eligibility for the school lunch program, gender, and grade level?

Second, to determine how well English learner students did academically in reading and math, the study looked at cumulative passing rates:

- What was the cumulative percentage of English learner students from each cohort who passed the reading and math content tests for the first time after the baseline year?
- How did the cumulative percentage of English learner students who passed the reading and math content tests for the first time vary by students’ initial English language proficiency level, eligibility for special education services, eligibility for the school lunch program, gender, and grade level?

The study also compared the cumulative reclassification rates of English learner students on the English Language Proficiency Assessment and the cumulative passing rates on the reading and math content tests. Finally, it compared the cumulative reclassification rates

This report provides empirical evidence on the progress of grade-level cohorts of English learner students in English language proficiency and in English language arts and math content knowledge over several years

for English learner students at each English language proficiency level with Nevada’s progress expectations on annual measurable achievement objective 1, of advancing at least one English language proficiency level each year.

Box 3 summarizes the study’s data sources and methods. Appendix B provides more detail.

Box 3. Data and methods

Data source. The Clark County School District and the Washoe County School District provided data on all students who had English language proficiency test results and subject matter test results in reading and math from 2006/07 through 2011/12, starting in kindergarten, grade 3, and grade 6. These are the two largest school districts in Nevada, and they educate 87 percent of the English learner students in the state. This dataset enabled Regional Educational Laboratory West to examine aspects of these students’ progress in English language proficiency and subject matter knowledge over six school years.

Analysis sample and methods. Because the study analyzed the entire population of English learner students in the Clark and Washoe County School Districts who met the analytic sample criteria for each of the grade cohorts, statistical tests were not conducted.

The analytic sample included all students identified as English learner students who were enrolled in the Clark or Washoe County School District public schools in the designated grade of the first year of the cohort, who progressed to the next grade level each year, and for whom the required test data were available for all six years being analyzed.

Each cohort consisted of a separate sample of students. For example, the students in the grade 3 cohort were English learner students who enrolled in a Clark or Washoe County School District public school in grade 3 in 2006/07, progressed to the next grade level each year, and for whom the required Nevada test score data were available through grade 8 in 2011/12.

Each cohort was progressively smaller because younger students who met the reclassification criteria as fluent English proficient students in the earlier grades were not included in the grade 3 and grade 6 cohorts. Further, the number of newly registering English learner students in grade 3 in the grade 3 cohort and in grade 6 in the grade 6 cohort was smaller than the number of English learner students who reclassified as fluent English proficient in the earlier grade levels. For example, for the English Language Proficiency Assessment, the kindergarten cohort had 6,620 students, the grade 3 cohort had 5,138 students, and the grade 6 cohort had 2,306 students. For a description of the steps taken to define each analytic sample see table B1 in appendix B.

The analyses were done for each English learner grade cohort as a whole and by both cohort and each of four student characteristics at the start of 2006/07: English language proficiency level, eligibility for special education services, eligibility for the school lunch program, and gender. For a breakdown of the characteristics of the whole sample and each cohort see table B2 in appendix B.

For the English language proficiency analysis 2007/08 was the first year data were available on measured progress (relative to 2006/07), and 2011/12 was the final year, for a total of five years of progress measurement. For the subject matter tests English learner student achievement levels for 2006/07–2011/12 were examined, for a total of six years.

See appendix B for further details on data and methods.

What the study found

Across all three cohorts of English learner students 65 percent or more of students in each cohort achieved reclassification as fluent English proficient students based on their performance on Nevada’s English Language Proficiency Assessment (see box 2). English learner students in the grade 3 cohort had the highest cumulative reclassification rate (81 percent), while English learner students in the kindergarten cohort had the lowest cumulative reclassification rate (65 percent). This finding differed from previous research, which found that English learner students in the lower grades made better progress in developing fluency.

As expected, English learner students who started the study at higher levels below English proficiency had higher cumulative reclassification rates as fluent English proficient students than students who started at lower levels. In the grade 6 cohort, English learner students who started the study at the two lowest English language proficiency levels (entry, level 1, and emerging, level 2) had the lowest final cumulative reclassification rates, of 30 percent or less.

Cumulative passing rates on the subject matter tests—Nevada’s criterion-referenced tests and High School Proficiency Examination for reading and math—were similar for both subjects. English learner students in the kindergarten cohort had the highest cumulative passing rates in reading and math, while English learner students in the grade 6 cohort had the lowest cumulative passing rates. This finding is consistent with previous research that found that English learner students in lower grades made better academic progress than students in higher grades. Again, as expected, English learner students who started the study at the two highest levels below proficient generally had higher cumulative passing rates on the reading and math content tests. However, in the grade 6 cohort, English learner students who started the study at the lowest English language proficiency level (entry) had a slightly higher cumulative passing rate on the reading content test than those who started at the second-lowest level (emerging). For the math content test the cumulative passing rates for the two lowest proficiency levels in the grade 6 cohort were nearly identical.

Across all three tests the range of cumulative passing rates for the three grade cohorts was lowest for the English Language Proficiency Assessment (65–81 percent), greater for the reading content test (34–66 percent), and greatest for the math content test (35–79 percent). A similar pattern was observed for each English learner student subgroup. With the exception of the kindergarten cohort English learner students had higher cumulative passing rates on the English Language Proficiency Assessment than on the two subject matter tests. In the kindergarten cohort the cumulative passing rate on the English Language Proficiency Assessment was the lowest of the three tests (65 percent). The largest differences in cumulative passing rates for all three tests were associated with students’ eligibility for special education services and with their English language proficiency level at the start of the study.

English learner students eligible for the school lunch program scored lower on the English Language Proficiency Assessment and the two subject matter tests than their peers who were not eligible for the school lunch program. And male students generally scored lower than female students.

Less than half of any group of English learner students achieved the expected rate of progress of gaining one English language proficiency level per year called for in Nevada’s annual measurable achievement objective 1. English learner students making progress at

Across all three cohorts of English learner students 65 percent or more of students in each cohort achieved reclassification as fluent English proficient students

the recommended rate ranged from a low of 12 percent (grade 6 cohort, initial English language proficiency level 2) to a high of 46 percent (grade 6 cohort, initial English language proficiency level 4; see table A1 in appendix A). At the same time more than 90 percent of English learner students eventually reclassified in 4 of the 12 proficiency level groups across the three grade cohorts.

Specific results related to each research question are presented below.

How many English learner students became proficient in English during the five-year study period and how quickly

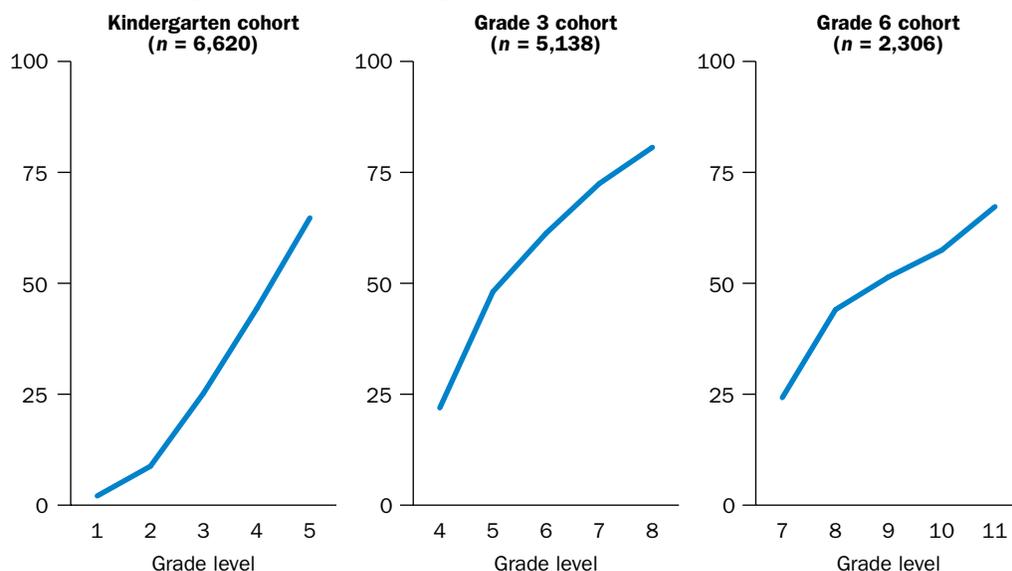
Most English learner students were reclassified as fluent English proficient, and progress was faster for the grade 3 and grade 6 cohorts in the first few years. Across all three grade cohorts at least 65 percent of the English learner students scored at or above the required level for reclassification as fluent English proficient on the Nevada English Language Proficiency Assessment after five years (figure 1). The grade 3 cohort had the highest cumulative reclassification rate, while the kindergarten cohort had the lowest.

Across all three grade cohorts at least 65 percent of the English learner students scored at or above the required level for reclassification as fluent English proficient on the Nevada English Language Proficiency Assessment after five years

English learner students in the grade 3 and grade 6 cohorts made greater progress in cumulative reclassification rates in the first few years of the study than toward the end. For the grade 3 cohort the break in the rate of progress was seen in grade 5, after which progress slowed in grade 6 through the end of the study. For the grade 6 cohort the break in the rate of progress occurred in grade 8. For the kindergarten cohort the opposite occurred: the rate of progress was slower in grades 1 and 2 and then increased in grade 3 through the end of the study.

Figure 1. For all three grade cohorts of English learner students the cumulative reclassification rate in becoming fluent English proficient followed a steady progression from the beginning to the end of the study period, 2006/07–2011/12

Cumulative percentage reclassified as fluent English proficient



Note: The English language proficiency assessment in 2006/07 serves as a baseline, defining the initial population of English learner students for this analysis.

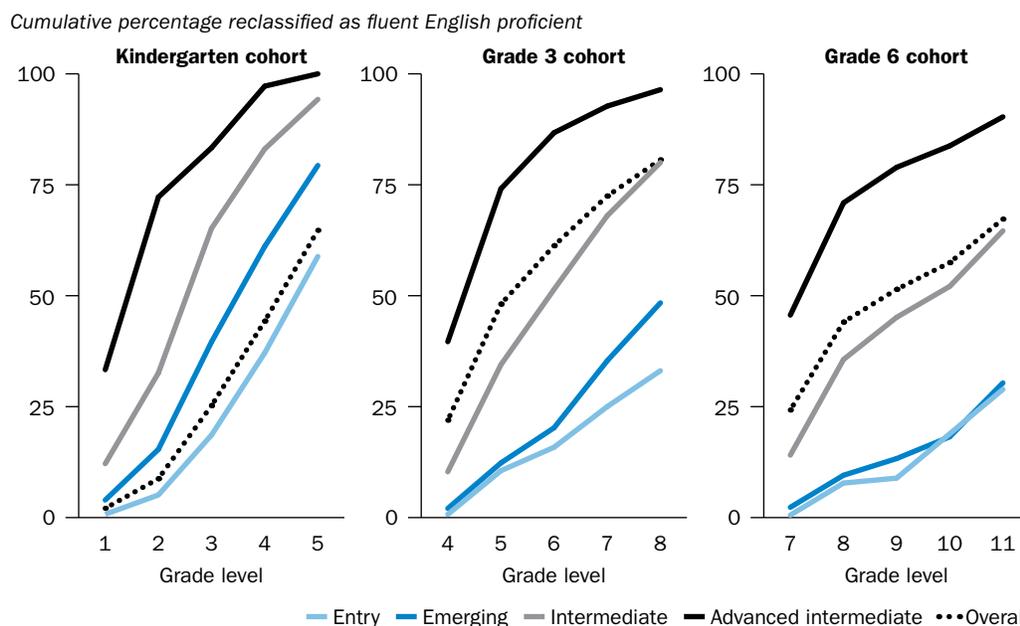
Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

English learner students who started the study at higher English language proficiency levels had higher cumulative reclassification rates than their grade-level peers who started at lower English language proficiency levels. English learner students at each higher English language proficiency level had a higher cumulative reclassification rate than their grade-level peers at lower English language proficiency levels (figure 2). Among students at different English language proficiency levels English learner students in the kindergarten cohort who were at the highest English language proficiency level below proficient (advanced intermediate, level 4) had the highest cumulative reclassification rate (100 percent). In the grade 3 and grade 6 cohorts English learner students who started the study at the two lowest English language proficiency levels (entry, level 1, and emerging, level 2) had final cumulative reclassification rates of less than 50 percent. The lowest cumulative reclassification rate was for the entry level (29 percent) and the emerging level (30 percent) in the grade 6 cohort.

English learner students at each higher English language proficiency level had a higher cumulative reclassification rate than their grade-level peers at lower English language proficiency levels

English learner students who were eligible for special education services had lower cumulative passing rates on the English Language Proficiency Assessment than their peers who were not eligible. For all three grade cohorts English learner students who were eligible for special education services at the start of the study had lower cumulative reclassification rates as fluent English proficient than students who were not eligible (figure 3). After five years, this gap increased.

