

English Language Development among American Indian English Learner Students in New Mexico

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New Mexico's Every Student Succeeds Act state plan set the goal for all English learner students to attain English proficiency within five years. The Regional Educational Laboratory Southwest English Learners Research Partnership conducted this study to better understand progress toward English proficiency among American Indian English learner students. The study examined two statewide cohorts of American Indian students identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15 in New Mexico public schools. The study found that most American Indian English learner students were not reclassified as English proficient within five years. Similarly, most American Indian English learner students did not meet grade level standards on New Mexico state assessments in English language arts and math in grades 3 and 4, regardless of whether they attained English proficiency and were reclassified within five years. However, considerably higher percentages of American Indian English learner students who were reclassified as English proficient met grade level standards in both English language arts and math compared with students who were not reclassified. Finally, students who attended a school with a bilingual multicultural education program (BMEP) for at least four years were reclassified as English proficient and met grade level standards on state assessments in English language arts and math at higher rates than students who never attended a school with a BMEP. Staff at the New Mexico Public Education Department, district and school leaders, and teachers can use the findings from this study to determine how best to support English language development among American Indian English learner students.

Why this study?

New Mexico's Every Student Succeeds Act state plan sets forth annual English language proficiency growth targets for English learner students and expectations that all students attain English proficiency within five years. Students identified as English learner students in kindergarten are expected to develop language skills in the four domains of listening, speaking, reading, and writing and attain full proficiency by grade 4. The New Mexico Public Education Department set these goals to establish rigorous expectations for how school districts across the state serve English learner students (New Mexico Administrative Code 6.32.2.9; New Mexico Public Education Department, 2019a, 2019b).

Helping English learner students achieve English language proficiency is critical to their long-term academic success. Students who do not gain sufficient English language proficiency and who are not reclassified as English proficient within six years are at risk of becoming long-term English learner students in secondary school (Regional Educational Laboratory West, 2016).¹ English learner students at the secondary level often lack full access to academic content in English language arts, math, and science (Umansky, 2016, 2018); are less likely to take

For additional information, including technical methods and supporting analyses, access the report appendixes at <https://go.usa.gov/xu8UG>.

1. Definitions for long-term English learner students vary across states and school districts but typically refer to students who have been identified as English learner students and enrolled in U.S. schools for six years or more and have not been reclassified as English proficient (Regional Educational Laboratory West, 2016).

college-level courses in high school (Holzman et al., 2020); and are less likely to enroll or persist in college (Phillips et al., 2017).

American Indian English learner students have unique education needs. First, unlike English learner students who are recent arrivals in the United States, American Indian English learner students in New Mexico typically come from families who have lived in the state or country for multiple generations. Some students may speak their Native language as their first language and English as a second language, while others may speak only English but use a modified English influenced by Native language structure and patterns or have not acquired standard academic English proficiency (Carjuzaa & Ruff, 2016). Therefore, supports for language development among American Indian English learner students may vary widely. Second, many American Indian English learner students—including those in New Mexico—attend school in small, rural districts with limited access to instructors who are qualified to teach English as a second language, particularly to American Indian English learner students (Carjuzaa & Ruff, 2016). Third, there is a long history of schools providing culturally inappropriate services to American Indian English learner students, particularly schools in communities near American Indian reservations (Demmert, 2001). As a result, American Indian English learner students may experience cultural dissonance between their home and school environments (Carjuzaa & Ruff, 2016), particularly where teachers do not have expertise in addressing the needs of American Indian English learner students.

The Regional Educational Laboratory Southwest English Learners Research Partnership² conducted this study to better understand the progress of American Indian English learner students toward English language proficiency. American Indian students constituted 17 percent (8,092 students) of English learner students in New Mexico in the 2015/16 school year (New Mexico Public Education Department, 2016). New Mexico Public Education Department staff and school district leaders can use the findings from this study to identify ways to support the English language development of American Indian English learner students. For example, they might consider further exploring the root causes of American Indian English learner students' low English proficiency and identify strategies to support these students and address their needs. In addition, teachers might consider providing additional supports to help American Indian English learner students improve their reading, speaking, and writing skills, and district and school leaders might support these efforts by offering teachers professional development and other research-based resources. Finally, because districts often use bilingual multicultural education programs (BMEPs) to support English learner students, findings from the study may provide information on how embedding students' culture in the curriculum supports students, as well as information about how to improve BMEPs (see box 1 for definitions of key terms).

Box 1. Key terms

ACCESS for ELLs (ACCESS). ACCESS is a suite of summative English proficiency assessments that measure students' academic English language proficiency overall and on four domains: listening, speaking, reading, and writing (Cook & MacGregor, n.d.). Students receive scale scores and proficiency-level scores for each domain. The proficiency-level scores range from 1.0 to 6.0 (assigned to one decimal point): 1.0-1.9 (entering), 2.0-2.9 (emerging), 3.0-3.9 (developing), 4.0-4.9 (expanding), 5.0-5.9 (bridging), and 6.0 (reaching). In 2017/18 ACCESS underwent a standards-setting process to better align the proficiency score scaling with current college- and career-ready standards at each grade level. However, the range of ACCESS proficiency-level scores did not change. Students identified on the WIDA-ACCESS Placement Test as English learner students take the ACCESS assessment each winter until they are reclassified as English proficient.

Bilingual multicultural education program (BMEP). BMEPs in New Mexico provide core content and instruction in both English and a student's home language (except for the enrichment model, which is intended for fully English proficient

2. Members of the Southwest English Learners Research Partnership include staff at the New Mexico Public Education Department and several local education agencies from various regions in New Mexico, faculty from New Mexico institutions of higher education, and staff from Dual Language Education of New Mexico, a nonprofit organization that supports dual language education programs in New Mexico.

students). The program comprises five models. The *heritage language model*, which includes American Indian languages, provides language instruction to students in the home language or heritage language of their family or tribe; the goal is to arrest home language loss and ultimately recover (or newly develop) proficiency in the language. The *enrichment model* further develops students' proficiency in the home or heritage language and integrates instruction in the history and culture of New Mexico; this model does not include English language instruction for English learner students. The *dual language immersion model* develops bilingualism and biliteracy in English and another language. The *maintenance model*, designed specifically for English learner students, provides instruction in English as a second language at the level that is appropriate to the student's proficiency in English. The *transitional model* prepares English learner students to transition to the district's all-English general education program. Students could attend schools with different BMEP models throughout the five-year study period.

