

MEMORANDUM

November 15, 2022

TO: Khechara E. Bradford, Ed.D.
Officer, Special Populations

FROM: Allison E. Matney, Ed.D.
Executive Officer, Research and Accountability

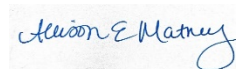
SUBJECT: **SUMMER SCHOOL EDUCATION PROGRAM, 2021–2022**

Each year, the Houston Independent School District (HISD) offers a Summer School Education program designed to assist students with a variety of instructional needs. In 2022, centrally coordinated summer school programs included accelerated instruction for State of Texas Assessments of Academic Readiness (STAAR) and STAAR End-of-Course (EOC) re-testers; bilingual or English as Second Language (ESL) classes for Emergent Bilingual students (EBs); credit accrual/recovery for students needing to graduate; Extended School Year (ESY) services; Promotion/Retention classes; and other school-based programs. The Summer School Education program supports HISD's Board Goal 3: Academic Growth. This report shows student enrollment and outcomes for students who attended summer school in 2022 based on either retention status at the end of spring 2022 or for other reasons, such as academic enrichment.

Key findings include:

- A total of 25,051 students attended the HISD 2022 Summer School Education Program in grades 1–12; 15,051 were in grades 1–8.
- Of the 15,051 students in grades 1–8 who were retained at the end of spring 2022 and attended the 2022 summer school program, 99.4 percent were retained because they did not meet course grade requirements or by committee decision.
- Of the students in grades 1–8 who were retained in spring 2022 and attended the 2022 Summer School Education Program, 87.9 percent of students were promoted by meeting the appropriate promotion standards or by committee decision.
- The strongest predictor of students in grades 1–8 being retained after attending summer school program was special education status (SPED) with the odds at 1.66 times greater than students not identified as SPED, controlling for demographic characteristics.
- Students in grades 9–12 showed an increase in mean course grades in 2022 end-of-summer STAAR subject credit recovery courses after receiving tutoring in that specific STAAR subject. The highest mean difference (MD) was achieved by students who took a credit recovery social studies course with (MD=34.56), followed by an English language arts (ELA) course (MD=33.05), and a math course (MD=31.37).

Further distribution of this report is at your discretion. Should you have any further questions, please contact me at 713-556-6700.



_____AEM

Attachment
cc: Millard L. House II

Shawn Bird, Ed.D.



RESEARCH

Educational Program Report

SUMMER SCHOOL EDUCATION PROGRAM,
2021-2022



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EVALUATION REPORT

BUREAU OF PROGRAM EVALUATION

Supporting efforts to meet promotion standards or STAAR course achievement requirements for students who attended the Summer School Education Program, 2021–2022

Prepared by Kenneth L. Powers, Ed.D.

Abstract

*The 2022 Summer School Education Program provided students, retained at the end-of-spring 2022, the opportunity to meet promotion standards. Additionally, the summer school program provided students who did not meet STAAR course achievement requirements in grades 9–12 access to subject specific tutoring and the opportunity to take credit recovery courses to stay on-time for graduation. Of the students in grades 1–8 who were retained in spring 2022 and attended the 2022 Summer School Education Program, 87.9 percent were promoted either by meeting the appropriate promotions standards or by committee decision. The strongest predictor of students in grades 1–8 being retained after attending the summer school program was special education (SPED) status with the odds at 1.66 times greater than students not identified as SPED, controlling for all other factors in the model. For students in grades 9–12, a paired-sample *t*-test was conducted for students who took a credit recovery course in one or more of the STAAR core subjects of English Language Arts (ELA), math, science, and social studies during the 2022 summer school education program. Students showed an increase on 2022 end-of-summer course grades when compared to 2022 end-of-spring course grades. The highest mean difference (MD) was achieved by students who took a credit recovery social studies course (MD=34.56), followed by an ELA course (MD=33.05), and a math course (MD=31.37). With strong academic support during the summer school program, academic benefits for retained students or students in credit recovery courses was evident in the end-of-summer outcomes for the majority of summer school participants.*