Figure 2. For the grade 3 and grade 6 cohorts English learner students at the two lowest initial English language proficiency levels made the slowest cumulative reclassification rate progress in becoming fluent English proficient, 2006/07–2011/12

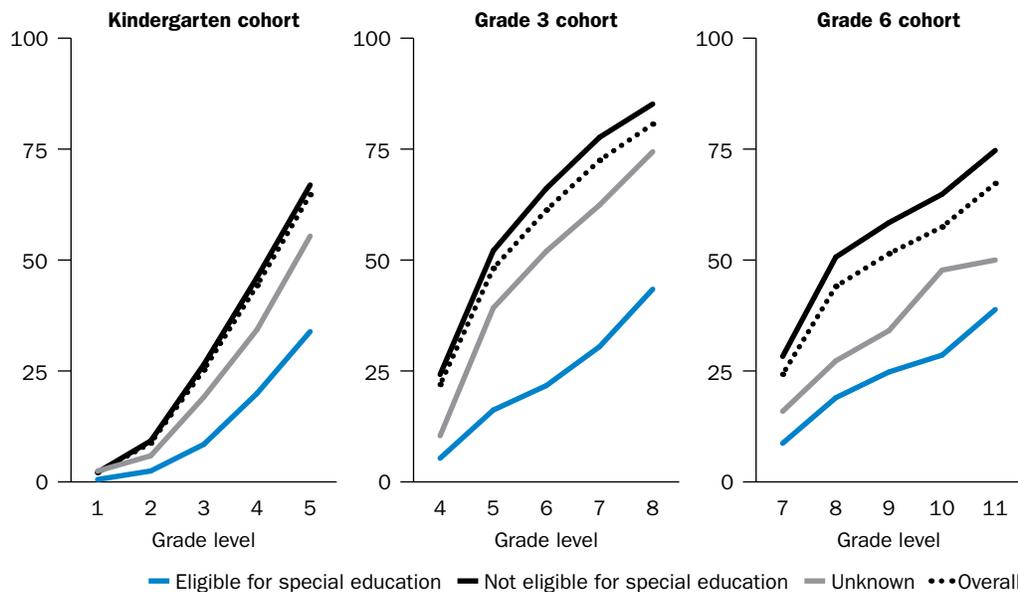


Note: The English language proficiency assessment in 2006/07 serves as a baseline, defining the initial population of English learner students for this analysis. The number of English learner students in each subgroup is as follows. Kindergarten cohort: entry, 4,983; emerging, 1,288; intermediate, 313; and advanced intermediate, 36. Grade 3 cohort: entry, 284; emerging, 682; intermediate, 1,851; and advanced intermediate, 2,321. Grade 6 cohort: entry, 180; emerging, 346; intermediate, 831; and advanced intermediate, 949.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

Figure 3. None of the three grade cohorts of English learner students who were eligible for special education services ever surpassed a cumulative reclassification rate of 50 percent as fluent English proficient, 2006/07–2011/12

Cumulative percentage reclassified as fluent English proficient



For all three grade cohorts English learner students who were eligible for special education services at the start of the study had lower cumulative reclassification rates as fluent English proficient than students who were not eligible

Note: The English language proficiency assessment in 2006/07 serves as a baseline, defining the initial population of English learner students for this analysis. The number of English learner students in each subgroup is as follows. Kindergarten cohort: eligible for special education, 366; not eligible for special education, 6,050; and unknown, 204. Grade 3 cohort: eligible for special education, 525; not eligible for special education, 4,488; and unknown, 125. Grade 6 cohort: eligible for special education, 448; not eligible for special education, 1,814; and unknown, 44.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

The highest cumulative reclassification rate for English learner students who were not eligible for special education services at the start of the study was 85 percent in the grade 3 cohort. In none of the grade cohorts did English learner students who were eligible for special education services achieve a cumulative reclassification percentage of 50 percent. The highest cumulative reclassification percentage for English learner students eligible for special education services was 43 percent in the grade 3 cohort, while the lowest reclassification percentage was 34 percent in the kindergarten cohort.

Some of the largest differences in cumulative reclassification rates were found between English learner students who were eligible for special education services and students who were not and between students at the highest and lowest English language proficiency levels. The difference in cumulative reclassification rates between English learner students who were and those who were not eligible for special education services ranged from 33 percentage points in the kindergarten cohort to 42 percentage points in the grade 3 cohort (see figure 3). The difference in cumulative reclassification rates between English learner students at the highest and lowest English language proficiency levels ranged from 41 percentage points in the kindergarten cohort to 63 percentage points in the grade 3 cohort (see figure 2).

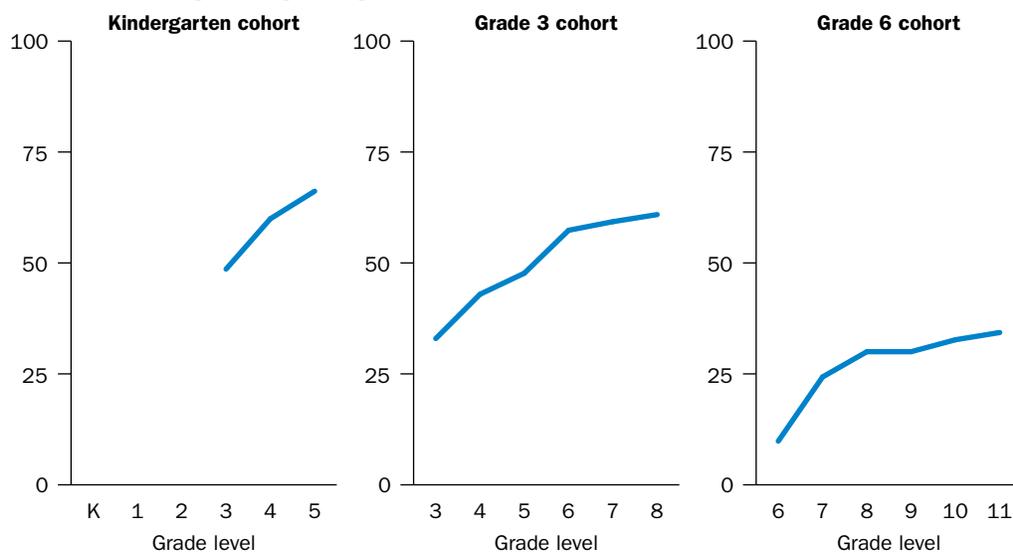
In general, cumulative reclassification rates were lower for English learner students who were eligible for the school lunch program than for their peers who were not eligible and were lower for male English learner students than for their female peers. With one exception English learner students who were eligible for the school lunch program had lower cumulative rates of reclassification as fluent English proficient students than their peers who were not eligible. The difference ranged from a low of 4 percentage points in the grade 6 cohort to a high of 8 percentage points in the kindergarten cohort (see figure C1 in appendix C). In all three cohorts male English learner students had lower cumulative reclassification rates than their female peers. The gap ranged from a low of 1 percentage point in the grade 6 cohort to a high of 7 percentage points in the kindergarten cohort (see figure C2).

How well English learner students did academically in reading and math

On the reading content test the kindergarten cohort had the highest cumulative passing rate, while the grade 3 and grade 6 cohorts experienced steady and then slowing progress. Across the three grade cohorts over the course of the study the cumulative passing rate on the reading content test ranged from 34 percent in the grade 6 cohort to 66 percent in the kindergarten cohort (figure 4). For the grade 3 and grade 6 cohorts the rate of progress in cumulative passing rates in reading was initially steady and then slowed during the later grade levels (see figure 1). For the kindergarten cohort the rate of progress in cumulative passing rates was consistent across the grade levels.

Figure 4. For the grade 3 and grade 6 cohorts the cumulative passing rate progress in reading slowed from the middle to the end of the study, 2006/07–2011/12

Cumulative percentage passing reading



Across the three grade cohorts over the course of the study the cumulative passing rate on the reading content test ranged from 34 percent in the grade 6 cohort to 66 percent in the kindergarten cohort

Note: The English language proficiency assessment in 2006/07 serves as a baseline, defining the initial population of English learner students for this analysis. Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9.

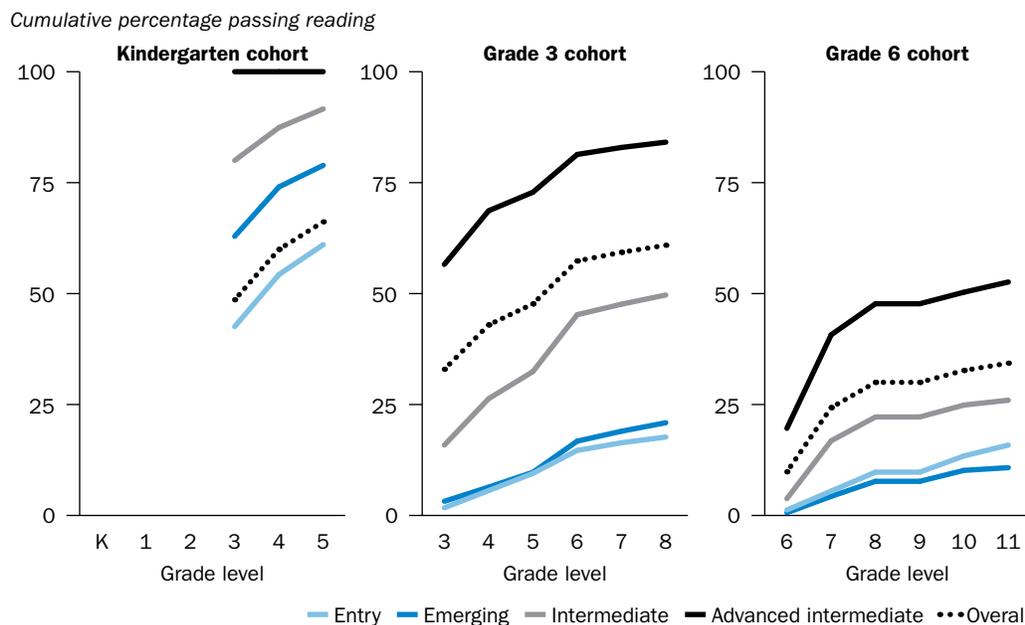
Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

English learner students who began the study at higher English language proficiency levels generally had higher cumulative passing rates on the reading content test than students who started at lower proficiency levels. In the kindergarten and grade 3 cohorts English learner students at each English language proficiency level had higher cumulative passing rates than their peers at lower English language proficiency levels (figure 5). In the kindergarten cohort 100 percent of the English learner students at the highest English language proficiency level below proficient (advanced intermediate, level 4) passed the reading content test at least once during the six-year study period. An exception to this pattern of a higher passing rate on the reading content test at higher English language proficiency levels occurred in the grade 6 cohort. English learner students who started the study at the entry level (level 1) had a higher cumulative passing rate on the reading content test than their peers who started at the emerging level (level 2).

The highest cumulative passing rate on the reading content test was achieved by English learner students in the kindergarten cohort who were at the highest English language proficiency level below proficient, advanced intermediate (100 percent). In the grade 3 and grade 6 cohorts English learner students who started the study at the two lowest English language proficiency levels had final cumulative passing rates of 21 percent or less. The

In the kindergarten and grade 3 cohorts English learner students at each English language proficiency level had higher cumulative passing rates than their peers at lower English language proficiency levels

Figure 5. The cumulative passing rate on the reading content test was 100 percent for English learner students who started the study in kindergarten at the advanced intermediate English language proficiency level but 11 percent for English learner students who started the study in grade 6 at the emerging level, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each subgroup is as follows. Kindergarten cohort: entry, 4,942; emerging, 1,275; intermediate, 310; and advanced intermediate, 38. Grade 3 cohort: entry, 232; emerging, 627; intermediate, 1,733; and advanced intermediate, 2,349. Grade 6 cohort: entry, 164; emerging, 325; intermediate, 820; and advanced intermediate, 958.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

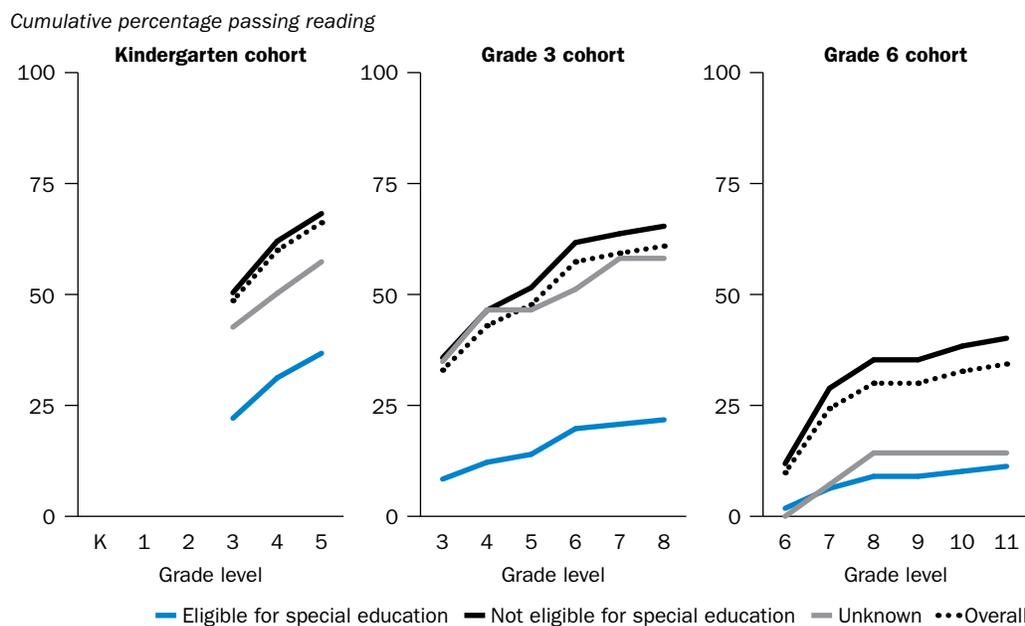
lowest cumulative passing rate was 11 percent for students in the grade 6 cohort who started the study at the emerging level.