English learner student. A New Mexico student whose primary home language is identified through a parent survey or through the school as other than English is considered a potential English learner student and is administered the WIDA-ACCESS Placement Test (Cook & MacGregor, n.d.). A student who scores 27 or lower on this screening test is identified as an English learner student.

Initial English proficiency in kindergarten. For this study, American Indian English learner students were classified into three initial English proficiency groups based on their composite scores on the Kindergarten ACCESS for ELLs assessment: low = 1.0-2.9, medium = 3.0-4.9, and high = 5.0-6.0. To be reclassified as English proficient, students must score in the high range.

Kindergarten WIDA-ACCESS Placement Test. A language screening test (not the same as the ACCESS for ELLs assessment) given at the beginning of kindergarten to students whose home language is other than English to measure their English language proficiency to determine whether they could benefit from English language instructional services (Cook & MacGregor, n.d.).

Met grade-level standards in English language arts and math. Student scores on New Mexico state achievement tests in English language arts and math are classified into five levels: level 1-did not yet meet expectations, level 2-partially met expectations, level 3-approached expectations, level 4-met expectations, and level 5-exceeded expectations. Students met grade-level standards if they scored at level 4 or higher. In 2014/15-2017/18 students in grade 3-8 took the Partnership for Assessment of Readiness for College and Careers English language arts and math assessments. In 2018/19, students in grade 3-8 took the New Mexico Standards-Based Transition Assessment of Mathematics and English Language Arts.

Reclassified as English proficient. The study uses the state's identification of students as English learner students. Students are reclassified as English proficient when they are no longer coded as an English learner student in the state data system. This typically occurs when students earn a composite score of 5.0 or higher on the ACCESS. Districts receive ACCESS results at the end of the school year or at the start of the subsequent school year.

Research questions

This study addressed seven research questions about American Indian English learner students in New Mexico:

1. What percentage of American Indian students who entered kindergarten for the first time in 2013/14 or 2014/15 were identified as English learner students within five years, and among those who were identified, in which grade were they most likely to be identified?
2. How did American Indian students who were identified as English learner students in kindergarten perform on the Kindergarten ACCESS for ELLs (ACCESS), an English language proficiency assessment?
3. What percentage of American Indian students identified as English learner students at initial kindergarten entry were reclassified as English proficient within five years, and among those who were reclassified, what was the average time to reclassification?

4. How did the final English proficiency scores compare for American Indian English learner students who were reclassified as English proficient within five years of entering kindergarten and for students who were not reclassified? Did final proficiency scores vary by ACCESS domain?
5. What percentage of American Indian students identified as English learner students in kindergarten met grade-level standards on New Mexico state assessments in English language arts and math in grade 3 and 4? How did performance on these assessments compare for American Indian English learner students who were reclassified as English proficient and for those who were not reclassified?
6. What percentage of American Indian students identified as English learner students in kindergarten attended a school with a bilingual multicultural education program (BMEP)? What percentage attended a school with an American Indian heritage language BMEP?
7. Were American Indian English learner students who attended a school with a BMEP for at least four years more likely than students who never attended a school with a BMEP to be reclassified as English proficient or to meet grade-level standards on New Mexico state assessments in English language arts and math?

For research question 7, differences in outcomes between students who attended a school with a BMEP and those who did not might be due to other differences between the two groups of students (such as home language, parent support or involvement, or proximity to a reservation or pueblo). These results should not be interpreted as indicating that attending a school with a BMEP for at least four years causes these differences in outcomes.

Box 2 summarizes the data sources, sample, and methods used to answer the research questions (see appendix A for more details).

Box 2. Data sources, sample, methods, and limitations

Data sources. Student-level records and school characteristics data for 2012/13 through 2018/19 came from the New Mexico Public Education Department. Student-level data used for the study included student records of enrollment in New Mexico public schools, student demographic characteristics, student English proficiency assessment scores, student achievement scores in English language arts and math on the New Mexico state assessments, and indicators of whether a school offered a bilingual multicultural education program (BMEP), the BMEP models offered, and the American Indian languages taught in heritage language BMEPs.

Sample. The study used data from two statewide cohorts of American Indian students. Data on these students were collected for four years after kindergarten. Most students in the sample completed grade 4 during the study time frame; however, some students were retained. Therefore, findings in this report are described as occurring within five years of entering kindergarten rather than through a particular grade level. The analyses include all available data on students, so students are included in the analyses even if they were enrolled in a New Mexico public school for fewer than five years.

The sample for research question 1 included 875 unique students in the 2013/14 kindergarten cohort (data were collected from 2013/14 through 2017/18) and 886 unique students in the 2014/15 kindergarten cohort (data were collected from 2014/15 through 2018/19). The sample for research questions 2-6 was limited to students who were identified as English learner students in kindergarten, including 690 unique students in the 2013/14 kindergarten cohort and 685 unique students in the 2014/15 kindergarten cohort. A description of student characteristics for the two statewide cohorts is in table A2 in appendix A. The sample used to answer research question 7 was limited to students who attended a school with a BMEP for at least four years or not at all: 233 unique students in the 2013/14 kindergarten cohort and 426 unique students in the 2014/15 kindergarten cohort.

Methodology. For research question 1, the study team calculated the percentage of American Indian students who entered kindergarten for the first time in 2013/14 or 2014/15 who were identified as English learner students within five years.

For research question 2, the study team calculated American Indian English learner students' average initial English proficiency levels overall and in each of the four domains (listening, speaking, reading, and writing) on the Kindergarten ACCESS for ELLs (ACCESS) assessment. The study team compared students' scores across the four domains.

For research question 3, the study team calculated the percentage of American Indian students identified as English learner students in kindergarten who were reclassified as English proficient within five years as well as the average time to reclassification for students who were reclassified. The study team examined how average time to reclassification differed by initial English proficiency level. The study team also calculated the percentage of American Indian English learner students who were reclassified as English proficient separately by cohort (see appendix B) because the ACCESS underwent a standards-setting process during the study period (in 2017/18) to better align the proficiency score scaling with current college- and career-ready standards (see appendix B). For binary outcomes differences between groups of 5 percentage points or greater are considered meaningful and highlighted in the narrative. For continuous outcomes differences between groups of .25 standard deviations or greater are considered meaningful and highlighted in the narrative.