Introduction

Each year, the Houston Independent School District (HISD) offers the Summer School Education Program, which is designed to assist students with a variety of instructional needs. In 2022, centrally coordinated summer school programs included accelerated instruction for State of Texas Assessments of Academic Readiness (STAAR) and STAAR End-of-Course (EOC) re-testers; Emergent Bilingual (EB) students, formerly referred to as English Learners (ELs), receiving English as a Second Language (ESL) classes; credit accrual/recovery for students needing to graduate; Extended School Year (ESY) services; Promotion/Retention classes; and other school-based programs. The Summer School Education Program supports HISD’s Board Goal 3: Academic Growth. This report shows student enrollment and outcomes for students who attended summer school in 2022 based on retention status at the end of spring 2022 or for other reasons, such as academic enrichment.

Background

Figure 1, shows the location of grades 1–8 campuses within HISD that offered summer school for students who were retained in spring 2022. The summer 2022

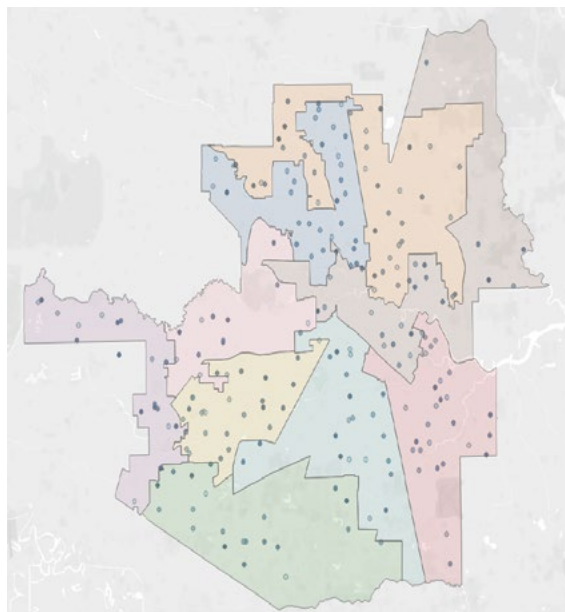


Figure 1: HISD 2022 summer school campuses grades 1–8, by campus name (select image above to access **Tableau Map by Campus.**)

program took place from June 13, 2022 to July 7, 2022. The 2022 Summer School Education Program allowed students who did not meet the applicable promotion standards the opportunity to repeat the required courses needed for promotion. For other students, the summer school program provided the opportunity to advance their studies by taking required courses before the next school year or to receive specialized instruction based on eligibility. This report addresses eligibility, enrollment, attendance, and outcomes for the 2022 HISD summer school program.

Research Questions:

1. What was the number of students who were available for summer school participation in 2021–2022?
2. What was the number of students in grades 1–12 that attended the HISD 2022 Summer School Education Program?
3. What were the reasons retained students in grades 1–8 attended the 2022 Summer School Education Program?
4. What were the demographic characteristics of retained students in grades 1–8 who attended the 2022 Summer School Education Program, and how do they compare to retained students in grades 1–8 who attended the 2021 Summer School Education Program?
5. How many students in grades 1–8 were promoted or retained following the 2021 and 2022 spring semesters and Summer School Education Program?
6. What type of courses did students in grades 9–12 take during the 2022 Summer School Education Program?
6. How did students perform in credit recovery courses after receiving tutoring during the 2022 Summer School Education Program?