English learner students who were eligible for special education services at the start of the study had lower cumulative passing rates on the reading content test than their peers who were not eligible. In all three grade cohorts English learner students who were eligible for special education services at the beginning of the study had lower cumulative passing rates on the reading content test than their peers who were not eligible (figure 6). The difference remained constant for the kindergarten cohort. For the grade 3 and grade 6 cohorts the difference increased as the study progressed. The cumulative passing rate on the reading content test was below 40 percent for English learner students in all three grade cohorts who were eligible for special education services. The highest cumulative passing rate in reading was 37 percent in the kindergarten cohort, followed by 22 percent in the grade 3 cohort, and 11 percent in the grade 6 cohort.

In all three grade cohorts English learner students who were eligible for special education services at the beginning of the study had lower cumulative passing rates on the reading content test than their peers who were not eligible

Some of the largest differences in cumulative passing rates on the reading content test occurred between English learner students who were eligible for special education services and students who were not eligible and between students at the highest and lowest English language proficiency levels. The difference in cumulative passing rates between

Figure 6. English learner students who were eligible for special education services started with lower passing rates on the reading content test than students who were not eligible, and the difference increased over time, 2006/07–2011/12



Note: The English language proficiency assessment in 2006/07 serves as a baseline, defining the initial population of English learner students for this analysis. Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each subgroup is as follows. Kindergarten cohort: eligible for special education, 362; not eligible for special education, 6,006; and unknown, 197. Grade 3 cohort: eligible for special education, 501; not eligible for special education, 4,397; and unknown, 43. Grade 6 cohort: eligible for special education, 444; not eligible for special education, 1,809; and unknown, 14.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

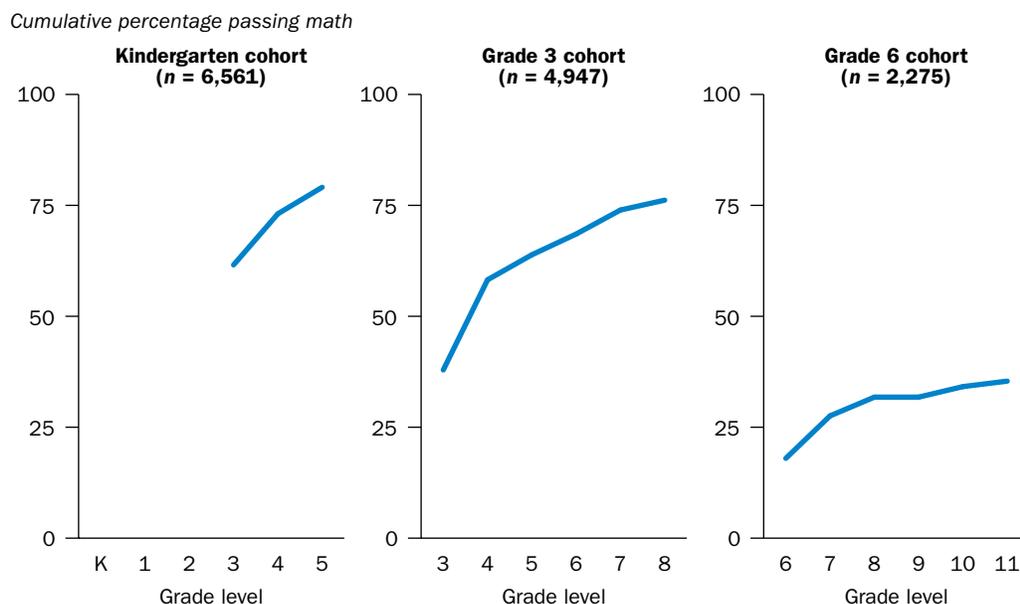
English learner students who were and those who were not eligible for special education services ranged from 29 percentage points in the grade 6 cohort to 43 percentage points in the grade 3 cohort (see figure 6). The difference in cumulative passing rates on the reading content test between English learner students at the highest and lowest English language proficiency levels ranged from 37 percentage points in the grade 6 cohort to 66 percentage points in the grade 3 cohort (see figure 5).

Cumulative passing rates on the reading content test were lower for English learner students who were eligible for the school lunch program than for their peers who were not eligible and were lower for male English learner students than for their female peers. English learner students who were eligible for the school lunch program had lower cumulative passing rates on the reading content test than their peers who were not eligible. The difference ranged from a low of 1 percentage point in the grade 6 cohort to a high of 4 percentage points in both the kindergarten and grade 3 cohorts (see figure C3 in appendix C). Male English learner students had lower cumulative passing rates in reading than their female peers. The gap ranged from a low of 6 percentage points in the kindergarten and grade 6 cohorts to a high of 7 percentage points in the grade 3 cohort (see figure C4).

Cumulative passing rates on the math content test showed the same pattern among subgroups and cohorts as rates on the reading content test: the kindergarten cohort scored highest, and progress eventually slowed for the grade 3 and grade 6 cohorts. Across the three grade cohorts the cumulative passing rate on the math content test ranged from a low of 35 percent in the grade 6 cohort to a high of 79 percent in the kindergarten cohort (figure 7). Similar to progress on the reading content test, progress on the math content

The kindergarten cohort scored highest in cumulative passing rates on both the reading and the math content tests, and progress eventually slowed for the grade 3 and grade 6 cohorts

Figure 7. For English learner students in the grade 6 cohort cumulative passing rate progress on the math content test slowed after the first two years of the study period, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests, and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

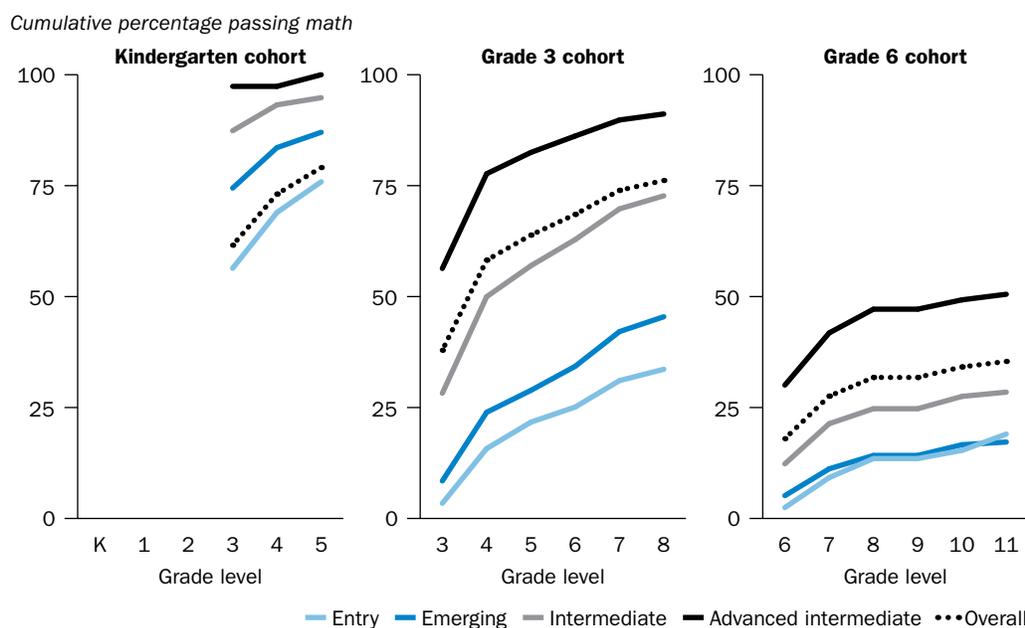
test was greater in cumulative passing rates during the first few years of the study period and then slowed toward the end of the study, especially in the grade 3 and grade 6 cohorts. For example, for the grade 3 cohort the cumulative passing rate on the math content test increased steadily from grade 3 to grade 4 and then started to slow by grade 5. The pattern was similar for the grade 6 cohort, for which there was a break at grade 7, after which the rate slowed through the end of the study.

English learner students who began the study at higher English language proficiency levels generally had higher cumulative passing rates on the math content test than students who started at lower proficiency levels. The patterns of progress on cumulative passing rates for the math content test were similar to those for the reading content test. In the kindergarten and grade 3 cohorts English learner students at each English language proficiency level had higher cumulative passing rates than their peers at lower English language proficiency levels (figure 8). For the grade 6 cohort this pattern continued with one exception: English learner students who started the study at entry proficiency (level 1) had slightly higher cumulative passing rates on the reading content test than their peers who started the study at emerging proficiency (level 2).

English learner students in the kindergarten and grade 3 cohorts at each English language proficiency level had higher cumulative passing rates on the reading and math content tests than their peers at lower English language proficiency levels

The highest cumulative passing rate on the math content test was achieved by English learner students in the kindergarten cohort who were at the highest English language proficiency level below proficient, advanced intermediate, level 4 (100 percent). In the grade

Figure 8. In general, the higher the initial English proficiency level, the higher the cumulative passing rate on the math content test, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests, and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each cohort is as follows. Kindergarten cohort: entry, 4,942; emerging, 1,272; intermediate, 309; and advanced intermediate, 38. Grade 3 cohort: entry, 235; emerging, 627; intermediate, 1,733; and advanced intermediate, 2,352. Grade 6 cohort: entry, 163; emerging, 331; intermediate, 829; and advanced intermediate, 952.

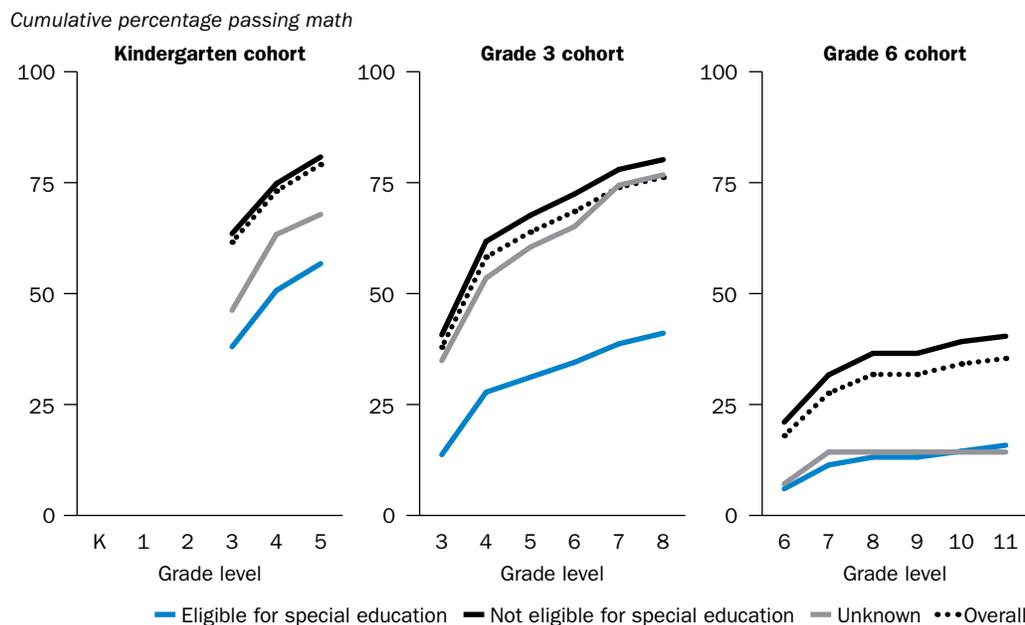
Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

6 cohort English learner students who started the study at advanced intermediate had a cumulative passing rate of 51 percent, while English learner students who started the study at the two lowest English language proficiency levels had final cumulative passing rates of just below 20 percent.