For research question 4, the study team calculated American Indian English learner students' average final English proficiency levels overall and in each of the four domains on the ACCESS assessment and compared the final scores for American Indian English learner students who were reclassified and those who were not. The final English proficiency level represents the score from the ACCESS completed prior to being reclassified (for students reclassified during the study) or in the final year of the study (for students who were not reclassified during the study). Differences between groups of .25 standard deviations or greater are considered meaningful and highlighted in the narrative.

For research question 5, the study team calculated the percentage of American Indian English learner students who met grade-level standards on the New Mexico state assessments in English language arts and math in grade 3 and 4 by whether students were reclassified. The analyses were conducted separately for each cohort due to changes in the state English language arts and math assessments during the study period (see appendix B).¹ Differences between groups of 5 percentage points or greater are considered meaningful and highlighted in the narrative.

For research question 6, the study team calculated the percentage of students who attended a school with a BMEP at any time during the five-year study period, overall and for each BMEP model: heritage language, enrichment, dual language immersion, maintenance, and transitional.² For students who attended a school with a heritage language BMEP, the study team calculated the percentage of students who attended a school with each of five American Indian languages (Diné, Zuni, Keres, Tewa, and Jicarilla).

For research question 7, the study team assessed differences in rates of being reclassified as English proficient and meeting grade-level standards on the New Mexico state assessments in English language arts and math in grade 3 and 4 between American Indian English learner students who attended a school with a BMEP for at least four years and students who never attended a school with a BMEP during the five-year study period. The study team focused on students who attended a school with a BMEP for at least four years to ensure sufficient potential exposure to the BMEP model, while recognizing that some students who attended these schools might not have participated in the BMEP, which is a limitation of this study. Students who attended a school with a BMEP for at least four years and students who never attended a school with a BMEP had similar characteristics, including rates of school mobility. Differences between groups of 5 percentage points or greater are considered meaningful and highlighted in the narrative.

Limitations. This study has five primary limitations. First, during the study period, New Mexico transitioned to new assessments for English language proficiency and academic achievement. In 2017/18 the ACCESS underwent a standards-setting intended to better align the proficiency score scaling with current college- and career-ready standards at each grade level. In 2018/19 New Mexico also changed the state assessment, switching from the Partnership for Assessment of Readiness for College and Careers to the New Mexico Standards-Based Transition Assessment of Mathematics and English Language Arts. It is possible that the new assessments changed the level of difficulty for English learner students to be reclassified or to meet grade-level standards. Because the Partnership for Assessment of Readiness for College and Careers and the New Mexico Standards-Based Transition Assessment of Mathematics and English Language Arts cannot be considered equivalent, separate analyses were conducted for each cohort.

Second, the New Mexico Public Education Department data on BMEPs specify only whether a student attended a school that offered a BMEP, not whether a student participated in the BMEP. In addition, no data are available on specific

program elements, quality of program implementation, characteristics of teachers in the programs, class size, or other features that likely vary across schools.

Third, schools that offer BMEPs differ from schools that do not on characteristics that are observed in the data: schools that offer BMEPs are more likely than schools that do not offer BMEPs to serve students eligible for the National School Lunch Program (an indicator of economic disadvantage), students who are American Indian, or students who live in rural areas (see table B1 in appendix B). In addition, schools that offer BMEPs and their students may differ from other schools and students in ways that are not observed in the data but are associated with English language development. For example, American Indian English learner students enrolled in public schools on or close to reservations or pueblos might be more likely to attend a school with a BMEP than American Indian English learner students enrolled in public schools that are not on or close to reservations or pueblos. For this reason, findings from analyses comparing students who did and those who did not attend a school with a BMEP should not be considered causal.

Fourth, the data are limited to academic outcomes. As such, the study does not investigate whether attending a school with a BMEP is associated with other outcomes that BMEPs are intended to support, such as social-emotional skills or cultural development.

Finally, the study findings cannot be generalized to the universe of American Indian English learner students in New Mexico. The study excluded students with fluctuating patterns of English learner identification and transfers in and out of public schools in New Mexico because data inconsistencies made it impossible to analyze English language proficiency or grade-level proficiency in English language arts or math.

Notes

1. In 2017/18 New Mexico administered the the Partnership for Assessment of Readiness for College and Careers English language arts and math assessments for the last time. In 2018/19 New Mexico administered transitional assessments while it created a new state assessment system.

2. This approach excluded students who moved into or out of a school that offered a BMEP during the five-year study period. All schools retained their original BMEP status during the study period.

Findings

This section summarizes the main findings for American Indian English learner students in New Mexico. Additional findings from supporting analyses are in appendix B.

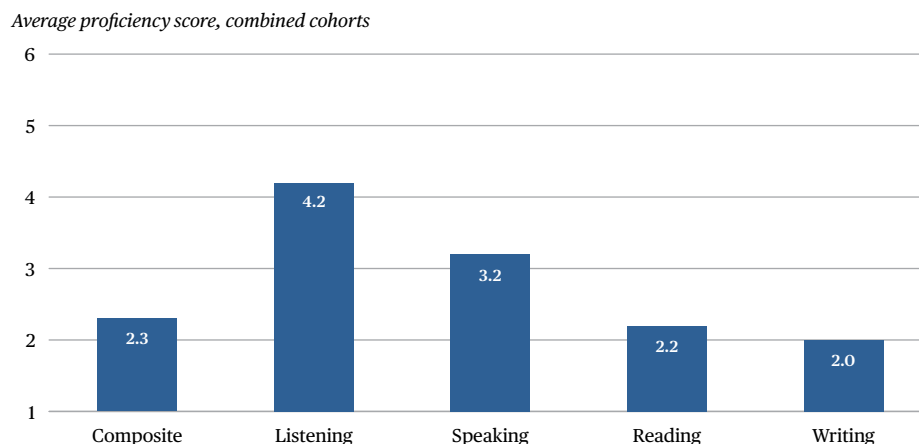
About one-third of American Indian students who initially entered kindergarten in 2013/14 or 2014/15 were identified as English learner students within five years of entering kindergarten

About 34 percent of American Indian students who entered kindergarten in New Mexico public schools for the first time in the 2013/14 and 2014/15 school years were identified as English learner students within five years. Of these students, 78 percent were identified as English learner students in kindergarten (see table B2 in appendix B). The remaining students were identified in later years.

