

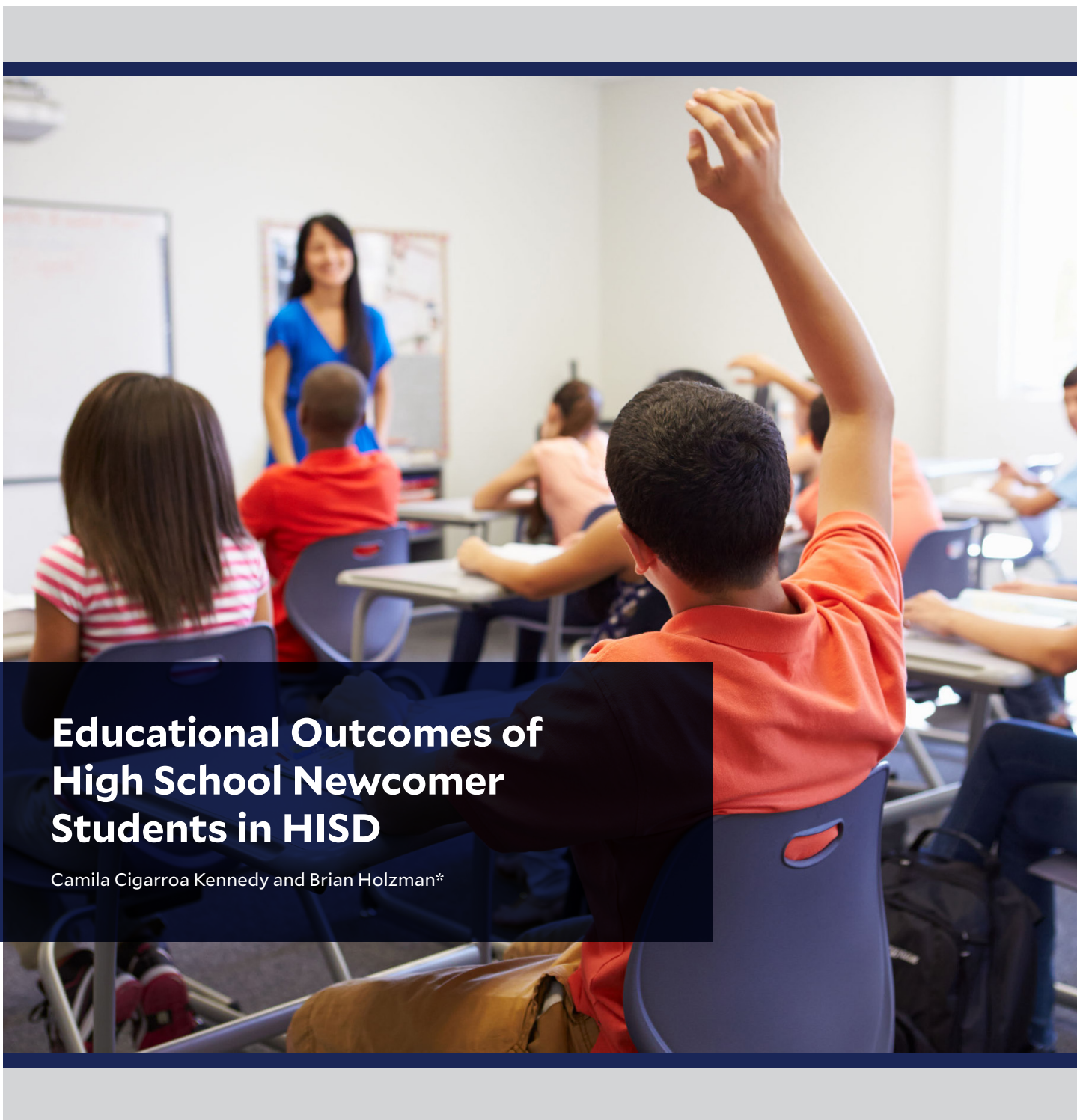


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# Kinder Institute for Urban Research

*Houston Education Research Consortium*

*Building Better Cities  
Building Better Lives*



## Educational Outcomes of High School Newcomer Students in HISD

Camila Cigarroa Kennedy and Brian Holzman\*

**Research Brief**

\* Corresponding author: [bholzman@tamu.edu](mailto:bholzman@tamu.edu)

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**Note on the authors.** Camila Cigarroa Kennedy is a researcher at Education Northwest. Brian Holzman is an assistant professor at Texas A&M University.