English learner students who were eligible for special education services at the start of the study had lower cumulative passing rates on the math content test than their peers who were not eligible, and the gap generally widened toward the end of the study. As on the reading content test, English learner students who were eligible for special education services at the beginning of the study had low cumulative passing rates on the math content test both overall and compared with their peers who were not eligible for special education services. In the grade 3 and grade 6 cohorts the gap in cumulative passing rates increased during the six-year study period. For the kindergarten cohort the gap remained steady, decreasing by 2 percentage points at the end of the study (figure 9). The cumulative passing rate for English learner students eligible for special education services was low for each cohort, which was especially apparent in the grade 6 cohort. Only the English learner students in the kindergarten cohort who were eligible for special education services surpassed a 50 percent cumulative passing rate on the math content test. For students in the grade 3 cohort who were eligible for special education services 41 percent passed the math content test, while for the grade 6 cohort 16 percent passed. For the grade 6 cohort

As on the reading content test, English learner students who were eligible for special education services at the beginning of the study had low cumulative passing rates on the math content test both overall and compared with their peers who were not eligible for special education services

Figure 9. Of English learner students who were eligible for special education services, only the kindergarten cohort ever surpassed a cumulative passing rate of 50 percent on the math content test, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests, and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each cohort is as follows. Kindergarten cohort: eligible for special education, 363; not eligible for special education, 5,999; and unknown, 199. Grade 3 cohort: eligible for special education, 504; not eligible for special education, 4,400; and unknown, 43. Grade 6 cohort: eligible for special education, 449; not eligible for special education, 1,812; and unknown, 14.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

only 40 percent of the English learner students who were not eligible for special education services passed the math content test by the end of the study period.

Some of the largest differences in cumulative passing rates on the math content test occurred between English learner students who were eligible for special education services and students who were not eligible and between students at the highest and lowest English language proficiency levels. The difference in cumulative passing rates between English learner students who were and those who were not eligible for special education services ranged from 24 percentage points in the kindergarten cohort to 39 percentage points in the grade 3 cohort (see figure 9). The difference in cumulative passing rates on the math content test between English learner students at the highest English language proficiency level below proficient (advanced intermediate, level 4) and the lowest level (entry, level 1) ranged from 24 percentage points in the kindergarten cohort to 58 percentage points in the grade 3 cohort (see figure 8).

Cumulative passing rates on the math content test were generally lower for English learner students who were eligible for the school lunch program and for female English learner students than for their peers. After six years English learner students who were eligible for the school lunch program had slightly lower cumulative passing rates on the math content test than their peers who were not eligible, with the difference ranging from 2 percentage points in the kindergarten and grade 3 cohorts to 3 percentage points in the grade 6 cohort (see figure C5 in appendix C). In the kindergarten cohort female English learner students had cumulative passing rates on the math content test that were generally comparable to those of their male peers. Female English learner students had cumulative passing rates that were 1 percentage point lower than those of their male English learner peers in the grade 3 cohort and 6 percentage points lower in the grade 6 cohort (see figure C6).

For the reading and math content tests two patterns were consistent: English learner students in lower grade cohorts had higher cumulative passing rates than students in higher grade cohorts, and within each grade cohort the cumulative passing rate was higher on the math content test

Comparison of cumulative passing rates across tests and cohorts

For the reading and math content tests two patterns were consistent: English learner students in lower grade cohorts had higher cumulative passing rates than students in higher grade cohorts, and within each grade cohort the cumulative passing rate was higher on the math content test. For example, on the reading content test the kindergarten cohort had the highest cumulative passing rate, at 66 percent, followed by the grade 3 cohort at 61 percent and the grade 6 cohort at 34 percent (table 1). Also within the kindergarten cohort the cumulative passing rate was 13 percentage points higher on the math content test than on the reading content test.

However, across all three tests—Nevada’s English Language Proficiency Assessment and Nevada’s reading and math content tests—and across and within all three grade cohorts, overall cumulative passing rates showed no consistent pattern. For example, in the kindergarten cohort the English learner students had similar cumulative passing rates on the English Language Proficiency Assessment (65 percent) and on the reading content test (66 percent), but both rates were lower than the cumulative passing rate on the math content test (79 percent; see table 1). In the grade 6 cohort the cumulative reclassification rate as fluent English proficient students was highest (67 percent), while the cumulative passing rate was 34 percent for the reading content test and 35 percent for the math content test. In

Table 1. Cumulative passing rates for each grade cohort for each test, 2006/07–2011/12 (percent of students passing the test)

| Test | Kindergarten | Grade 3 | Grade 6 |
|---|--------------|---------|---------|
| English Language Proficiency Assessment | 65 | 81 | 67 |
| Reading content test | 66 | 61 | 34 |
| Math content test | 79 | 76 | 35 |

Note: The number of English learner students in each analytic sample is as follows. Kindergarten cohort: English language proficiency, 6,620; reading, 6,565; and math, 6,561. Grade 3 cohort: English language proficiency, 5,138; reading, 4,941; and math, 4,947. Grade 6 cohort: English language proficiency, 2,306; reading, 2,267; and math, 2,275.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

contrast to the subject matter tests, the grade 3 and grade 6 cohorts had higher cumulative passing rates on the English Language Proficiency Assessment than the kindergarten cohort.

Comparison of cumulative passing rates with Nevada's progress expectations

Nevada's annual measurable achievement objective 1. Nevada's annual measurable achievement objective 1 for English learner students—an increase of one English language proficiency level per school year—means that English learner students should have passed Nevada's English Language Proficiency Assessment within one to four years of the start of the study, depending on the proficiency level at which they started in 2006/07. For example, English learner students who started the study at the entry level (level 1) should have been able to achieve reclassification as fluent English proficient students (level 5) within four years of the start of the study.

English learner students did not generally achieve the expected rate of progress of gaining one level per year in English proficiency but rather advanced at different rates.

How well English learner students in this sample met this progress expectation differed according to their cohort and language proficiency level at entry. However, less than half the English learner students in any of the grade cohort English language proficiency level groups reached reclassification as fluent English proficient students within the expected timeline of advancing one proficiency level each year (see table A1 in appendix A). The proportion of English learner students who met the expected reclassification timeline ranged from a low of 12 percent (grade 6 cohort students who started the study at emerging proficiency, level 2) to a high of 46 percent (grade 6 cohort students who started at advanced intermediate proficiency, level 4).

Implications of the study findings

This section includes some implications of the study findings for policy, practice, and future research and discusses how the findings expand on or vary from the findings of previous research.

Three findings are consistent with current research and suggest areas for focused interventions

Nevada may want to consider devoting additional attention to improving teaching practices and support services to help the following underperforming English learner student subgroups.

Less than half the English learner students in any of the grade cohort English language proficiency level groups reached reclassification as fluent English proficient students within the expected timeline of advancing one proficiency level each year

English learner students who are eligible for special education services. All English learner students who are eligible for special education services will likely need additional support to be successful, and this support may need to vary by specific subgroups of learning disabilities. Further investigation into more effective practices for improving the achievement of English learner students, especially English learner students in secondary school, who are eligible for special education services appears warranted.

Older English learner students. On the reading and math content tests English learner students in the grade 6 cohort always made less progress than students in the lower cohorts. Older English learner students may require additional, possibly different, supports if they are to meet at least minimal expectations for academic achievement. Or, perhaps, middle and high school teachers will need additional or different skills from those they currently have. These teachers may need additional, targeted professional development to effectively support the academic English literacy needs of their older English learner students across content areas.

English learner students eligible for the school lunch program and male English learner students. While performance differences between English learner students who were and those who were not eligible for the school lunch program, and between male and female English learner students, were generally smaller than those for the other two characteristics examined (eligibility for special education services and initial English language proficiency level), they were consistently present. Accordingly, comprehensive supports to improve English learner achievement would likely need to include supports targeted to the additional or unique needs of English learner students who are eligible for the school lunch program and male English learner students.

All English learner students who are eligible for special education services will likely need additional support to be successful, and this support may need to vary by specific subgroups of learning disabilities

Three findings expand the current research literature and point to areas for possible changes in practice or for further research

Three of the study findings offer evidence not found in the general research literature.

Differentiated support by students' English language proficiency levels may be needed to help students at the lowest English language proficiency levels succeed on current and future subject matter tests. For this study the achievement standard on the subject matter tests was low: passing the subject matter test once over the course of six years. Nevertheless, English learner students who started the study at lower proficiency levels still had low cumulative pass rates on reading and math content tests, especially compared with their grade-level peers who started the study at higher English language proficiency levels. While these findings are consistent with the research literature (Cook et al., 2008; Grissom, 2004; Kieffer, 2008, 2010, 2011; Salazar, 2007), they also show something more: that large percentages of English learner students who were at the lower English language proficiency levels were not able to advance sufficiently in English proficiency and content knowledge to pass subject matter tests once over six years. These findings suggest that changes in teaching and support practices may be needed if English learner students at lower English language proficiency levels are ever going to meet minimum content achievement expectations.

Examining English learner student achievement among special education students by specific learning disabilities may provide useful information for more effective, targeted supports. In this study English learner students who were eligible for special education services had lower final cumulative passing rates on all three tests than their peers who

were not eligible for special education services, which is consistent with the research literature (see, for example, Lipka, Siegel, & Vukovic, 2005). Additional research could take into consideration the fact that English learner students who are eligible for special education services cover a diverse set of learning-related disabilities (Kavale, 2005). Examining the achievement rates of these different groups may provide useful information on how to best support each group.

Nevada may want to consider changing its annual measurable achievement expectations or its teaching and support practices, as most English learner students did not meet the progress and achievement targets. This study's findings show that across grade cohorts and English language proficiency levels, less than 50 percent of the English learner students in each of the 12 cohort English language proficiency level subgroups made the expected rate of progress. The percentage of English learner students who met the expected rate of progress ranged widely from a low of 12 percent (grade 6 cohort, emerging proficiency, level 2) to a high of 46 percent (grade 6 cohort, advanced intermediate proficiency, level 4). At the same time the percentage of English learner students within any of the grade cohort English language proficiency level subgroups who eventually reclassified during the five years of the study period ranged from 29 percent (grade 6 cohort, entry proficiency, level 1) to 100 percent (kindergarten cohort, advanced intermediate proficiency, level 4). Thus, it may be too rigid or simplistic to assume that all English learner students, regardless of English language proficiency level and grade level, will advance at the same pace. More flexible standards might be useful to educators. Further, that such low percentages of English learner students meet the expected achievement targets may also signal that teaching and support practices are not effective. Improvements in these areas may also increase English learner student achievement.

Nevada may want to examine why some cohorts of English learner students outperformed their grade-level peers with higher English language proficiency levels. This finding was not consistent with the general research literature and points to areas for additional research to better understand such discrepancies

One finding was not consistent with the research literature and points to areas for additional research

Nevada may want to examine why some cohorts of English learner students outperformed their grade-level peers with higher English language proficiency levels. This finding was not consistent with the general research literature and points to areas for additional research to better understand the discrepancies between this study's results and the current research base.⁴

In a few instances English learner students with lower initial English language proficiency levels had higher cumulative passing rates than their peers who had higher initial proficiency levels. In the grade 6 cohort English learner students at the entry proficiency level (level 1) had cumulative passing rates on the reading and math content tests that were comparable with or slightly higher than those of their peers at the emerging level (level 2). It is not clear why this occurred. One possibility is that this finding may be driven by variation in the prevalence of risk factors, such as eligibility for special education services or the school lunch program across students with different English language proficiency levels. Or, perhaps, the actual difference in English proficiency between English learner students at these two lower levels is much smaller than between any other levels. Further analyses in these areas could help clarify this inconsistency with the research literature.

Limitations of the study

This study has two limitations. The first relates to the scope of the sample. The analytic sample excludes mobile students who left or entered each of the two school districts, Clark County and Washoe County, during the study period. It also excludes students who repeated or skipped a grade, because of difficulties tracking students who did not progress with the rest of their grade cohort. As a result, this sample is a more stable group of English learner students than is the case in most schools. Thus, the cumulative passing rates on examined tests could be higher than for the English learner population as a whole. To address the possibility that the study sample may differ from the English learner population as a whole, table B2 in appendix B describes the difference between the whole population and the analytic sample.