American Indian students identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15 demonstrated higher levels of English proficiency on the listening and speaking domains of the Kindergarten ACCESS for ELLs than on the reading and writing domains

On average, American Indian students who were identified as English learner students in kindergarten in 2013/14 or 2014/15 scored below 3.0 on the Kindergarten ACCESS for ELLs, with the average composite proficiency rating being 2.3 of a potential 6.0 (figure 1). American Indian English learner students had the highest proficiency levels on the listening (4.2) and speaking (3.2) domains and the lowest proficiency levels on the reading (2.2) and writing (2.0) domains. A majority of American Indian English learner students scored in the low range (1.0-2.9) overall and on the reading and writing domains of the Kindergarten ACCESS, while scores

Figure 1. On average, American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts earned a proficiency score below 3.0 overall and on the reading and writing domains of the Kindergarten ACCESS for ELLs



Note: The sample included 1,281 American Indian students who were identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15. Kindergarten ACCESS for ELLs data are missing for 94 American Indian students who were identified as English learner students in kindergarten in 2013/14 or 2014/15. Potential scores range from 1.0 to 6.0. Results for each cohort are in figure B2 in appendix B.

Source: Authors' analysis of data from the New Mexico Public Education Department.

were more varied on the listening and speaking domains (see figure B1 in appendix B). The findings related to average proficiency scores were similar for each cohort (see figure B2 in appendix B).

Only 18 percent of American Indian students identified as English learner students in kindergarten were reclassified as English proficient within five years

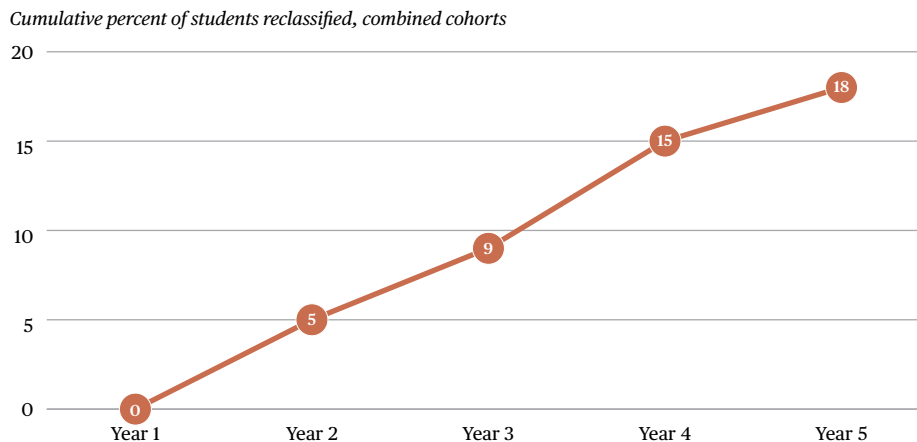
Few American Indian students who were identified as English learner students at initial kindergarten entry were reclassified as English proficient within five years. The percentage of students who were reclassified increased by 2-6 percentage points each year, but after five years, only 18 percent of American Indian students had been reclassified (figure 2).

In 2017/18 New Mexico began using a version of ACCESS that was intended to better align with college- and career-ready standards. That was year 4 for the 2014/15 kindergarten cohort and year 5 for the 2013/14 kindergarten cohort. Reclassification rates were similar for the two cohorts in years 1-3 but began to diverge in year 4 (see figure B3 in appendix B). By year 4, 18 percent of American Indian English learner students who entered kindergarten in 2013/14 were reclassified compared with only 12 percent of American Indian English learner students who entered kindergarten in 2014/15. By year 5, there was a 5 percentage point gap between the reclassification rates of these cohorts (20 percent for the 2013/14 cohort and 15 percent for the 2014/15 cohort), which suggests that the new assessment may have been more challenging for students.

On average, American Indian English learner students who earned high proficiency scores on the Kindergarten ACCESS for ELLs were reclassified as English proficient one year earlier than those who earned low or medium proficiency scores

For American Indian English learner students who were reclassified as English proficient, the average time to reclassification was 2.4 years. American Indian English learner students who scored in the high range on the Kindergarten ACCESS for ELLs were reclassified one year earlier, on average, than students who scored in the low or medium proficiency range (figure 3).

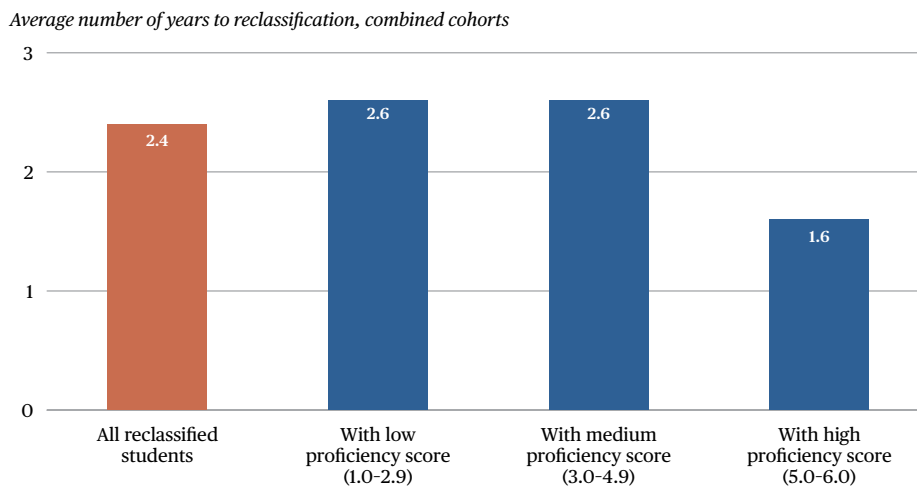
Figure 2. Low percentages of American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts were reclassified as English proficient within five years of entering kindergarten



Note: The sample included 1,375 American Indian students who were identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15 (year 1). Results for each cohort are in figure B3 in appendix B.

Source: Authors' analysis of data from the New Mexico Public Education Department.

