

The Impact of Multilingual Summer School on Emergent Bilingual Students' Beginning-of-Year Performance in 2021–2022

Background

Emergent bilingual students (formerly known as English learners; García et al., 2008) in Austin Independent School District (AISD) are eligible to enroll in an optional month-long summer school program offered for incoming kindergarten (KG) and 1st grade students. The multilingual summer school program is designed to prepare students for future success. In June of 2021, AISD offered a hybrid (remote and in-person) program, with lessons on language arts, math, science, and social studies. Lessons were offered in both English and Spanish based on students' language program (i.e., English as a Second Language, Dual Language).

This report explores the impact of attending the multilingual summer school program on KG and 1st-grade students' Fall 2021 academic performance. Students who attended summer school were compared with students who did not attend summer school on their beginning-of-year (BOY) early reading (KG and 1st grade) and math (1st grade) performance (matched on grade level, emergent bilingual status, and economic disadvantage students). Incoming kindergarteners were assessed with the Texas Kindergarten Entry Assessment (TX-KEA), which is composed of three subtests as part of a literacy screener designed to gauge students' readiness for KG. Incoming 1st graders were assessed with the MAP Growth reading and math tests.

Summer School Student Demographics, 2021

A total of 933 students attended the 2021 summer school program (442 incoming kindergarteners, 490 incoming 1st graders, and one incoming 2nd grader). Demographic characteristics for both grade levels are reported in Table 1.

Table 1.

2021 Multilingual Summer School Student Characteristics, by Grade Level

	Kindergarten (<i>n</i> = 442)	1 st grade (<i>n</i> = 490)
Race		
Hispanic	69%	78%
Black or African American	1%	2%
Asian	25%	14%
White or another race	5%	5%
Receiving special education services	12%	13%
Economically disadvantaged	71%	76%
Gender (% female)	49%	44%
Native Spanish speaker	69%	78%

Source. AISD student records

Note. One incoming 2nd grader was excluded from the table for confidentiality reasons.



For Texas Education Agency (TEA) summer school requirements, see <https://tea.texas.gov/sites/default/files/covid/2021-English-Learner-Summer-School-Guidance.pdf>.

For more information about AISD multilingual summer school, see <https://www.austinisd.org/multilingual/programs/summer-programs>.

Kindergarten BOY Performance

AISD KG students completed the TX-KEA (see sidebar) at the beginning of the 2021–2022 school year to assess their KG readiness. Eighty-eight percent of KG students who attended summer school received a score on the literacy screener. Summer school students were compared with students who did not attend summer school. Comparison-group students were randomly selected and matched on grade level, emergent bilingual status, and economic disadvantage status and had similar testing rates as did summer school students. Seventy-nine percent of comparison-group students were native Spanish speakers.

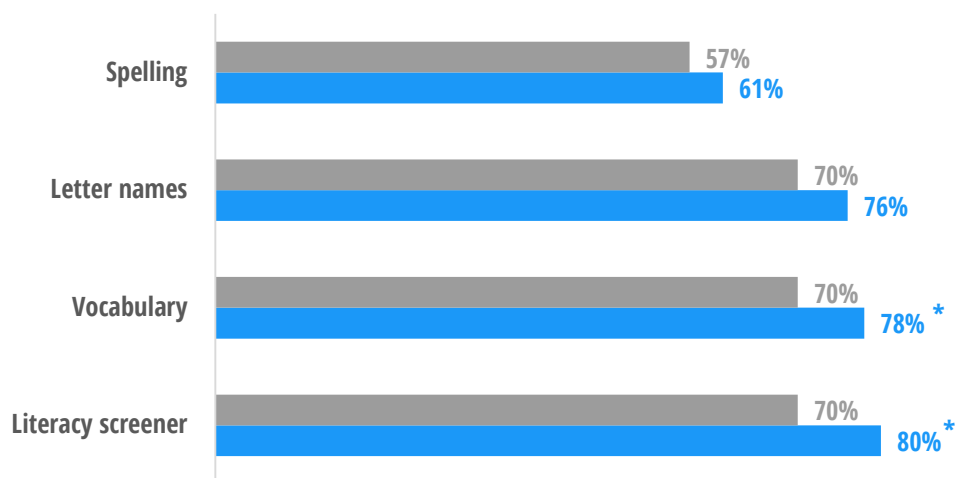
TX-KEA was available for students to take in both English and Spanish. For those who took the literacy screener, 58% of summer school students and 66% of comparison-group students tested in Spanish, 33% of summer school students and 25% of comparison-group students tested in English, and less than 10% of KG students in either group tested in both languages. The results presented in this report represent the best performance for a student in either language.