The second limitation relates to comparisons among grade cohorts based on differences in sample characteristics. The students in the kindergarten, grade 3, and grade 6 cohorts likely have different characteristics, especially related to initial English language proficiency level. For students in the kindergarten cohort, kindergarten was their initial enrollment year in Nevada, and their English language proficiency level was their initial English language proficiency level when they started school. For students in the grade 3 and grade 6 cohorts their English language proficiency level was their level at the start of the study, which most likely differed from their proficiency level at the time they started school. Furthermore, the composition of the kindergarten, grade 3, and grade 6 cohorts could vary because of differences in student mobility, screening opportunities for special education services, and grade repetition across cohorts.

Appendix A. Nevada programs that provide context for the study

To provide context for the analysis in this report, this appendix describes Nevada’s process for identification of students who are eligible for special education services, identification of students as English learner students, English Language Proficiency Assessment and levels, reading and math content tests and achievement levels, English learner support programs, and how Nevada (and other states) define “making progress in learning English.” These descriptions provide a context for the state analysis and are not intended as evaluations of the state programs or assessments.

Identification of students who are eligible for special education services

Students are eligible for special education services if they are determined to have a learning disability under the Individuals with Disabilities Education Act of 2004 (34 C.F.R. Secs. 300 et al.) and Section 504 of the Rehabilitation Act of 1973. Nevada’s procedures for making this determination are intended to comply with these federal statutes, Nevada Revised Statutes, and the Nevada Administrative Code. The procedures are described in *Special Education Rights of Parents and Children* (Nevada Department of Education, 2009). The steps in the process of determining whether students have a learning disability and are eligible for special education services include:

- Proactive efforts by public education agencies to identify, locate, and evaluate students with disabilities within their jurisdictions.
- Use of pre-referral interventions to help students suspected of having a disability improve their school success.
- Referral of students suspected of having a disability who did not respond sufficiently to pre-referral services for a full evaluation initiated by a student’s parent or a local public education agency staff member.
- Assembly of an evaluation team that
 - Reviews information on the child’s progress.
 - Collects and reviews additional functional, developmental, and academic information following reasonable efforts to obtain parent consent to collect this information along with parent input and teacher recommendations.
 - Determines, along with the parent(s), whether the student has a learning disability that affects learning and whether the student needs specially designed instruction.

The specially designed instruction for each student is set forth in their individualized education program. Accommodations or additional supports for language needs for English learner students are made on an individual basis by each evaluation team. Each English learner student’s evaluation team determines the degree to which the individualized education program alters the student’s participation in any English language support program.

Identification of students for an English learner program

As required by Title III of the No Child Left Behind Act of 2001, each state must distribute a home language survey to all students when they first enroll in the state’s public schools. The schools must assess the English language proficiency of all students whose parents or guardians report that a language other than English is spoken at home. Nevada administers its own version of a home language survey and uses its English language

proficiency test to make the initial determination of whether a student should be classified as an English learner. Students whose parents or guardians report that a language other than English is spoken at home and who do not pass the English language proficiency test are classified as English learner students.

English language proficiency test and subject matter tests

Nevada's English Language Proficiency Assessment is the English language proficiency test referred to throughout this study. It was developed to test students in five grade spans (K–1, 2–3, 4–5, 6–8, and 9–12), with each grade span testing four different domains: listening, writing, reading, and speaking. Each domain and the overall score have five levels of proficiency: entry (level 1), emerging (level 2), intermediate (level 3), advanced intermediate (level 4), and proficient (level 5). Before 2009/10 English learner students were reclassified as fluent English proficient if they achieved the proficient level for their overall test score. Since 2009/10 English learner students must achieve proficient for the overall test score and achieve advanced intermediate or higher for the four domains of listening, speaking, reading, and writing to reclassify as fluent English proficient and exit the English learner program. Nevada administers its English language proficiency test each fall, between October and December. In 2012/13, after the conclusion of the study period, Nevada switched to the World-Class Instructional Design and Assessment as its English language proficiency test.

For subject matter tests students in grades 3–8 take the Nevada criterion-referenced tests, and in high school students take the High School Proficiency Examination; however, no High School Proficiency Examination is administered in grade 9. Both the criterion-referenced tests and High School Proficiency Examination measure how well the students learned the subject matter, and both are aligned to Nevada state standards for their grade. Two of the criterion-referenced test subject areas, reading and math, are the subject matter tests referred to throughout this report. The criterion-referenced tests have four performance levels: emergent/developing, approaches standard, meets standard, and exceeds standard. Students must score at or above meets standard to pass the reading and math content tests. Nevada administers its criterion-referenced tests and High School Proficiency Examination each spring. In 2014/15, after the conclusion of the study period, Nevada switched to the Smarter Balanced Assessment Consortium content tests in English language arts and reading.

Types of English learner support programs

In Nevada, English learner students are placed in mainstream classes with their native English-speaking peers. Classroom teachers, with the support of their schools, provide their English learner students with the English language development supports they need (Horsford, Mokhtar, & Sampson, 2013). As a result, a variety of English learner support programs and activities occur across schools and classrooms in the Clark County and Washoe County School Districts.

Guidelines for making progress in learning English

States have discretion to determine what is considered “making progress in learning English” under the annual measurable achievement objective 1 requirement of Title III of

the No Child Left Behind Act of 2001. According to an American Institutes for Research brief prepared for the U.S. Department of Education in May 2010, half of the states with sufficient documentation of their classification criteria (17 of 34 states examined in the study) defined annual measurable achievement objective 1 progress as advancing one English language proficiency level (or more) per school year until students score at the required English language proficiency level for reclassification as fluent English proficient (Boyle, Taylor, Hurlburt, & Soga, 2010).

Nevada defines annual measurable achievement objective 1 progress as achieving a 25-point gain (less than one English language proficiency level) on the overall English language proficiency test scaled scores each year (Nevada Department of Education, 2011). However, discussions with state department of education staff indicated that they generally considered English learner students to be making sufficient annual progress toward reclassification as fluent English proficient when they averaged one English language proficiency level per year during the study period.⁵ At this faster rate of one English language proficiency level per school year, English learner students would be expected to achieve reclassification as fluent English proficient in one to four years, depending on their initial English language proficiency level. Table A1 compares the percentage of students who reclassified within the expected annual measurable achievement objective 1 timeline and students who reclassified over the longer course of the study period for each English language proficiency level. For example, for English learner students who started at level 3 (intermediate) in the kindergarten cohort, 27 percent were reclassified within two years, as expected by annual measurable achievement objective 1, while 94 percent passed within the five years of the study period for the English Language Proficiency Assessment.

Table A1. Percentage of English learner students achieving reclassification as fluent English proficient within the expected number of years, by initial English language proficiency level, 2006/07–2011/12

| English language proficiency level in 2006/07 | AMAO 1 | | Kindergarten cohort (percent) | | Grade 3 cohort (percent) | | Grade 6 cohort (percent) | |
|---|---|-------------|--|---|--|---|--|---|
| | Expected years to reclassification as fluent English proficient student | Target year | Cumulative reclassification rate by AMAO 1 expected year | Actual cumulative reclassification rate at the end of study | Cumulative reclassification rate by AMAO 1 expected year | Actual cumulative reclassification rate at the end of study | Cumulative reclassification rate by AMAO 1 expected year | Actual cumulative reclassification rate at the end of study |
| Entry (level 1) | 4 | 2010/11 | 31 | 59 | 21 | 33 | 24 | 29 |
| Emerging (level 2) | 3 | 2009/10 | 24 | 79 | 17 | 48 | 12 | 30 |
| Intermediate (level 3) | 2 | 2008/09 | 27 | 94 | 32 | 80 | 33 | 65 |
| Advanced intermediate (level 4) | 1 | 2007/08 | 33 | 100 | 40 | 96 | 46 | 90 |

AMAO 1 is annual measurable achievement objective 1, which set an expectation of increasing one English language proficiency level per school year for English learner students.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

Appendix B. Data and methodology

This appendix describes construction of the analytic samples and explains how the data were analyzed.

Analytic sample

Students were grouped into three analytic cohorts based on their grade level in 2006/07: kindergarten, grade 3, and grade 6. Within each grade cohort students' initial English language proficiency level was determined based on the 2006/07 English Language Proficiency Assessment. Thus, 2006/07 was the English learner baseline identification year, and English learner student proficiency progress was initially measured in 2007/08. For the reading and math content tests, achievement progress for English learner students was measured from the first year of the study, 2006/07, with the exception of the students in the kindergarten cohort. Students were first administered the reading and math content tests in grade 3, which was 2009/10 for the students in the kindergarten cohort (box B1).

For each grade cohort the analytic sample was based on the following criteria (a student was included in the analytic sample if the student met criteria 1–3 below, as well as either 4A, 4B, or 4C):

1. Was in the data system in all six years, 2006/07–2011/12.
2. Had an initial English language proficiency-level assessment score lower than proficient in 2006/07.
3. Started from the cohort grade (kindergarten, 3, or 6) in 2006/07 and had normal grade progress (no grade repeaters or grade skippers) through 2011/12.

Box B1. Timing of English Language Proficiency Assessment and reading and math content tests

The analytic period differed for the English Language Proficiency Assessment and the subject matter tests. For the English language proficiency analysis 2006/07 was the baseline year for the identification of the English language proficiency level subgroups. That year was chosen because no English language proficiency level data were available prior to 2006/07 across the three states, Arizona, Nevada, and Utah, which were required for parallel reports that were part of this analysis. English language proficiency progress was measured from that point. Thus, in the English language proficiency analysis 2007/08 was the first year of measured progress, and 2011/12 was the final year, for a total of five years. For the subject matter tests students that were classified as English learner students in 2006/07 were identified, and for the grade 3 and grade 6 cohorts, achievement levels from 2006/07 through 2011/12 were examined, for a total of six years. For students in the kindergarten cohort who were classified as English learner students in 2006/07, their first subject matter tests were administered in grade 3, which was in 2009/10. Subject matter achievement levels for the English learner students in the kindergarten cohort were examined for a total of three years, from 2009/10 through 2011/12.

and

4A. For the English language proficiency level assessment analysis achieved English language proficiency for reclassification as fluent English proficient or took the English Language Proficiency Assessment in the last school year (2011/12).

or

4B. For the reading analysis had state reading content test results in each year the test was administered during the study period.

or

4C. For the math analysis had state math content results in each year the test was administered during the study period.

In sum the analytic sample included all students identified as English learner students who were enrolled in Clark County School District's and Washoe County School District's public schools in the designated grade of the first year of the cohort, who progressed to the next grade level each year, and who had the required test data throughout the six years being analyzed. Each cohort consisted of a separate sample of students. For example, the students in the grade 3 cohort were English learner students who enrolled in a Clark County School District or Washoe County School District public school in grade 3 in 2006/07, progressed to the next grade level each year, and for whom the required Nevada test score data were available through grade 8 in 2011/12.

Because of these criteria for inclusion, the sample excluded mobile students who left and entered each district during the study period. Grade repeaters or skippers were excluded because tests differ by grade level. Thus, it is not accurate to annually aggregate test results across a cohort of students when students are taking different grade-level tests, such as a second grade repeater and a third grader in the same year. Further, it is difficult to track students who did not progress with the rest of their grade cohort, which would have required districts to provide additional years of data for only a small percentage of students.

The numbers and percentages for English learner students who did not make normal grade progress were as follows in Clark County School District: kindergarten cohort, 357 (4.6 percent); grade 3 cohort, 267 (4.6 percent); and grade 6 cohort, 141 (4.3 percent), and as follows in Washoe County School District: kindergarten cohort, 0 (0.0 percent); grade 3 cohort, 20 (1.8 percent); and grade 6 cohort, 13 (2.9 percent).

Hence, because the final sample was a more geographically stable population, as well as one without grade repeaters and skippers, the proficiency rates and passing rates could be higher than for the English learner population as a whole. Limitations because of the characteristics of the analytic sample and other issues are described above and in the limitations section of the main report.

The steps for preparing the student samples for each of the three assessments (English proficiency, reading content, and math content) are described in table B1.