Figure 3. On average, American Indian English learner students in the 2013/14 or 2014/15 kindergarten cohorts who earned high proficiency scores on the Kindergarten ACCESS for ELLs were reclassified as English proficient about one year earlier than students who earned low or medium proficiency scores



Note: The sample included 221 American Indian students who were identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15 and reclassified as English proficient within five years. Of these students, 92 had a low proficiency score, 77 had a medium proficiency score, and 52 had a high proficiency score. ACCESS for ELLs scores were not available for 27 reclassified students. Potential scores range from 1.0 to 6.0. Results for each cohort are in figure B4 in appendix B.

Source: Authors' analysis of data from the New Mexico Public Education Department.

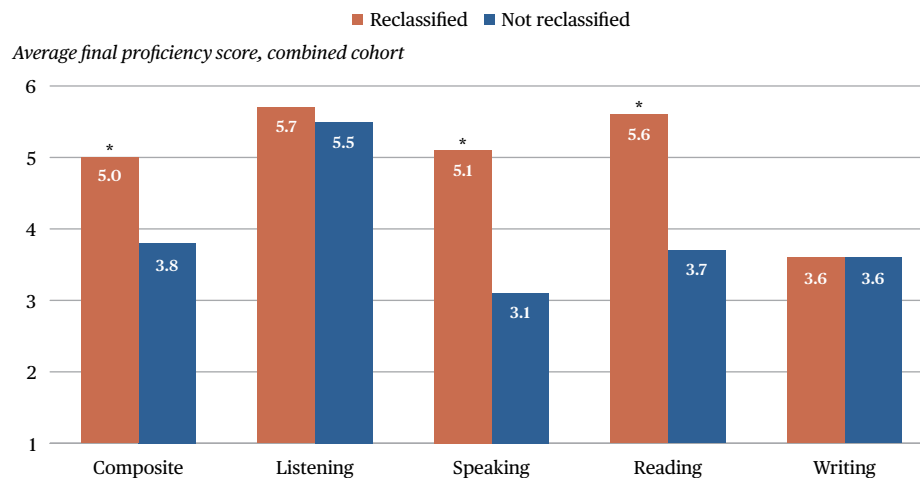
Analyses by cohort yield similar results, except for students who earned medium proficiency scores. American Indian English learner students in the 2014/15 cohort who scored in the medium range were reclassified one-half year earlier, on average, than students in the 2013/14 cohort who scored in the medium range (see figure B4 in appendix B).

American Indian English learner students who were reclassified as English proficient within five years of entering kindergarten achieved higher scores on the speaking and reading domains the final time they took the ACCESS for ELLs than did students who were not reclassified

American Indian English learner students are typically reclassified as English proficient when they earn a 5.0 on the ACCESS overall, but they can have final English proficiency scores on one or more ACCESS domain that are higher or lower than 5.0. American Indian English learner students who were reclassified as English proficient within five years of entering kindergarten had higher final English proficiency scores on the ACCESS overall and on the reading and speaking domains. On the reading domain, American Indian English learner students who were reclassified had an average proficiency score of 5.6, while those who were not reclassified had an average score of 3.7 (figure 4). On the speaking domain, reclassified students had an average proficiency score of 5.1, while those who were not reclassified had an average score of 3.1.

Scores on the listening and writing domains did not differ between students who were reclassified within five years of entering kindergarten and those who were not. On the listening domain, students in both groups scored at the high proficiency level (5.0-6.0; see figure 4). However, neither group scored at the high proficiency level on the writing domain: on average, both groups scored 3.6 on the writing domain, below the high proficiency level. The pattern of results was similar by cohort (see figure B5 in appendix B).

Figure 4. American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts who were reclassified as English proficient and those who were not had similar scores on the writing and listening domains of the ACCESS for ELLs



*Denotes a difference of .25 standard deviations or greater between American Indian English learner students who were reclassified and those who were not, which is considered a meaningful difference (see table B3 in appendix B for standardized mean differences).

Note: The sample included 1,108 American Indian students who were identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15 and who were either reclassified as English proficient or not reclassified as proficient within five years of kindergarten entry. Final ACCESS for ELLs data were not available for 267 American Indian English learner students for whom Kindergarten ACCESS for ELLs data were available. Average proficiency scores on the ACCESS for ELLs represent the average of students' final scores up to five years after entering kindergarten. Potential scores range from 1.0 to 6.0. Results for each cohort are in figure B5 in appendix B.

Source: Authors' analysis of data from the New Mexico Public Education Department.

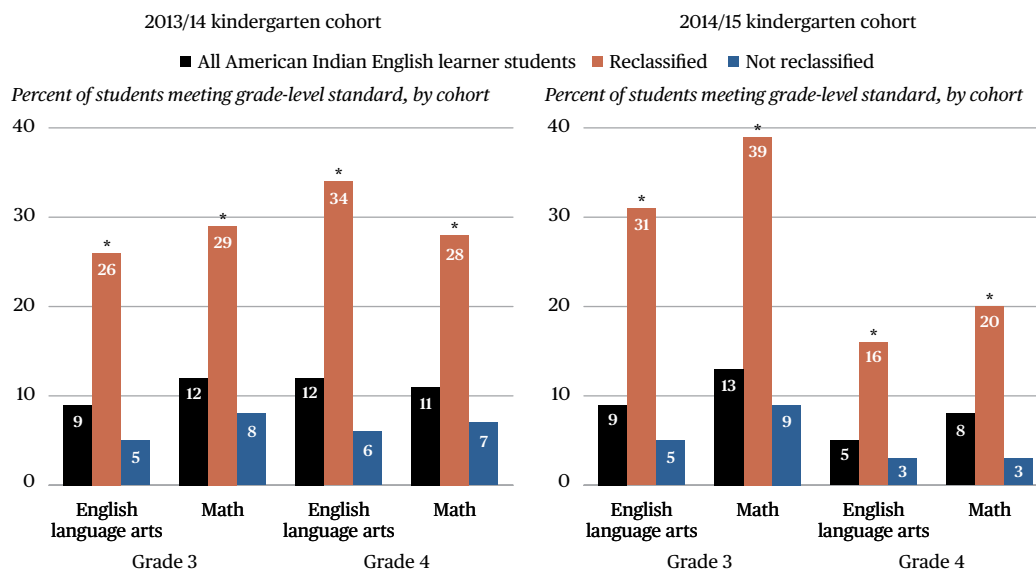
American Indian students identified as English learner students in kindergarten in 2013/14 or 2014/15 and reclassified as English proficient within five years were more likely than students who were not reclassified to meet grade-level standards on the New Mexico state assessments in English language arts and math in grade 3 and 4

Most American Indian English learner students did not meet grade-level standards on the New Mexico state assessments in English language arts and math in grade 3 and 4. However, American Indian English learner students who were reclassified as English proficient within five years of entering kindergarten were more likely to meet grade-level standards than students who were not reclassified.