Review of the Literature

In an effort to hold public schools and students responsible for academic achievement, many states have implemented accountability measures (Battistin & Schizzerotto, 2019; Campbell, Sutter, & Lambie, 2019; Valbuena, Mediavilla, Choi, & Gil, 2021; and Young, et al., 2019). These accountability measures have led to the implementation of programs to help low achieving students meet minimum promotion standards, such as after school interventions and required summer school. (Folsom, Reed, Aloe, & Shmitz, 2019; Pennell, 2020; and Young, et al., 2019). Promotion standards require a student to meet an academic benchmark at or above grade level to be promoted to the next grade level (Battistin & Schizzerotto, 2019; Valbuena, Mediavilla, Choi, & Gil, 2021; and Young, et al., 2019). The Houston Independent School District (HISD) has set promotion standards for grades 1 through 8 which includes requiring students to meet state yearly grade average in core subjects; passing the High Frequency Word Examination (HFWE) for grades 1 and 2; and no more than ten percent unexcused absence for all days of instruction (Houston Independent School District, 2022). Students who do not meet the required promotion standards are encouraged to attend summer school as an opportunity to meet requirements for grade advancement.

Methods

Study Population

Student enrollment, demographic characteristics, and academic performance data for the evaluation were obtained using a variety of sources. Several student data files were used for spring 2022 and summer 2022 information, including end-of-year (EOY) HISD Department of Research and Accountability

promotion, retention, and enrollment (Promotion Standards file, 2021–2022 and 2021–2022 OnPoint Fall PEIMS) and student demographics [Promotion Standards file, Fall PEIMS, and Student Information System (SIS) C7 (summer cycle) file].

Data Collection and Analyses

For this report, an HISD student cohort showing all students available for summer school was created using the SIS Ad Hoc Spring 2022 file for purposes of analyzing student demographics. A total of 114,263 students in grades 1–8 was included for summer school eligibility. Further, a total of 54,062 students in grades 9–12 was identified as available for the 2022 summer school program using the SIS Ad Hoc file.

Students from the Promotion Standards file were included in the 2022 HISD summer school cohort if they had a summer school promotion standard status in grades 1–8 (n=15,171). A positive summer school enrollment indicator in the SIS C7 (summer cycle) file identified 9,880 students in grades 9–12 who enrolled in the 2022 Summer School Education Program. A total of 25,051 HISD students from grades 1–12, attended the 2022 Summer School Education Program. More detailed results from these data sources are reflected in the figures contained within the Tableau dashboards.

Tableau Dashboard by School Office can be found at https://public.tableau.com/views/Grades1_8Spring2022andSummer2022SchoolOffices_16685295558840/Grades1-8_SchoolOffice?:language=en-US&:display_count=n&:origin=viz_share_link and provides information on students in grades 1–8 on being retained at the end of spring 2022 and is filtered by school office.

Tableau Dashboard by Campus (Grades 1 through 8) can be found at https://public.tableau.com/views/campus_16686349936300/Grades1-8_Campus?:language=en-US&:display_count=n&:origin=viz_share_link and provides information on students in grades 1–8 that attended summer school based on being retained at the end of spring 2022 and is filtered by campus.

Tableau Dashboard High School can be found at https://public.tableau.com/shared/P5JNW637J?:display_count=n&:origin=viz_share_link and shows a detailed campus breakdown of students in grades 9–12 that attended summer school in 2022.

Direct logistic regression was performed to assess the impact of a set of predictor variables on the odds that students retained at the end of spring 2022 would also be retained at the end of summer 2022. In addition, a paired samples t-test was conducted on students who had both an end-of-year STAAR course (i.e., ELA, math, science, or social studies) grade and an end-of-summer course grade.

Study Limitations

The summer school days attended were not available for this report. Therefore, the researcher used the summer school promotion status indicator to identify students in grades 1–8 who were retained in spring 2022 and attended the summer 2022 program.

Additionally, for students in grades 9–12 who met eligibility requirements for 30 hours of tutoring per core subject, the number of hours completed prior to summer school were not available, which did not allow the amount of time being tutored during summer school to be included in the statistical tests.

What was the number of students who were available for sum-

mer school participation in 2021–2022?

A total of 194,607 HISD students enrolled in grade 1 – grade 12 at the end of the 2021 spring semester were available for summer school participation (**Table A–1**, p. 6). This enrollment number does not include students identified as ‘graduated’ and is different from the fall PEIMS snapshot of enrollment taken in October. The enrollment number more closely reflects students available at the end of the school year to attend summer school.