Table B1. Steps to getting an analytic sample for each test

| Cohort | Step | Sample category | Sample for English learner proficiency test | | Sample for English language arts content test | | Sample for math content test | |
|--------------|-------------|---|---|---------|---|---------|------------------------------|---------|
| | | | Number | Percent | Number | Percent | Number | Percent |
| Kindergarten | Start point | English learner students in 2006/07 (initial English language proficiency level <5) | 9,062 | 100.0 | 9,062 | 100.0 | 9,062 | 100.0 |
| | Step 1 | Students excluded because they were not in the school district all six years | 1,996 | 22 | 1,996 | 22 | 1,996 | 22 |
| | Step 2 | Students excluded because of abnormal grade progress | 357 | 4 | 357 | 4 | 357 | 4 |
| | Step 3 | Students excluded because of missing values | 89 | 1 | 144 | 2 | 148 | 2 |
| | End point | Analytic sample | 6,620 | 73 | 6,565 | 72 | 6,561 | 72 |
| Grade 3 | Start point | English learner students in 2006/07 (initial English language proficiency level <5) | 6,879 | 100.0 | 6,879 | 100.0 | 6,879 | 100.0 |
| | Step 1 | Students excluded because they were not in the school district all six years | 1,292 | 19 | 1,292 | 19 | 1,292 | 19 |
| | Step 2 | Students excluded because of abnormal grade progress | 287 | 4 | 287 | 4 | 287 | 4 |
| | Step 3 | Students excluded because of missing values | 162 | 2 | 359 | 5 | 353 | 5 |
| | End point | Analytic sample | 5,138 | 75 | 4,941 | 72 | 4,947 | 72 |
| Grade 6 | Start point | English learner students in 2006/07 (initial English language proficiency level <5) | 3,751 | 100.0 | 3,751 | 100.0 | 3,751 | 100.0 |
| | Step 1 | Students excluded because they were not in the school district all six years | 1,173 | 31 | 1,173 | 31 | 1,173 | 31 |
| | Step 2 | Students excluded because of abnormal grade progress | 154 | 4 | 154 | 4 | 154 | 4 |
| | Step 3 | Students excluded because of missing values | 118 | 3 | 157 | 4 | 149 | 4 |
| | End point | Analytic sample | 2,306 | 61 | 2,267 | 60 | 2,275 | 61 |

Note: Percentages might not total to 100 because of rounding.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

Data analysis

The data include student-level data from 2006/07–2011/12. Data were analyzed in the three parallel six-year grade span cohorts: kindergarten through grade 5, grade 3 through grade 8, and grade 6 through grade 11. Annual cumulative numbers and percentages of English learner students who met each progress criterion were calculated, grouped by grade cohort (an analytical method recommended by Cook et al., 2012). At the start of the study (2006/07) analyses were conducted for each English learner grade cohort as a whole, as well as by the four student characteristics: English language proficiency level, eligibility for special education services, eligibility for the school lunch program, and gender. The similarities and differences across the three cohorts were also explored.

Note that Nevada administers its state subject matter tests starting in grade 3. Therefore, for research questions 3 and 6 the kindergarten cohort has results for grades 3–5. In high school Nevada does not administer its subject matter tests in grade 9.

Characteristics of students in the sample and the cohorts

Table B2 compares the characteristics of students in the analytic samples with the entire initial English learner student population and all analytic samples.

Table B2. Characteristics of students in the analytic samples and the initial English learner population, 2006/07

| Grade cohort and characteristic | Student characteristic | Sample for English Language Proficiency Assessment | | Sample for reading content test | | Sample for math content test | | Initial English learner population in 2006/07 | | |
|---|---|---|---------|---------------------------------|---------|------------------------------|---------|---|---------|---|
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent | |
| Kindergarten | Initial English language proficiency level in 2006/07 | | | | | | | | | |
| | Entry | 4,983 | 75 | 4,942 | 75 | 4,942 | 75 | 6,957 | 77 | |
| | Emerging | 1,288 | 19 | 1,275 | 19 | 1,272 | 19 | 1,671 | 18 | |
| | Intermediate | 313 | 5 | 310 | 5 | 309 | 5 | 384 | 4 | |
| | Advanced intermediate | 36 | 1 | 38 | 1 | 38 | 1 | 50 | 1 | |
| | Eligibility for special education services in 2006/07 | | | | | | | | | |
| | Eligible | 366 | 6 | 362 | 6 | 363 | 6 | 539 | 6 | |
| | Not eligible | 6,050 | 91 | 6,006 | 91 | 5,999 | 91 | 7,950 | 88 | |
| | Unknown | 204 | 3 | 197 | 3 | 199 | 3 | 573 | 6 | |
| | Eligibility for the school lunch program in 2006/07 | | | | | | | | | |
| | Eligible | 2,859 | 43 | 2,821 | 43 | 2,818 | 43 | 3,814 | 42 | |
| | Not eligible | 3,650 | 55 | 3,636 | 55 | 3,635 | 55 | 4,981 | 55 | |
| | Unknown | 111 | 2 | 108 | 2 | 108 | 2 | 267 | 3 | |
| | Gender | | | | | | | | | |
| | Female | 3,263 | 49 | 3,235 | 49 | 3,231 | 49 | 4,302 | 48 | |
| | Male | 3,357 | 51 | 3,330 | 51 | 3,330 | 51 | 4,565 | 50 | |
| | Unknown | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 195 | 2 | |
| | Total number of students | | 6,620 | | 6,565 | | 6,561 | | 9,062 | |
| | Grade 3 | Initial English language proficiency level in 2006/07 | | | | | | | | |
| | | Entry | 284 | 6 | 232 | 5 | 235 | 5 | 496 | 7 |
| Emerging | | 682 | 13 | 627 | 13 | 627 | 13 | 968 | 14 | |
| Intermediate | | 1,851 | 36 | 1,733 | 35 | 1,733 | 35 | 2,461 | 36 | |
| Advanced intermediate | | 2,321 | 45 | 2,349 | 48 | 2,352 | 48 | 2,954 | 43 | |
| Eligibility for special education services in 2006/07 | | | | | | | | | | |
| Eligible | | 525 | 10 | 501 | 10 | 504 | 10 | 688 | 10 | |
| Not eligible | | 4,488 | 87 | 4,397 | 89 | 4,400 | 89 | 5,843 | 85 | |
| Unknown | | 125 | 3 | 43 | 1 | 43 | 1 | 348 | 5 | |
| Eligibility for the school lunch program in 2006/07 | | | | | | | | | | |
| Eligible | | 3,229 | 63 | 3,128 | 63 | 3,130 | 63 | 4,220 | 61 | |
| Not eligible | | 1,840 | 36 | 1,813 | 37 | 1,817 | 37 | 2,516 | 37 | |
| Unknown | | 69 | 1 | 0 | 0.0 | 0 | 0.0 | 143 | 2 | |
| Gender | | | | | | | | | | |
| Female | | 2,402 | 47 | 2,288 | 46 | 2,290 | 46 | 3,140 | 46 | |
| Male | | 2,736 | 53 | 2,653 | 54 | 2,657 | 54 | 3,615 | 52 | |
| Unknown | | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 124 | 2 | |
| Total number of students | | 5,138 | | 4,941 | | 4,947 | | 6,879 | | |

(continued)

Table B2. Characteristics of students in the analytic samples and the initial English learner population, 2006/07 (continued)

| Grade cohort and characteristic | Student characteristic | Sample for English Language Proficiency Assessment | | Sample for reading content test | | Sample for math content test | | Initial English learner population in 2006/07 | | |
|---------------------------------|---|--|---------|---------------------------------|---------|------------------------------|---------|---|---------|--|
| | | Number | Percent | Number | Percent | Number | Percent | Number | Percent | |
| Grade 6 | Initial English language proficiency level in 2006/07 | | | | | | | | | |
| | Entry | 180 | 8 | 164 | 7 | 163 | 7 | 375 | 10 | |
| | Emerging | 346 | 15 | 325 | 14 | 331 | 15 | 630 | 17 | |
| | Intermediate | 831 | 36 | 820 | 36 | 829 | 36 | 1,316 | 35 | |
| | Advanced intermediate | 949 | 41 | 958 | 42 | 952 | 42 | 1,430 | 38 | |
| | Eligibility for special education services in 2006/07 | | | | | | | | | |
| | Eligible | 448 | 19 | 444 | 19 | 449 | 19 | 662 | 17 | |
| | Not eligible | 1,814 | 79 | 1,809 | 80 | 1,812 | 80 | 2,878 | 77 | |
| | Unknown | 44 | 2 | 14 | 1 | 14 | 1 | 211 | 6 | |
| | Eligibility for the school lunch program in 2006/07 | | | | | | | | | |
| | Eligible | 1,598 | 69 | 1,584 | 70 | 1,590 | 70 | 2,582 | 69 | |
| | Not eligible | 687 | 30 | 683 | 30 | 685 | 30 | 1,109 | 29 | |
| | Unknown | 21 | 1 | 0 | 0 | 0 | 0 | 60 | 2 | |
| | Gender | | | | | | | | | |
| | Female | 1,032 | 45 | 1,013 | 45 | 1,016 | 45 | 1,623 | 43 | |
| | Male | 1,274 | 55 | 1,254 | 55 | 1,259 | 55 | 2,043 | 55 | |
| | Unknown | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 85 | 2 | |
| | Total number of students | | 2,306 | | 2,267 | | 2,275 | | 3,751 | |

Note: Percentages might not add up to 100 because of rounding.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

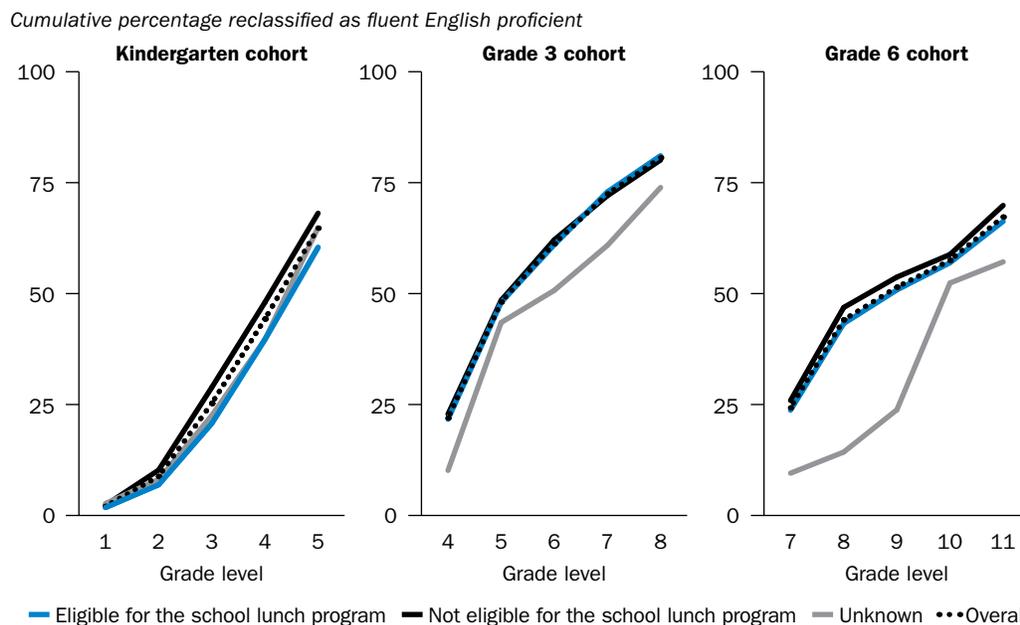
Appendix C. Additional findings

This appendix presents additional findings related to English learner students' cumulative reclassification rates as fluent English proficient students and cumulative passing rates on Nevada's reading content test and math content test based on eligibility for the school lunch program (a proxy for low-income status) and gender.