For the 2013/14 kindergarten cohort, 26 percent of American Indian English learner students who were reclassified met grade-level standards in English language arts in grade 3, compared with 5 percent of those who were not reclassified (figure 5). In grade 4, the difference was wider: 34 percent of American Indian English learner students who were reclassified met grade-level standards in English language arts, compared with 6 percent of those who were not reclassified. In math, 28 percent of reclassified students met grade-level standards in grade 4, compared with 7 percent of those who were not reclassified.

For the 2014/15 kindergarten cohort, the patterns of results were similar in grade 3. However, a much smaller percentage of American Indian English learner students met grade-level standards in grade 4 after the state transitioned from the Partnership for Assessment of Readiness for College and Careers for grade 3-8 to the New Mexico

Figure 5. Although few American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts met grade-level standards on the New Mexico state assessments in English language arts and math in grade 3 and 4, students who were reclassified as English proficient were more likely to meet standards than students who were not reclassified



*Denotes a difference of 5 percentage points or greater between American Indian English learner students who were reclassified and those who were not, which is considered a meaningful difference.

Note: The sample included American Indian students who were identified as English learner students at kindergarten entry in 2013/14 or 2014/15. Of these, the 2013/14 kindergarten cohort included 643 grade 3 American Indian English learner students and 539 grade 4 American Indian English learner students, and the 2014/14 kindergarten cohort included 582 grade 3 American Indian English learner students and 685 grade 4 American Indian English learner students. Students in grade 3 in 2016/17 or 2017/18 and in grade 4 in 2017/18 completed the Partnership for Assessment of Readiness for College and Careers assessments. Students in grade 4 in 2018/19 completed the New Mexico Standards-Based Transition Assessment of Mathematics and English Language Arts.

Source: Authors' analysis of data from the New Mexico Public Education Department.

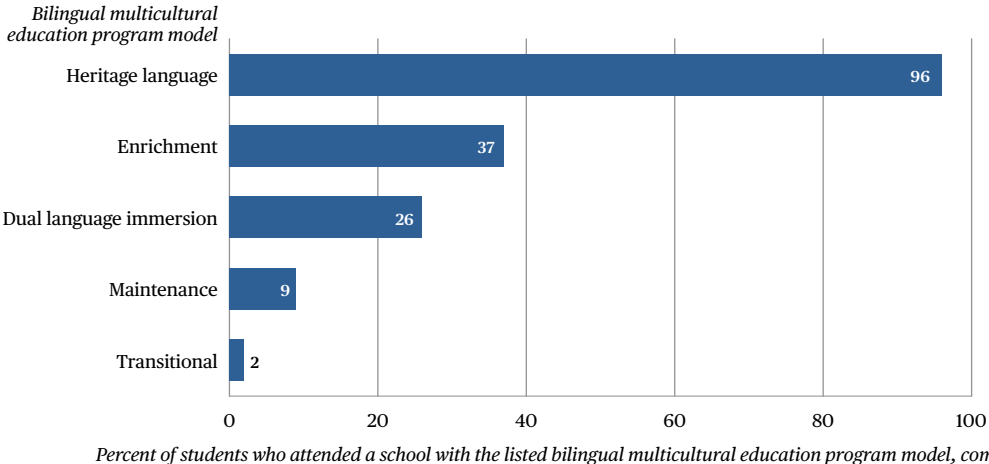
Standards-Based Transition Assessment of Mathematics and English Language Arts in 2018/19. In English language arts, 16 percent of American Indian English learner students who were reclassified met grade-level standards in grade 4, compared with 3 percent of those who were not reclassified (see figure 5). In math, 20 percent of reclassified students met grade-level standards in grade 4, compared with 3 percent of those who were not reclassified.

Of the more than 80 percent of American Indian English learner students who attended a school with a bilingual multicultural education program at any time during the five-year study period, most attended a school with a heritage language program

During the five-year study period, 87 percent of American Indian English learner students attended a school with a BMEP (data not shown). By far the largest percentage (96 percent) of these students attended a school with a heritage language BMEP (figure 6). Smaller percentages attended schools with other models of BMEP (students could attend schools with different BMEP models throughout the five-year study period): 37 percent attended a school with an enrichment BMEP, 26 percent attended a school with a dual language immersion BMEP, 9 percent attended a school with a maintenance BMEP, and just 2 percent attended a school with a transitional BMEP. The pattern of results was similar by cohort (see figure B6 in appendix B).

Nearly three-quarters of American Indian English learner students who attended a school with a heritage language BMEP at any time during the study period attended a school that taught Diné (figure 7). Less than 10 percent attended a school that taught Zuni (8 percent) or Keres (7 percent), and about 1 percent attended a school that taught Tewa or Jicarilla. About 10 percent of American Indian English learner students attended a school that did not offer an American Indian heritage language BMEP (but rather another type of heritage language BMEP; data not shown). The pattern of results was similar in analyses conducted separately for each cohort (see figure B7 in appendix B).

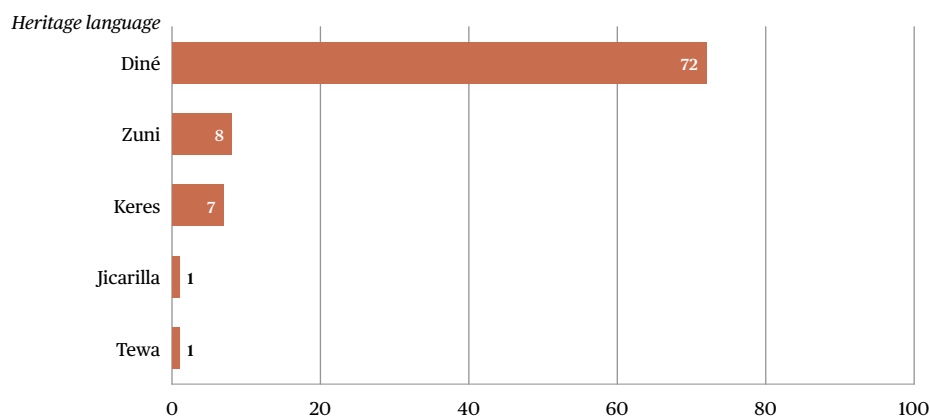
Figure 6. Most American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts who attended a school with a bilingual multicultural education program attended a school with a heritage language program



Note: The sample included 1,119 American Indian English learner students who were identified as English learner students at initial kindergarten entry in 2013/14 or 2014/15 and who attended a school with a bilingual multicultural education program (BMEP) at any time during the five-year study period (87 percent of American Indian English learner students attended a school with a BMEP during the five-year study period). Percentages sum to more than 100 because students could attend schools with different BMEP models throughout the five-year study period. BMEPs in New Mexico provide core content and instruction in English and in a student’s home language. Results for each cohort are in figure B6 in appendix B.