What was the number of students in grades 1–12 that attended the HISD 2022 Summer School Education Program?

A total of 25,051 students in grades 1–12 attended the HISD Summer School Education Program (**Table A–2**, p. 6) for enrichment (extended school year, campus enrichment, or reading intervention) or failing to meet HISD promotion standards. Based on the 2022 spring enrollment, grade 10 had the largest proportion of spring 2022 students enrolled in the 2022 summer school program (21.9 percent), followed by grade 1 (20.7 percent). By contrast, grade 6 had the lowest proportion of spring 2022 students enrolled in the 2022 Summer School Education Program (9.7 percent).

What were the reasons retained students in grades 1–8 attended the 2022 Summer School Education Program?

Of the 15,165 students in grades 1–8 who were retained at the end of spring 2022 and attended the 2022 Summer School Education Program, 69.0 percent were retained because they did not meet course requirements, 29.4 percent were retained by committee decision (but met grade requirements) (**Figure 2**).

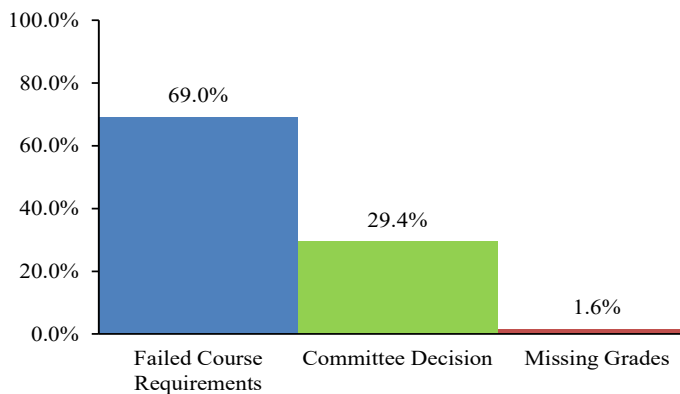


Figure 2: Reason for retention at end-of-spring 2022, by percentage

Additionally, 1.6 percent were retained for missing grades. For a more detailed view at the campus level go to **Tableau Dashboard by Campus (Grades 1 through 8)**, (p.2).

What were the demographic characteristics of retained students in grades 1–8 who attended the 2022 Summer School Education Program, and how do they compare to retained students in grades 1–8 who attended the 2021 Summer School Education Program?

Summer school attendance for retained students grades 1–8 fell from 23,460 in summer 2021 to 15,171 students in summer HISD Department of Research and Accountability

2022 (**Table A–3**, p. 7). A higher proportion of students that were retained and attended summer school 2022 were identified as EB (16.8 percent) when compared to summer school 2021 (2.3 percent). As shown in **Table A–4** (p. 7), Hispanic students were a smaller proportion of retained students that attended summer school 2022 (64.7 percent) when compared to summer school 2021 (68.5 percent).

How many HISD students in grades 1–8 were promoted or retained following the 2021 and 2022 spring semesters and Summer School Education Program?

As shown in **Table A–5** (p. 8), 87.9 percent of students in grades 1–8 who were retained in spring 2022 and attended the 2022 summer school program met promotion standards compared to 90.9 percent of similar students who attended the 2021 summer school program. With the exception of grades 5 and 6, each grade had a smaller percentage of students promoted following 2022 summer school when compared to similar students following summer school 2021.

Logistic Regression

Direct logistic regression was performed to assess the impact of a set of predictor variables on the odds that students retained at the end of spring 2022 would also be retained at the end of summer 2022. The model contained five independent variables [sex, latest economic disadvantage, latest Emergent Bilingual (EB) status, minority status, and latest special education (SPED) status]. The full model containing all predictors was statistically significant, $X^2(5, N = 14,854) = 81.08, p < .001$, indicating the model was able to distinguish between students that were retained at the end of summer 2022 and those students that were not retained at the end of summer 2022. The model as a whole correctly classified 88.2% of cases. As shown in **Table B–1** (p. 9), only three of the independent variables made a unique statistically significant contribution to the model (latest economic disadvantage status, latest EB status, and latest SPED status). The strongest predictor of students retained in spring 2022 being retained in summer 2022 was latest SPED status, recording an odds ratio of 1.66. This indicated that the odds are 1.66 times greater that students with a SPED status would be retained at the end of summer 2022 than those not identified as SPED, controlling for all other factors in the model.