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## Research Brief

# Educational Outcomes of High School Newcomer Students in HISD

**T**his brief examines the outcomes of high school-aged newcomer students—recently-arrived immigrant English learners—in the Houston Independent School District (HISD). Data from the 2007-2008 through 2018-2019 school years show that newcomer students who attended Liberty High School upon arrival in the U.S. had similar levels of academic performance outcomes to their newcomer peers who attended other high schools in HISD. However, other outcomes differed: Liberty students were less likely to take advanced and career and technical education courses, had lower attendance rates, and had lower graduation rates than newcomer students at other high schools. Notably, many of the differences between Liberty and non-Liberty students shrank in more recent years after Liberty established a day program in addition to its night school program.

## Key Findings

1. Liberty and non-Liberty newcomer students demonstrated similar academic performance, as measured by GPA (grade point average) and TELPAS scores (Texas English Language Proficiency Assessment System).
2. Liberty students were more likely to take art courses and less likely to take advanced courses, athletics, or CTE courses during their first year compared to newcomer students at other high schools.
3. Attendance rates were lower for Liberty students compared to newcomer students at other high schools, but the difference narrowed after the addition of the day program.
4. Dropout rates were higher and graduation rates were lower for Liberty students compared to newcomer students attending other high schools.



# Background

Newcomer students are English learner (EL) students who have recently immigrated to the United States (U.S. Department of Education, 2016). Given their experiences with interrupted formal education,<sup>1</sup> trauma from the migration journey, and unfamiliarity with the U.S. schooling system, newcomer students may require support beyond what is provided in traditional classrooms (Custodio, 2011; Custodio & O’Loughlin, 2020; Hos, 2020; Jaycox et al., 2002; Short & Boyson, 2004). Newcomer programs are a strategy to address the unique needs of this population. These programs ease students’ transition to mainstream education by accelerating English language acquisition, developing literacy in students’ home languages, providing content instruction, and facilitating cultural adjustment (Short & Boyson, 2012). Within HISD, Liberty High School is one program serving the needs of recently arrived, adolescent immigrant students.

## **Liberty High School: “Many Cultures, Many Minds, One Goal: Academic Success”<sup>2</sup>**

Liberty High School is an alternative school in the Gulfton neighborhood of Houston serving students through two programs: a night program targeting over-age students and a more traditional day program. The night program opened in fall 2005 to provide intensive English language instruction, flexible schedules for working students, and year-round education. The day program opened in fall 2012, offering a four-year curriculum and a more traditional high school experience. Liberty is a school of choice, which means that no students are zoned to it, so students and their families

must choose to enroll. Liberty does not implement any test score requirements for admission, and enrollment is not limited to immigrant students in their first year of U.S. schooling, although most students are recent immigrants. Liberty’s mission statement is to “provide a setting for young adult learners where they will develop the linguistic and cognitive skills necessary for success in high school, college and beyond.”<sup>3</sup> These goals are important given the challenges faced by immigrant students who come to the U.S. as adolescents: late-arriving students tend to have lower levels of academic performance and are more likely to drop out of high school (Potochnick, 2018).

Students at Liberty High School are a unique group of recent immigrants. A prior HERC report showed that about 4% of Liberty enrollees were refugees or asylees and nearly half were classified as students with interrupted formal education (Holzman et al., 2024). According to school leaders, many Liberty students enter the school with few or no credits toward a high school diploma. The school is committed to ensuring recent immigrants have opportunities to complete a high school education and has a sizeable number of over-age enrollees. Although Liberty students were classified as 12th graders during the time of the study, many students were in their early to mid-20s. Because older students may have family responsibilities and full-time jobs, many Liberty enrollees opt to attend the night program. Additional details about this unique group of students are available in the data and sample section of this research brief.

<sup>1</sup> Students with interrupted formal education arrive in the U.S. with no prior schooling or fewer years of schooling than expected given their age (e.g., a 16-year-old who only had six years of education).

<sup>2</sup> Liberty’s motto from <https://www.houstonisd.org/liberty>.

<sup>3</sup> Liberty’s mission statement from <https://www.houstonisd.org/liberty>





## Research Questions

This brief explores the academic performance, course-taking, school engagement, and educational attainment of high school-aged newcomer students in HISD. The study used student-level administrative data from 12 cohorts of high school students from the 2007-2008 to 2018-2019 school years to address the following question:

*How did attending Liberty versus other HISD high schools predict the following outcomes among adolescent newcomer students?*

1. First-year academic performance (grade point average [GPA], Texas English Language Proficiency Assessment System [TELPAS])
2. First-year course-taking (advanced, career and technical education [CTE], fine arts, and athletics coursework)
3. First-year school engagement (attendance rate)
4. Educational attainment by age 20 (high school dropout and graduation)<sup>4</sup>

<sup>4</sup> The dropout and graduation rates used in this study were measured using multiple years of data to follow high school

HERC researchers examined these outcomes for the whole study period as well as for the periods before and after the addition of the day program in the fall of 2012. When making comparisons between groups, the analysis considered important student characteristics, including but not limited to age, country of origin, economic disadvantage, and baseline English proficiency (IDEA Proficiency Test score).