Source: Authors’ analysis of data from the New Mexico Public Education Department.

Figure 7. Most American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts who attended a school with a heritage language bilingual multicultural education program attended a school that taught Diné



Percent of students who attended a school with a heritage language bilingual multicultural education program in the listed language, combined cohorts

Note: The sample included 1,074 (87 percent) American Indian students who were identified as English learner students at initial kindergarten entry and who attended a school with an American Indian heritage language bilingual multicultural education program (BMEP) at any time during the five-year study period. BMEPs in New Mexico provide core content and instruction in English and in a student's home language. Results for each cohort are in figure B7 in appendix B.

Source: Authors' analysis of data from the New Mexico Public Education Department.

American Indian English learner students who attended a school with a bilingual multicultural education program for at least four years were reclassified as English proficient and met grade-level standards on the New Mexico state assessments in English language arts and math at higher rates than students who never attended a school with such a program

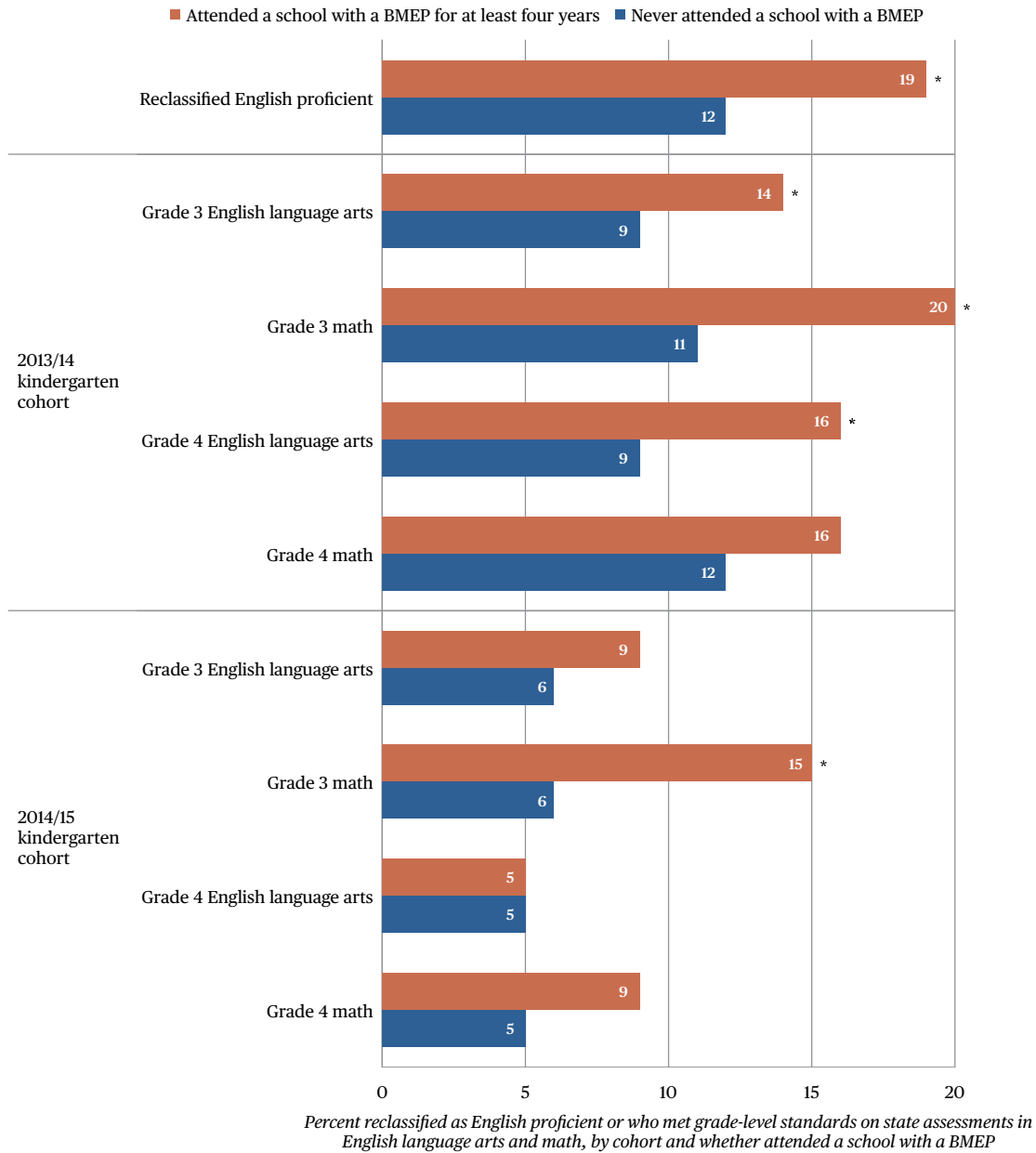
The 403 American Indian English learner students who attended a school with a BMEP for at least four years were reclassified as English proficient at higher rates (19 percent) than the 256 American Indian English learner students who never attended a school with a BMEP during the five-year study period (12 percent; figure 8).³ The pattern of results was similar for each cohort, but the gap was larger for students in the 2013/14 kindergarten cohort (13 percentage points) than for students in the 2014/15 cohort (6 percentage points; see figure B8 in appendix B).