What type of courses did students in grades 9–12 take during the 2022 Summer School Education Program?

In the 2022 summer school program 9,880 students in grades 9–12 took a total of 22,532 courses. Courses were comprised of credit recovery (59.9 percent), not identified (38.0 percent), and original credit (2.1 percent). Of all courses taken, 95.7 percent were passed successfully. Additionally, 85.0 percent of all courses taken were in one of the four core subjects (English language arts, mathematics, science, or social studies). For a more detailed view at the campus level go to **Tableau Dashboard High School** (p.2).

How did students perform in credit recovery courses after receiving tutoring during the 2022 Summer School Education Program?

Due to the Texas Education Agency (TEA) establishing new

requirements for accelerated instruction for students who do not pass the State of Texas Assessments of Academic Readiness (STAAR®), opportunities to complete HB4545 tutorial hours were built into Summer School: Learning & Fun (30-minute sessions). A number of HISD students who received tutoring for not passing the STAAR subject assessment additionally took a credit recovery course in that specific STAAR subject during the 2022 Summer School Education Program (English =142, Math=270, Science=277, and Social Studies=117).

English Language Arts (ELA)

As shown in **Table B-2** (p. 9), a paired-samples t-test was conducted to evaluate the impact of tutoring on a students' end of summer English Language Arts (ELA) subject course grade. There was a statistically significant increase in students' mean ELA course grade from spring 2022 ($M=51.78$, $SD=15.03$) to summer 2022 ($M=84.82$, $SD=8.92$), $t(141) = 22.16$. The mean increase was 33.05 points, with a 95% confidence interval ranging from 30.10 to 36.0. Both the Cohen's d (1.86) and the eta squared statistic (.78) showed a very large effect size.

Math

A paired-samples t-test was conducted to evaluate the impact of tutoring on a student's end of summer math subject course grade (Table B-2). There was a statistically significant increase in students' mean math score from spring 2022 ($M=55.87$, $SD=11.60$) to summer 2022 ($M=82.46$, $SD=8.04$), $t(269) = 35.44$. The mean increase was 31.37 points, with a 95% confidence interval ranging from 29.63 to 33.11. Both the Cohen's d (2.16) and the eta squared statistic (.82) showed a very large effect size.

Science

A paired-samples t-test was conducted to evaluate the impact of tutoring on a student's end of summer science subject course grade. There was a statistically significant increase in students' mean science course grade from spring 2022 ($M=51.08$, $SD=11.21$) to summer 2022 ($M=84.53$, $SD=7.94$), $t(276) = 35.07$. The mean increase was 28.67 points, with a 95% confidence interval ranging from 27.05 to 30.27. Both the Cohen's d (2.11) and the eta squared statistic (.82) showed a very large effect size.

Social Studies

A paired-samples t-test was conducted to evaluate the impact of tutoring on a student's end of summer social studies subject course grade. There was a statistically significant increase in students' mean social studies course grade from spring 2022 ($M=50.94$, $SD=13.02$) to summer 2022 ($M=85.50$, $SD=9.57$), $t(116) = 24.85$. The mean increase was 34.56 points, with a 95% confidence interval ranging from 31.80 to 37.31. Both the Cohen's d (2.30) and the eta squared statistic (.84) showed a very large effect size.