English language proficiency

For all three grade cohorts English learner students who were eligible for the school lunch program at the start of the study had lower cumulative reclassification rates as fluent English proficient students than their peers who were not eligible, but the differences narrowed after five years. English learner students who were eligible for the school lunch program had lower final cumulative reclassification rates as fluent English proficient students (that is, passing Nevada's English Language Proficiency Assessment) than their peers who were not eligible. The difference was 8 percentage points or less in each of the three grade cohorts. For the kindergarten cohort both subgroups had cumulative reclassification rates of 60 percent or higher (figure C1). In the grade 3 cohort, which had the highest cumulative reclassification rate as fluent English proficient students for this

Figure C1. In the kindergarten and grade 6 cohorts English learner students who were not eligible for the school lunch program consistently achieved higher cumulative reclassification rates as fluent English proficient than did students who were eligible, 2006/07–2011/12



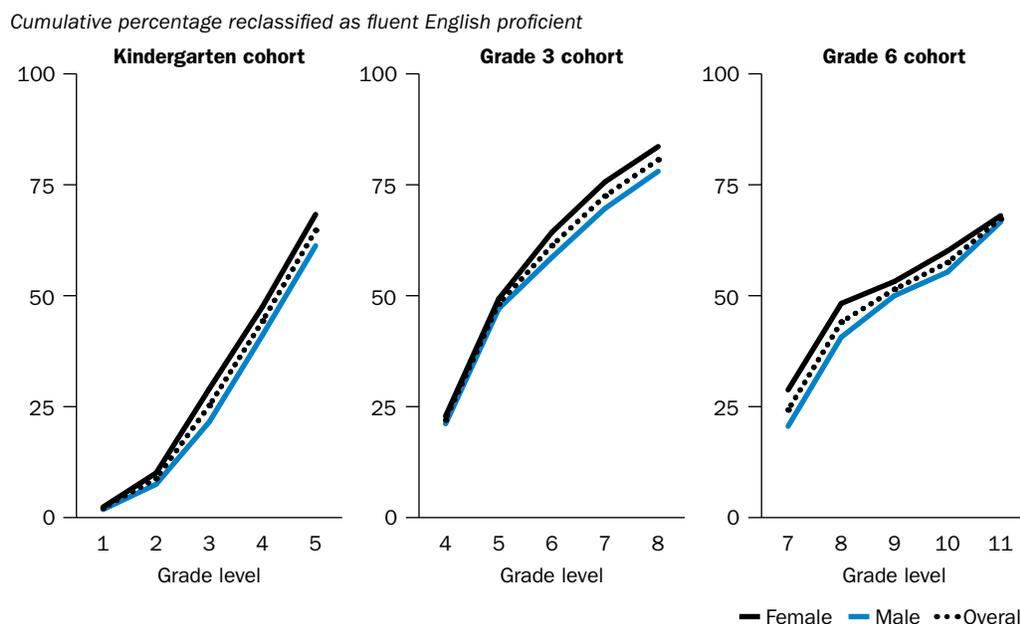
Note: The English language proficiency assessment in 2006/07 served as a baseline, defining the initial population of English learner students for this analysis. The number of English learner students in each subgroup is as follows. Kindergarten cohort: eligible for the school lunch program, 2,859; not eligible for the school lunch program, 3,650; and unknown, 111. Grade 3 cohort: eligible for the school lunch program, 3,229; not eligible for the school lunch program, 1,840; and unknown, 69. Grade 6 cohort: eligible for the school lunch program, 1,598; not eligible for the school lunch program, 687; and unknown, 21.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

characteristic, 80 percent of English learner students who were eligible for the school lunch program achieved reclassification as fluent English proficient, and 81 percent of English learner students who were not eligible achieved reclassification. For the kindergarten and grade 6 cohorts English learner students who were eligible for the school lunch program at the start of the study had similar cumulative reclassification rates as English learner students who were not eligible for the school lunch program. However, after five years there was a small difference.

For the three grade cohorts female English learner students had higher cumulative reclassification rates as fluent English proficient than male English learner students, though after five years the differences were 7 percentage points or less. Across all three grade cohorts female English learner students had higher cumulative reclassification rates as fluent English proficient than male English learner students; however, the differences between the subgroups in the final cumulative reclassification rates were 7 percentage points or less (figure C2). For example, for the grade 6 cohort 68 percent of female English learner students achieved reclassification as fluent English proficient, while 67 percent of male English learner students did—a difference of 1 percentage point. The difference in the final cumulative reclassification rate between female and male English learner students as fluent English proficient was greatest in the kindergarten cohort, at 7 percentage points. For the grade 3 cohort the difference was 6 percentage points.

Figure C2. Across all three grade cohorts female English learner students consistently achieved higher cumulative reclassification rates as fluent English proficient students than did male English learner students, 2006/07–2011/12



Note: The English language proficiency assessment in 2006/07 served as a baseline, defining the initial population of English learner students for this analysis. The number of English learner students in each subgroup is as follows. Kindergarten cohort: female, 3,263; male, 3,357. Grade 3 cohort: female, 2,402; male, 2,736. Grade 6 cohort: female, 1,032; male, 1,274.

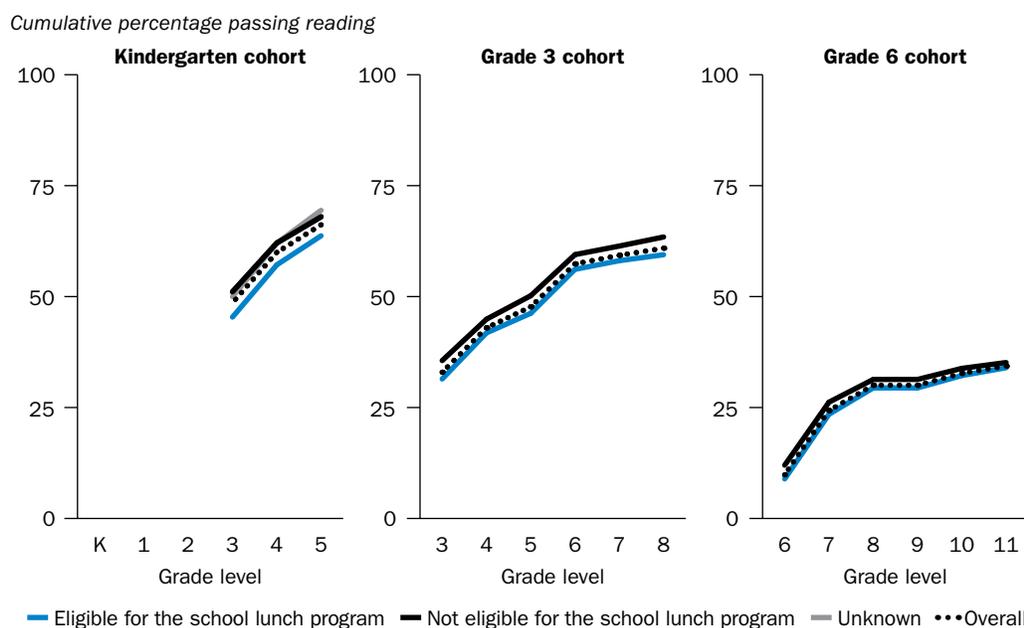
Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

Reading content test

For the three grade cohorts English learner students who were eligible for the school lunch program at the start of the study had lower cumulative passing rates on Nevada's reading content test than did English learner students who were not eligible, a difference that remained after six years. English learner students who were eligible for the school lunch program had lower cumulative passing rates on the reading content test than their grade-level peers who were not eligible for the school lunch program (figure C3). For example, in the kindergarten cohort the English learner students who were eligible for the school lunch program had a final cumulative passing rate of 64 percent on the reading content test, while their peers who were not eligible had a final cumulative passing rate of 68 percent. For the kindergarten cohort the difference in the final cumulative passing rate between the two groups was 4 percentage points, while the initial difference—based on results from the first reading content test given to the kindergarten cohort English learner students during grade 3—was 6 percentage points.

For the three grade cohorts female English learner students had higher cumulative passing rates on the reading content test than did male English learner students; after six years the differences increased for all three grade cohorts. Across all three grade cohorts female English learner students had higher cumulative passing rates on the reading

Figure C3. English learner students who were not eligible for the school lunch program consistently had higher cumulative passing rates on the reading content test than did students who were eligible, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each subgroup is as follows. Kindergarten cohort: eligible for the school lunch program, 2,821; not eligible for the school lunch program, 3,636; and unknown, 108. Grade 3 cohort: eligible for the school lunch program, 3,128; not eligible for the school lunch program, 1,813; and unknown, 0. Grade 6 cohort: eligible for the school lunch program, 1,584; not eligible for the school lunch program, 683; and unknown, 0.

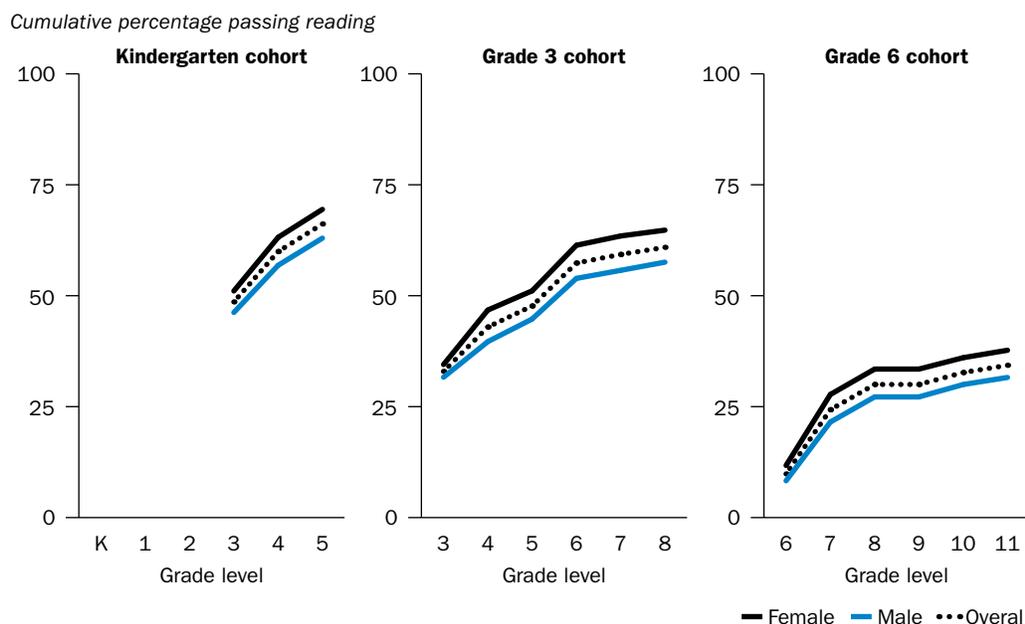
Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

content test than did male English learner students (figure C4). For example, for the grade 3 cohort female English learner students had a final cumulative passing rate of 65 percent, while male English learner students had a final cumulative passing rate of 58 percent, a difference of 7 percentage points. For the grade 3 cohort the initial difference in the reading passing rates (that is, in the first year of the study) was 3 percentage points. For the grade 6 cohort female English learner students had a 3 percentage point higher passing rate at the beginning of the study and a 6 percentage point higher cumulative passing rate by the end of the study (grade 11).

Math content test

English learner students who were eligible for the school lunch program had lower cumulative passing rates on Nevada’s math content test than did students who were not eligible, a difference that remained constant over time for the kindergarten cohort but not for the grade 3 and grade 6 cohorts. English learner students who were eligible for the school lunch program had slightly lower cumulative passing rates on the math content test than their grade-level peers who were not eligible for the school lunch program (figure C5). For example, in the grade 3 cohort, English learner students who were eligible for the school lunch program had a cumulative passing rate of 76 percent on the math content test, while their peers who were not eligible for the school lunch program had a cumulative

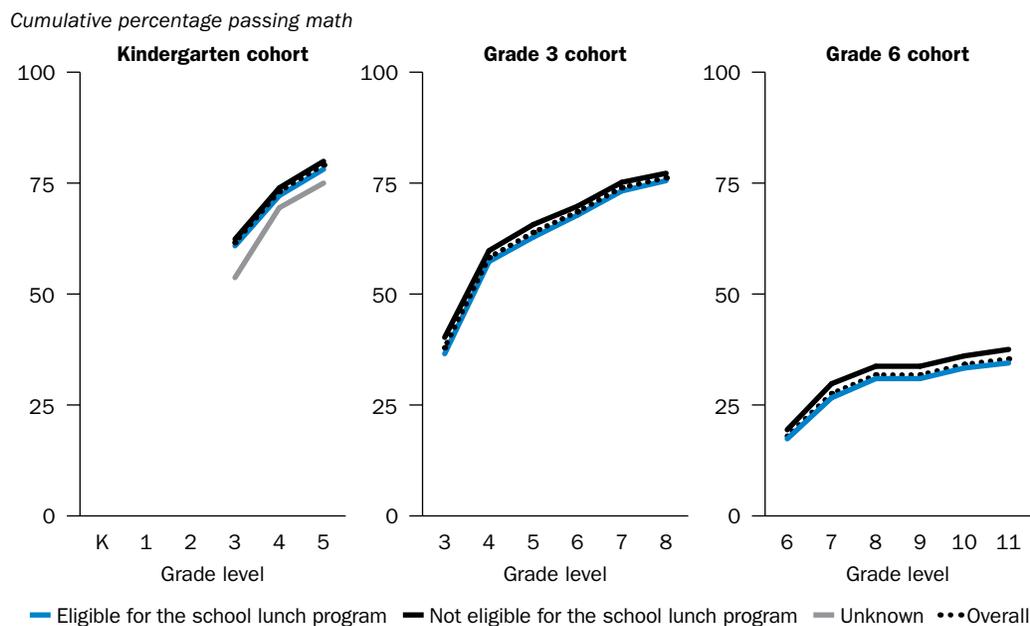
Figure C4. Female English learner students consistently had higher cumulative passing rates on the reading content test than did male English learner students, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each subgroup is as follows. Kindergarten cohort: female, 3,235; male, 3,330. Grade 3 cohort: female, 2,288; male, 2,653. Grade 6 cohort: female, 1,013; male, 1,254.