For the 2013/14 kindergarten cohort, American Indian English learner students who attended a school with a BMEP for at least four years were more likely to meet grade-level standards on New Mexico state assessments in English language arts and math than American Indian English learner students who never attended a school with a BMEP (see figure 8). There was one exception: in grade 4, there was no meaningful difference in the percentage of American Indian English learner students who met grade-level standards in math between those who attended a school with a BMEP for at least four years and those who never attended a school with a BMEP.

For the 2014/15 kindergarten cohort, the pattern of findings differed. The only meaningful difference between American Indian English learner students who attended a school with a BMEP for at least four years and those who never attended a school with a BMEP was in math in grade 3. Grade 3 American Indian English learner students who attended a school with a BMEP for at least four years were 9 percentage points more likely to meet grade-level standards in math than students who never attended a school with a BMEP (see figure 8). However,

3. These two groups of students did not differ by more than 4 percentage points by gender, ethnicity, eligibility for the National School Lunch Program, receipt of special education services, or Kindergarten ACCESS score (see table B4 in appendix B).

Figure 8. American Indian English learner students in the 2013/14 and 2014/15 kindergarten cohorts who attended a school with a bilingual multicultural education program for at least four years were more likely than students who never attended a school with such a program to be reclassified as English proficient and meet grade-level standards on the New Mexico state assessments in English language arts and math



*Denotes a difference of 5 percentage points or greater between students who attended a school with a BMEP for at least four years during the five-year study period and students who never attended a school with a BMEP, which is considered a meaningful difference.

BMEP is bilingual multicultural education program.

Note: The sample included American Indian students who were identified as English learner students at kindergarten entry in 2013/14 or 2014/15. Of these, 233 students were in the 2013/14 kindergarten cohort and 426 were in the 2014/15 kindergarten cohort. BMEPs in New Mexico provide core content and instruction in English and in a student's home language. Reclassification results for each cohort are in figure B8 in appendix B.

Source: Authors' analysis of data from the New Mexico Public Education Department.

in English language arts in grade 3 and in both subjects in grade 4, the percentages of American Indian English learner students who met grade-level standards were similar for students who attended a school with a BMEP for at least four years and those who never attended a school with a BMEP. For grade 4, the lack of meaningful differences may be related to the change in the state assessment from the Partnership for Assessment of Readiness for College and Careers to the New Mexico Standards-Based Transition Assessment of Mathematics and English Language Arts in 2018/19, which affected grade 4 students in the 2014/15 kindergarten cohort.

Implications

This study has three primary implications.

First, staff in the New Mexico Public Education Department and district leaders might consider exploring the root causes of low English proficiency among American Indian English learner students (such as not being provided opportunities to access rigorous, grade-level content) and identifying strategies to address these needs. More than 80 percent of American Indian English learner students in the study moved to upper elementary grades without being reclassified as English proficient, which could affect students' long-term academic success. Research finds that English learner students reclassified by the end of grade 3 achieve significant short-term and longer-term gains on standardized tests of reading and math (Chin, 2021). A better understanding of the root causes of barriers to English proficiency could provide educators with critical information for increasing the percentage of American Indian English learner students who are reclassified by grade 3. Numerous studies have linked improved student outcomes with curricula and instruction relevant to American Indian English learner students, but few American Indian English learner students have the opportunity to engage in culturally relevant curricula and instruction (Brayboy & Castagno, 2009; Demmert et al., 2006; McCarty & Wiley, 2011). In addition, some general education teachers may not have the specific knowledge, skills, and expertise needed to support American Indian English learner students in bridging the gap between nonstandard varieties of English spoken by some students and academic English, including all four literacy domains (listening, speaking, reading, and writing; Brayboy & Castagno, 2009; Carjuzaa & Ruff, 2016).

Second, teachers might focus on providing American Indian English learner students with additional supports to improve their speaking, reading, and writing skills. Among American Indian students who were identified as English learner students in kindergarten, those reclassified as English proficient within five years had higher final English proficiency scores on the ACCESS overall and in the speaking and reading domains, suggesting that focusing on these two domains as priorities might increase the likelihood of reclassification. In addition, both students who were reclassified within five years and those who were not often did not achieve proficiency in writing; both groups had an average final score of 3.6 on the ACCESS writing domain. To develop academic language and literacy skills, English learner students should receive regular, structured opportunities to practice these skills as early as grade 1 (Baker et al., 2014). The What Works Clearinghouse Practice Guide *Teaching Academic Content and Literacy to English Learners in Elementary and Middle School* recommends instructing students in a set of academic vocabulary words intensively across several days using a variety of instructional activities, integrating oral and written English language instruction into content-area teaching, providing structured opportunities to develop written language skills, and providing small-group instruction to students needing additional support in acquiring literacy and English language skills (Baker et al., 2014). A culturally responsive approach to implementing these strategies has the potential to further improve American Indian English learner students' writing skills (Carjuzaa & Ruff, 2016; McCarty, 2009).

In addition, to support teachers in improving American Indian English learner students' reading, speaking, and writing skills, district and school leaders in New Mexico might use the *Promising Practices* resource (https://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/training-coaching/sw5.2.22_resource-508.pdf) and its accompanying user guide (https://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/training-coaching/sw5.2.22_user-guide-508.pdf),

developed by the New Mexico Public Education Department in collaboration with Regional Educational Laboratory Southwest. The *Promising Practices* resource shares research-based practices that teachers and school leaders can use to support the development of English language proficiency among English learner students. The user guide provides additional resources for implementing and continuously improving those practices.

Third, additional research is needed to determine if attending a school with a BMEP has a causal effect on improving American Indian English learner students' language development and subsequent academic outcomes. American Indian English learner students who attended a school with a BMEP for at least four years were reclassified as English proficient at higher rates and performed better on state assessments in English language arts and math in grade 3 and 4 than American Indian English learner students who had never attended a school with a BMEP. This finding aligns with the findings of other studies of positive associations between culturally responsive curricula and pedagogy and student performance in math (Kisker et al., 2012). However, the positive associations could be due to differences in characteristics that were not observed in the data between students who attend schools with BMEPs and students who do not, such as proximity to a tribe or pueblo, parent involvement or support, and level of exposure to home or heritage language. In addition, school leaders might consider collecting data that link students to the BMEPs they attend to determine if there is a causal effect on improved language development and subsequent academic outcomes of attending a school with a BMEP or a specific BMEP model. Finally, observations of instructional practice and interviews with teachers and students may provide information about students' experiences in BMEPs, which could be used to improve the programs.

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