Discussion

The 2022 Summer School Education Program allowed students who did not meet the applicable promotion standard the opportunity to successfully meet the requirements for promotion. Promotion standards included course grades, and for grades one and two passing the High Frequency Word Examination (HFWE). For other students, it provided the opportunity to get ahead by taking the required courses before the next school year or to receive

specialized instruction based on eligibility. A total of 25,051 student in grades 1–12 attended the HISD 2022 summer school program. Of this total, the majority ($n=15,165$) were in grades 1–8.

The number of students who were retained following the spring semester and attended summer school showed a decrease in 2022 when compared to the previous year (25,051 vs. 15,165, respectively). The course work promotion standard accounted for 69.0 percent of retained students who attended the 2022 summer school program, followed by 29.4 percent who were retained by committee decision. Of the students in grades 1–8 who were retained in spring 2022 and attended the 2022 summer school program, 87.9 percent were promoted either by meeting the appropriate promotions standards or by committee decision, and 12.1 percent were retained.

The strongest predictor of students retained in spring 2022 being retained in summer 2022 was the latest special education (SPED) status, recording an odds ratio of 1.66. This indicated that the odds are 1.66 times greater that students with a SPED status would be retained at the end of summer 2022 than those not identified as SPED, controlling for all other factors in the model.

Students in grades 9–12 who did not meet STAAR course requirements during the 2021–2022 school year were afforded the opportunity to take courses to recover credit to stay on time to graduate. In addition to taking recovery credit courses, students that met eligibility, were given access to tutoring services. Students showed an increase in end-of-summer course grade when compared to end-of-year 2022 course grade. The highest mean difference was achieved by students who took a credit recovery social studies course with 34.56, followed by an english course with 33.05, and a math course with 31.37.

References

- Battistin, E., & Schizzerotto, A. (2019). Threat of grade retention, remedial education and student achievement: evidence from upper secondary schools in Italy. *Empirical Economics*, 56, 561-678. doi:10.1007/s00181-018-1443-6
- Campbell, L. O., Sutter, C. C., & Lambie, G. W. (2019). An Investigation of the summer learning effect on fourth grade students' reading scores. *Reading Psychology*, 40, 465-490. doi:10.1080/02702711.2019.1629516
- Folsom, J. S., Reed, D. K., Aloe, A. M., & Shmitz, S. S. (2019). Instruction in district-designed intensive summer reading programs. *Learning Disabilities Quarterly*, 42(3), 147-160. doi:10.1177/0731948718765207
- Houston Independent School District. (2022, August 18). Promotion Standards. Retrieved from Houston Independent School District.
- Nickow, A. J., Oreopoulos, P., & Quan, V. (2020). The Impressive Effects of Tutoring on PreK-12 Learning: A Systematic Review and Meta-Analysis of the Experimental Evidence. Brown University, Annenberg Institute. EdWorkingPaper. doi:https://doi.org/10.26300/eh0c-pc52
- Pennell, C. (2020). Summer school for middle school readers labeled as struggling: Lessons learned and pathways forward. *The Clearing House*, 93(3), 142-147. doi:10.1080/0009655.2019.1708696
- Valbuena, J., Mediavilla, M., Choi, A., & Gil, M. (2021). Effects of grade retention policies: A literature review of empirical studies applying causal inference. *Journal of Economic Surveys*, 35(2), 408-451. doi:10.1111/joes.12406

Young, S., Trujillo, N. P., Bruce, M. A., Pollard, T., Jones, J., & Range, B. (2019). Preservice teachers' views about grade retention as an intervention for struggling students. *Preventing School Failure*, 63(2), 113-120. doi:10.108/1045988X.2018.1523124