Incoming KG students who attended the multilingual summer school were significantly more likely than comparison-group students to score on-track on the TX-KEA literacy screener and vocabulary subtest at the beginning of the school year (Figure 1). There were no significant differences in performance on the letter names or spelling subtests between the two student groups.

Figure 1.

Percentage of Emergent Bilingual Kindergarten Students Who Scored *On-Track* on the TX-KEA BOY Assessment, 2021

Summer school students were significantly more likely to score *on-track* on the overall literacy screener and on the vocabulary subtest than were students in the comparison group.



Source. AISD student TX-KEA records

Note. Summer school student counts: spelling and literacy screener $n = 370$, letter names and vocabulary $n = 374$. Non-summer school student counts: vocabulary and letter names $n = 402$, spelling $n = 401$, literacy screener $n = 398$.

* $p < .05$.

TX-KEA

The TX-KEA is administered to AISD kindergarteners in the fall and is used to screen students' school readiness upon entry to kindergarten. The University of Texas Health Science Center's Children's Learning Institute, the TEA, and the U.S. Department of Education collaborated in the development of the TX-KEA.

The TX-KEA is a criterion-referenced test designed to assist school staff with determining whether students meet specific academic standards and developmental levels. The test assesses kindergarten readiness across six domains: language, literacy, math and science, executive functioning, social emotional skills, and academic motor skills. AISD only tested on the literacy screener and required subtests (spelling, letter names, and vocabulary). Test results are used to guide instruction and help teachers identify students in need of further diagnostic assessment and intervention.

The test is available in both English and Spanish. The results presented in this report represent the best performance for a student in either language. Thus, if a student took the test in both English and Spanish, the higher performance of the two would be the data included in the analysis. For more information on the TX-KEA, see <https://www.texaskea.org>.

First Grade BOY Performance

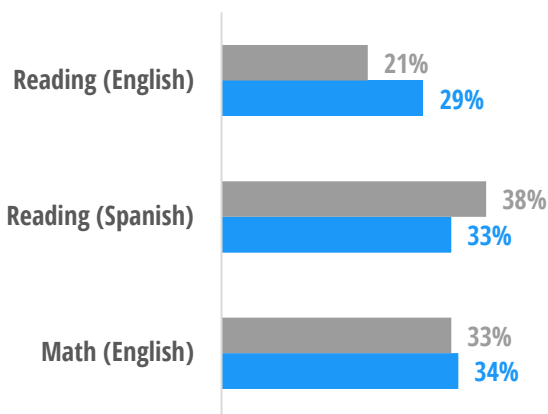
AISD 1st-grade students completed the MAP Growth reading and math assessments (see sidebar) online in the beginning of the 2021–2022 school year. The testing rates were low for both reading (55%) and math (48%); thus, findings may not be representative of all 1st-grade emergent bilingual summer school students. About one-third of summer school students who took the tests scored in the high average or high achievement quintiles (see sidebar) for MAP reading English, MAP reading Spanish, and MAP math English tests, which are comparable to district averages. Students who attended summer school were compared with students who did not attend summer school. Comparison-group students were randomly selected and matched on grade level, emergent bilingual status, and economic disadvantage status and had similar testing rates as did summer school students. Eighty-four percent of comparison-group students were native Spanish speakers.