Source: Authors’ analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

Figure C5. English learner students who were not eligible for the school lunch program consistently had higher cumulative passing rates on the math content test than did students who were eligible for the school lunch program, 2006/07–2011/12



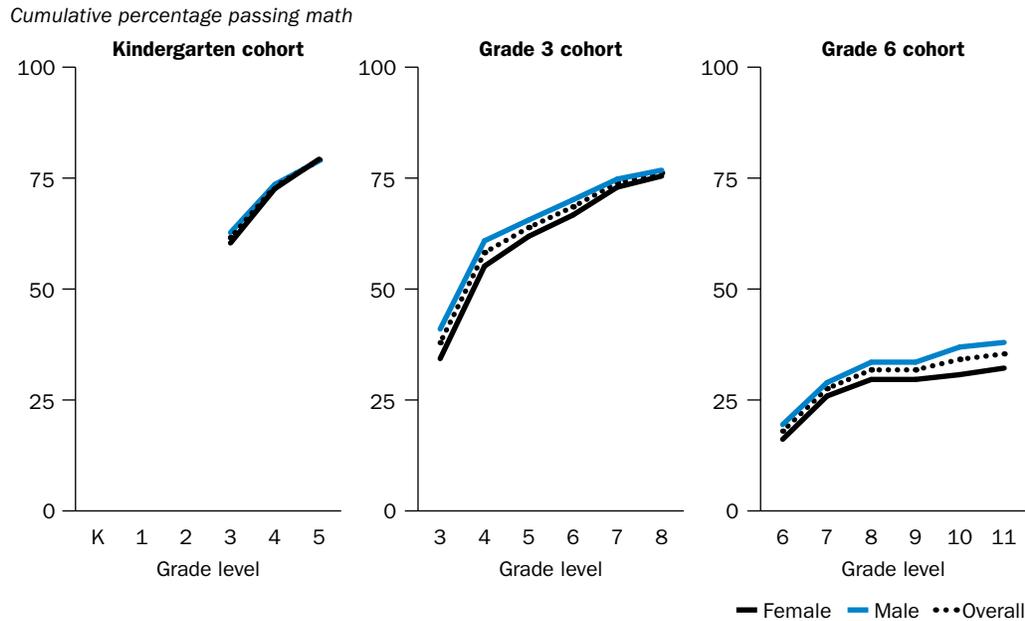
Note: Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each subgroup is as follows. Kindergarten cohort: eligible for school lunch, 2,818; not eligible for school lunch, 3,635; and unknown, 108;. Grade 3 cohort: eligible for school lunch, 3,130; not eligible for school lunch, 1,817; and unknown, 0. Grade 6 cohort: eligible for school lunch, 1,590; not eligible for school lunch, 685; and unknown, 0.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

passing rate of 77 percent, a difference of 1 percentage point. The difference in the math passing rate at the start of the study for the grade 3 cohort was 4 percentage points.

After six years the difference in cumulative passing rates on the math content test for female English learner students and male English learner students narrowed for the kindergarten and grade 3 cohorts but increased for the grade 6 cohort. The difference in cumulative passing rates on the math content test between male and female English learner students was never greater than 7 percentage points each year. That 7-percentage-point difference occurred in the grade 3 cohort's initial year (34 percent of female English learner students passed the math content test versus 41 percent of male English learner students; figure C6).

Figure C6. In the kindergarten and grade 3 cohorts final cumulative passing rates on the math content test were comparable for female and male English learner students, 2006/07–2011/12



Note: Students in grades 3–8 take the Nevada criterion-referenced tests and students in high school take the High School Proficiency Examination; no High School Proficiency Examination is administered in grade 9. The number of English learner students in each subgroup is as follows. Kindergarten cohort: female, 3,231; male, 3,330. Grade 3 cohort: female, 2,290; male, 2,657. Grade 6 cohort: female, 1,016; male, 1,259.

Source: Authors' analysis of student-level data from Clark and Washoe County School Districts, 2006/07–2011/12.

Notes

1. Nevada no longer administers these tests. The English Language Proficiency Assessment has been replaced with the WIDA ACCESS, and the criterion-referenced tests have been replaced with the Smarter Balanced Assessment Consortium content tests in English language arts and math. See appendix A for additional details.
2. This report documents a study that was replicated in three states: Arizona, Nevada, and Utah. Thus, while the data and findings naturally differ from one report to the other, the explanation of why the study was done, the review of relevant literature, and the description of methods are nearly the same in each report.
3. The Nevada State Department of Education did not collect all the data necessary to conduct the analyses statewide during the study period. Together, the Clark County School District and the Washoe County School District educate approximately 87 percent of the English learner students in the state.
4. This study performed no statistical tests. Hence, the small differences that were found in this study may not yield a statistically significant difference.
5. Personal communication with Jonathan Gibson, Nevada State Title III/Migrant Programs Professional at the Nevada Department of Education, March 14–18, 2014.

References

- Boyle, A., Taylor, J., Hurlburt, S., & Soga, K. (2010). *Title III accountability: Behind the numbers: ESEA evaluation brief: The English language acquisition, language enhancement, and academic achievement act*. Washington, DC: U.S. Department of Education. <http://eric.ed.gov/?id=ED511982>
- Collier, V. P. (1989). How long? A synthesis on academic achievement in a second language. *TESOL Quarterly*, 23(3), 509–531. <http://eric.ed.gov/?id=EJ396653>
- Collier, V. P. (1992). A synthesis of studies examining long-term language minority student data on academic achievement. *Bilingual Research Journal*, 16(1–2), 187–212. <http://eric.ed.gov/?id=EJ460177>
- Cook, G., Linqianti, R., Chinen, M., & Jung, H. (2012). *National evaluation of Title III implementation supplemental report: Exploring approaches to setting English language proficiency performance criteria and monitoring English learner progress*. Washington, DC: U.S. Department of Education and American Institutes for Research. <http://eric.ed.gov/?id=ED531979>
- Cook, H. G., Wilmes, C., Boals, T., & Santos, M. (2008). *Issues in the development of annual measurable achievement objectives for WIDA Consortium states* (WCER No. 2008–2). Wisconsin Center for Education Research Working Paper. Madison, WI: University of Wisconsin. <http://eric.ed.gov/?id=ED501340>
- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2005). English learners in U.S. schools: An overview of research findings. *Journal of Education for Students Placed at Risk*, 10(4), 363–385. <http://eric.ed.gov/?id=EJ717935>
- Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not—say. *American Educator*, 32(2), 8–23.
- Grissom, J. B. (2004). Reclassification of English learners. *Education Policy Analysis Archives*, 12(36), 1–38. <http://eric.ed.gov/?id=EJ852317>
- Halle, T., Hair, E., Wandner, L., McNamara, M., & Chien, N. (2012). Predictors and outcomes of early versus later English language proficiency among English language learners. *Early Childhood Research Quarterly*, 27(1), 1–20. <http://eric.ed.gov/?id=EJ947502>
- Horsford, S. D., Mokhtar, C., & Sampson, C. (2013). *Nevada's English language learner population: A review of enrollment, outcomes, and opportunities*. Las Vegas, NV: The Lincy Institute, University of Las Vegas.
- Horwitz, A. R., Uro, G., Price-Baugh, R., Simon, C., Uzzell, R., Lewis, S., & Casserly, M. (2009). *Succeeding with English language learner students: Lessons learned from the Great City Schools*. Washington, DC: Council of Great City Schools. <http://eric.ed.gov/?id=ED508234>

- Kavale, K. A. (2005). Identifying specific learning disability: Is responsiveness to intervention the answer? *Journal of Learning Disabilities*, 38(6), 553–562.
- Kieffer, M. (2008). Catching up or falling behind? Initial English proficiency, concentrated poverty, and the reading growth of language minority learners in the United States. *Journal of Educational Psychology*, 100(4), 851–868. <http://eric.ed.gov/?id=EJ823716>
- Kieffer, M. (2010). Socioeconomic status, English proficiency, and late-emerging reading difficulties. *Educational Researcher*, 39(6), 484–486. <http://eric.ed.gov/?id=EJ901134>
- Kieffer, M. (2011). Converging trajectories: Reading growth in language minority learners and their classmates, kindergarten to grade 8. *American Educational Research Journal*, 48(5), 1187–1225. <http://eric.ed.gov/?id=EJ939251>
- Kindler, A. L. (2002). *Survey of the states' limited English proficient students and available educational programs and services 2000–2001: Summary report*. Washington, DC: George Washington University, National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs.
- Klingner, J. K., Artiles, A. J., & Barletta, M. L. (2006). English language learners who struggle with reading: Language acquisition or LD? *Journal of Learning Disabilities*, 39(2), 108–128. <http://eric.ed.gov/?id=EJ757924>
- Liasidou, A. (2013). Bilingual and special educational needs in inclusive classrooms: Some critical and pedagogical considerations. *Support for Learning*, 28(1), 11–16. <http://eric.ed.gov/?id=EJ1003202>
- Lipka, O., Siegel, L. S., & Vukovic, R. (2005). The literacy skills of English language learners in Canada. *Learning Disabilities Research and Practice*, 20(1), 39–49. <http://eric.ed.gov/?id=EJ687027>
- Massachusetts Department of Elementary and Secondary Education. (2012). *Transitioning English language learners in Massachusetts: An exploratory data review*. Malden, MA: Author.
- McCardle, P., McCarthy-Mele, J., Cutting, L., Leos, K., & D'Emilio, T. (2005). Learning disabilities in English language learners: Identifying the issues. *Learning Disabilities Research and Practice*, 20(1), 1–5.
- McGraw, R., Lubienski, S. T., & Strutchens, M. E. (2006). A closer look at gender in NAEP mathematics achievement and affect data: Intersections with achievement, race and socio-economic status. *Journal for Research in Mathematics Education*, 37(2), 129–150. <http://eric.ed.gov/?id=EJ765478>
- Mulligan, G., Halle, T., & Kinukawa, A. (2012). *Reading, mathematics, and science achievement of language-minority students in grade 8* (NCES No. 2012–028). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. <http://eric.ed.gov/?id=ED531335>

- Nevada Department of Education. (2011). Annual Measurable Achievement Objectives (AMAOs): 2011–12 school year. Retrieved January 19, 2014, from http://ellp.ccsd.net/Resources/AMAO_Information/NDE_AMAO_Criteria_2012.pdf.
- Nevada Department of Education. (2009). *Special education rights of parents and children*. Carson City, NV: Author. Retrieved October 6, 2014, from http://www.doe.nv.gov/Special_Ed_Additional_Resources/.
- Nguyen, H. T. (2012). General education and special education teachers collaborate to support English language learners with learning disabilities. *Issues in Teacher Education*, 21(1), 127–152. <http://eric.ed.gov/?id=EJ986820>
- No Child Left Behind Act of 2001. (2002). Pub. L. No. 107–110, 115 Stat. 1425.
- Olsen, L. (2010). *Reparable harm: Fulfilling the promise of educational opportunity for California's long term English learners*. Long Beach, CA: Californians Together.
- Perie, M., Moran, R., & Lutkus, A. D. (2005). *NAEP 2004 trends in academic progress: Three decades of student performance in reading and mathematics* (NCES No. 2005–464). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. <http://eric.ed.gov/?id=ED485627>
- Quality Counts. (2009). Portrait of a population: How English language learner students are putting schools to the test. *Education Week*, 28(17). <http://eric.ed.gov/?id=EJ826948>
- Rathbun, A., & West, J. (2004). *From kindergarten through third grade: Children's beginning school experiences* (NCES No. 2004–007). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. <http://eric.ed.gov/?id=ED483078>
- Roberts, G., & Bryant, D. (2011). Early mathematics achievement trajectories: English-language learner and native English-speaker estimates, using the early childhood longitudinal survey. *Developmental Psychology*, 47(4), 916–930. <http://eric.ed.gov/?id=EJ934434>
- Roberts, S. A. (2009). Supporting English language learners' development of mathematical literacy. *Democracy & Education*, 18(3), 29–36. <http://eric.ed.gov/?id=EJ856295>
- Ruiz-de-Velasco, J., & Fix, M. (2000). *Overlooked & underserved: Immigrant students in U.S. secondary schools*. Washington, DC: The Urban Institute. <http://eric.ed.gov/?id=ED449275>
- Salazar, J. J. (2007). *Master Plan evaluation report for English learners—2005/2006*. Los Angeles, CA: Los Angeles Unified School District, Program Evaluation and Assessment Branch.
- Short, D. J., & Fitzsimmons, S. (2007). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners*. New York, NY: Carnegie Corporation.

The Regional Educational Laboratory Program produces 7 types of reports



Making Connections

Studies of correlational relationships



Making an Impact

Studies of cause and effect



What's Happening

Descriptions of policies, programs, implementation status, or data trends



What's Known

Summaries of previous research



Stated Briefly

Summaries of research findings for specific audiences



Applied Research Methods

Research methods for educational settings



Tools

Help for planning, gathering, analyzing, or reporting data or research