Appendix A

Table A–1. HISD Students Available for Summer School Participation in 2022

2021-2022 Grade Level	HISD Total (N)	Asian/Pacific Islander		African American		American Indian or Alaska Native		Hispanic		Two or More Races		White	
		N	%	N	%	N	%	N	%	N	%	N	%
1	15,075	732	4.9	3,447	22.9	17	0.1	9,199	61.0	278	1.8	1,402	9.3
2	14,307	686	4.8	3,132	21.9	22	0.2	8,818	61.6	259	1.8	1,390	9.7
3	15,078	808	5.4	3,190	21.2	17	0.1	9,382	62.2	257	1.7	1,424	9.4
4	15,266	770	5.0	3,257	21.3	19	0.1	9,486	62.1	290	1.9	1,444	9.5
5	15,358	718	4.7	3,243	21.1	20	0.1	9,596	62.5	296	1.9	1,485	9.7
6	12,733	602	4.7	2,785	21.9	20	0.2	7,788	61.2	215	1.7	1,323	10.4
7	13,290	563	4.2	2,966	22.3	23	0.2	8,150	61.3	233	1.8	1,355	10.2
8	13,156	609	4.6	2,773	21.1	31	0.2	8,226	62.5	207	1.6	1,310	10.0
9	17,681	619	3.5	4,076	23.1	35	0.2	11,287	63.8	242	1.4	1,422	8.0
10	12,885	539	4.2	2,888	22.4	36	0.3	7,958	61.8	181	1.4	1,283	10.0
11	12,355	506	4.1	2,748	22.2	30	0.2	7,530	60.9	170	1.4	1,371	11.1
12	11,141	513	4.6	2,436	21.9	17	0.2	6,788	60.9	126	1.1	1,261	11.3
Total	168,325	7,665	4.6	36,941	21.9	287	0.2	104,208	61.9	2,754	1.6	16,470	9.8

Source: 2022 spring ad hoc enrollment file

Table A–2. Spring HISD Enrollment and HISD Summer School Program Enrollment by Grade Level, 2022

Grade	1	2	3	4	5	6	7	8	9	10	11	12	Total
HISD Spring Grade Enrollment	15,075	14,307	15,078	15,266	15,358	12,733	13,290	13,156	17,681	12,885	12,355	11,141	194,607
Summer School Enrollment	3,115	2,431	1,994	1,845	1,597	1,232	1,468	1,489	3,154	2,819	2,212	1,695	25,051
% of HISD Spring Grade Enrollment	7.7	7.4	7.7	7.8	7.9	6.5	6.8	6.8	9.1	6.6	6.3	5.7	100.0
% of Total Summer School Enrollment	20.7	17.0	13.2	12.1	10.4	9.7	11.0	11.3	17.8	21.9	17.9	15.2	12.9

Source: 2022 spring ad hoc enrollment file; 2022 promotion file

Appendix A (continued)

Table A–3. Demographic Characteristics of Students Retained and Attended Summer School Program, Grades 1–8, Spring 2021 and 2022

Grade	Total Retained Spring 2021	Total Retained Spring 2022	Gender*				Emergent Bilingual		Special Education		Title I	
			Male		Female		2021	2022	2021	2022	2021	2022
			2021	2022	2021	2022						
			N	N	%	%	%	%	%	%	%	%
1	3,149	3,115	53.0	51.4	47.0	46.5	0.7	8.3	7.7	9.2	95.4	92.6
2	2,889	2,431	53.7	53.0	46.3	45.3	1.0	9.2	11.4	11.2	95.2	93.1
3	2,514	1,994	53.7	52.0	46.3	45.9	1.0	8.9	7.5	8.4	94.9	93.4
4	2,937	1,845	53.5	52.6	46.5	45.8	1.4	11.2	7.3	9.6	94.8	93.7
5	2,800	1,597	53.7	55.4	46.3	43.1	3.6	11.6	7.3	8.8	94.0	93.3
6	2,920	1,232	52.9	58.1	47.1	40.1	3.8	33.0	8.6	12.3	90.7	94.3
7	3,322	1,468	54.4	56.9	45.6	40.9	3.6	33.3	8.2	12.3	90.1	89.6
8	2,929	1,489	55.9	56.5	44.1	40.6	3.1	40.5	7.1	9.8	90.2	91.9
Total	23,460	15,171	53.9	53.9	46.1	44.2	2.3	16.8	8.2	10.0	93.1	92.8

Source: 2021 promotion file; 2022 promotion file

Note: *means that 295 students had no gender identified.