The MAP tests were available for students to take in both English and Spanish, but computing the top score for a student who has test scores in both languages is not recommended because the two versions are not yet comparable. Within each testing language, there were no significant differences between the percentages of summer school and comparison-group students who scored in the high average or high achievement quintiles on the MAP reading or math tests (Figure 2).

Figure 2.

Percentage of Emergent Bilingual 1st-Grade Students Who Scored in the High Average or High Achievement Quintiles on MAP Growth BOY Reading and Math Assessments, 2021

There were no significant differences between **summer school students** and students in the comparison group at $p < .05$.



Source. AISD student MAP reading and math records

Note. Computing the top score for a student who has test scores in both English and Spanish is not recommended because the two test versions are not yet comparable; thus, those students have both scores reported. Summer school and non-summer school student counts, respectively: Reading (English) $n = 229$ and 221, Reading (Spanish) $n = 181$ and 150, Math (English) $n = 232$ and 211, Math (Spanish) $n < 10$.

Supplemental analyses showed there was no difference in the percentage of summer school students who scored in the high average or high achievement quintiles on MAP reading based on testing language. However, a significantly smaller proportion of comparison-group students excelled on MAP reading when they took the test in English compared to Spanish. These differences in performance based on testing

MAP Growth

MAP Growth was developed by the Northwest Education Association to assess students' academic performance and growth in grades 1 through 5. MAP is a nationally norm-referenced test, but it is not a state-required standardized test. The test is designed to assess continuous progress by monitoring skills identified as predictors of later academic success and to help teachers plan for differentiated instruction and develop interventions for struggling students.

MAP assesses math, reading, language usage, and science. At AISD, the reading test has been required since Fall 2020, but the math test was optional in 2021. Both subjects were administered online in 2021. The assessment is given at BOY, middle of year (MOY), and end of year (EOY).

MAP is an untimed, interactive, computer-adaptive assessment. The first question presented to each student starts at the norm level for that grade. If the student gets the question right, the next question is harder; if the student gets the question wrong, the next question is easier. The tests are scored into 1 of 5 tiers: low, low average, average, high average, and high.

The test is available in English and Spanish. In this report, students who took the test in both English and Spanish have both of their scores reported. Computing the top score for a student who has test scores in both languages is not recommended because the two test versions are not yet comparable. For more information on MAP Growth, see <https://www.nwea.org/map-growth/>.

language and summer school participation may indicate the benefit of the program for students' English proficiency. Note that 50% of comparison-group students took the reading test in both languages, 11% took it in Spanish only, and 40% took it in English only. As for summer school test takers, 52% took the reading test in both languages, 15% took it in Spanish only, and 33% took it in English only.

For math, less than 10% of test takers in both groups took the test either in both languages or in Spanish only, and greater than 90% in both groups took the test in English only. This may be because the math curriculum instructional language switches from Spanish in KG to English in 1st grade in the bilingual programs at AISD. Therefore, comparing math scores across testing languages was not possible.

Conclusion

The AISD multilingual summer school program has historically shown a positive impact on incoming emergent bilingual KG students (Poulsen, 2021). The 2021 summer school program was no exception, even with the students being among the first to enter the school system virtually due to the COVID-19 pandemic.

While 1st graders' attendance of the 2021 multilingual summer school program did not seem to directly impact their BOY performance relative to a comparison group, it did seem indirectly related based on students' testing language. Also note that 149 (33%) of incoming emergent bilingual 1st graders attended the multilingual summer school in both of their eligible years: in the summer prior to their KG year (in 2020) as well as in 2021. Consistency in summer school attendance across both years may have had an impact on 1st graders' BOY performance. It is also possible that 2021 1st-grade students who attended summer school in 2020, prior to their KG year, were already enrolled in an AISD prekindergarten (pre-K) program in 2019–2020. Enrollment in AISD pre-K may be another positive predictor of both KG and 1st-grade academic performance—both in itself and by exposing these students to the opportunity to participate in the multilingual elementary summer school program.

References

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April 2022

Publication 21.03