Table A–4. Racial/Ethnic Demographics of Retained Students that Attended Summer School Program, Grades 1–8, 2021 and 2022

Grade	Total Retained Spring 2021	Total Retained Spring 2022	Race/Ethnicity							
			African American		Hispanic		White		Other*	
			2021	2022	2021	2022	2021	2022	2021	2022
			%	%	%	%	%	%	%	%
1	3,149	3,115	31	29.5	65	63.4	2.3	2.1	1.7	2.9
2	2,889	2,431	29.2	29.7	66.7	63.1	1.7	2.2	2.4	3.3
3	2,514	1,994	30.4	27.4	66.3	67.0	1.7	1.7	1.6	1.9
4	2,937	1,845	29.1	30.1	67.4	64.3	1.8	1.7	1.7	2.3
5	2,800	1,597	25.6	27.7	70.7	66.1	1.9	2.3	1.8	2.6
6	2,920	1,232	25.4	32.0	69.7	63.5	2.8	1.8	2.1	1.0
7	3,322	1,468	24	28.5	71.6	63.2	2.9	4.2	1.5	2.0
8	2,929	1,489	25.9	23.5	69.9	68.8	2.4	3.1	1.7	1.7
Total	23,460	15,171	27.5	28.7	68.5	64.7	2.2	2.3	1.8	2.4

Source: 2021 promotion file; 2022 promotion file

Note: *Other means Asian, Native American, Two or More, or Pacific Islander.

Appendix A (continued)

Table A-5. Promotion Following Summer School, 2020-2021 and 2021-2022						
Grade	2020-2021			2021-2022		
	Retained/ Attended N	Promoted N	Promoted %	Retained/ Attended N	Promoted N	Promoted %
1	3,149	2,425	77.0	3,115	2,373	76.2
2	2,889	2,387	82.6	2,431	1,971	81.1
3	2,514	2,299	91.4	1,994	1,809	90.7
4	2,937	2,784	94.8	1,845	1,735	94.0
5	2,800	2,707	96.7	1,597	1,550	97.1
6	2,920	2,698	92.4	1,232	1,145	92.9
7	3,322	3,164	95.2	1,468	1,345	91.6
8	2,929	2,854	97.4	1,489	1,412	94.8
Total	23,460	21,318	90.9	15,171	13,340	87.9

Source: 2021 promotion file; 2022 promotion file

Appendix B

Table B-1

Logistic Regression Predicting the Likelihood of a Student being retained at the end of summer 2022

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Latest Economic Dis- advantage Indicator	-0.222	0.106	4.408	1	0.036*	0.801	0.652	0.985
Latest ESL Indicator	-0.501	0.078	41.493	1	0.000*	0.606	0.521	0.706
Latest SpEd Indicator	-0.504	0.099	25.659	1	0.000*	0.604	0.497	0.734
Female_male	0.037	0.051	0.532	1	0.466	1.038	0.939	1.148
Minority_Status	-0.203	0.159	1.640	1	0.200	0.816	0.598	1.114
Constant	-1.505	0.175	73.515	1	0.000	0.222		

* $p < 0.05$

Table B-2

End-of-course grade differences between end-of-year 2022 and end-of-summer 2022

Outcome	End-of-year 2022		End-of-summer 2022		n	Mean Difference	95% CI for Mean Difference	t	p	Cohen's d	Partial eta squared
	M	SD	M	SD							
English	51.77	15.02	84.82	8.92	142	33.05	30.10, 36.0	22.16	<.001*	1.86	0.78
Math	51.08	11.60	82.46	8.04	270	31.37	27.05, 30.27	35.44	<.001*	2.16	0.82
Science	55.87	11.21	84.53	7.94	277	28.67	27.05, 30.27	35.07	<.001*	2.11	0.82
Social Studies	50.94	13.02	85.50	9.57	117	34.56	31.80, 37.31	24.85	<.001*	2.30	0.84

* $p < .05$