Importantly, this analysis is not a program evaluation. While the analysis highlights differences between Liberty students and non-Liberty students, it does not conclude that Liberty High School was the cause of these differences, especially since the two groups of students are different in known and unknown ways. Similarly, when examining changes in outcomes after the addition of the day program, the results reflect population changes in the students attending Liberty, not the causal effect of introducing the day program.

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newcomer students until they turned 20 years old. If a student graduated when they were 20 or 21 years old, for example, they were not counted as a graduate for the purpose of this study. The research team made this analytic choice because there were too few over-age students at other HISD schools to compare to over-age students at Liberty.



## Data

This study used HISD administrative data from the 2007-2008 to the 2018-2019 school years. The sample included 6,850 students, all of whom were newcomers: born outside of the U.S., in their first year of schooling in the U.S., and categorized as EL upon arrival. The sample focused on high school-aged newcomer students between 13 and 19 years old and classified as ninth through 12th graders.<sup>5</sup> Since a prior HERC study showed that few students far from the school enrolled at Liberty (Holzman et al., 2023), the sample was restricted to students within a 20-minute drive of the campus. Even within this subsample of newcomer students, Liberty students were distinct across a variety of characteristics (see Table 1).<sup>6</sup>

TABLE

1

## Characteristics of Liberty Students and Newcomer Students at Other High Schools

Characteristic	Other HS N = 5,730	Liberty HS N = 1,120
Age	15.8	17.3
Gender		
Female	41%	37%
Male	59%	63%
Country of origin		
Mexico	8%	8%
Central America	52%	74%
Other Hispanic Countries	6%	3%
Asia and the Pacific	11%	3%
Sub-Saharan Africa	8%	7%
Middle East	7%	1%
Other Countries	6%	4%
Economically disadvantaged	65%	82%
Individual Proficiency Oral English Test percentile		
1st percentile	57%	65%
2nd-10th percentile	20%	20%
Drive time to Liberty HS		
0-10 minutes	48%	78%
10-20 minutes	52%	22%
Student neighborhood context		
Proportion foreign-born residents	39%	51%
Socioeconomic status index	-0.09	-0.73

<sup>5</sup> Since few students at other HISD high schools were over-age, to ensure a closer comparison, the analysis excluded students who were 20 years old and older at arrival. All students at Liberty are coded as 12th graders, no matter their age or time spent at the campus.

<sup>6</sup> For a detailed analysis of which student characteristics predicted enrollment at Liberty High School, please review a previous HERC study called *Who Goes to Newcomer Schools? Liberty High School* by Holzman et al. (2023).

# Results

## 1 Liberty and non-Liberty newcomer students demonstrated similar levels of academic performance, as measured by GPA and TELPAS scores.

After accounting for student and neighborhood characteristics, newcomer students who attended Liberty had similar GPAs to newcomer students at other high schools (see Figure 1).

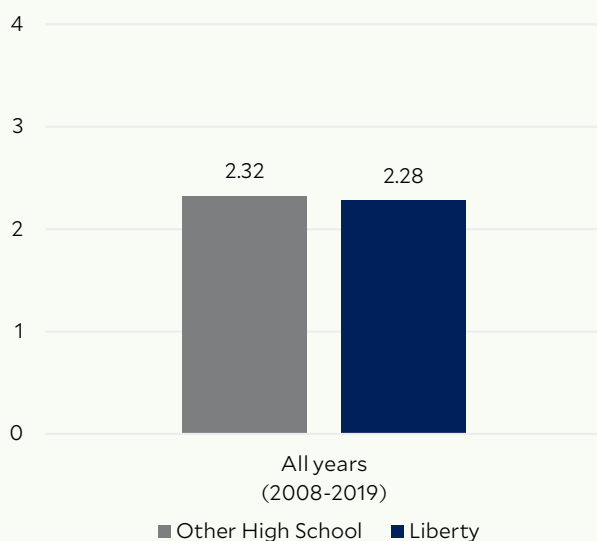
At the end of their first year in HISD, Liberty students had slightly lower TELPAS composite scores (1.78 points) than newcomers at other high schools (1.83 points). This was a small difference on a scale from 1 to 4. Both groups had scores that fell between the Beginner and Intermediate levels, scores 1 and 2 (see Figure 2). Among TELPAS subject-specific assessments, there were no differences in listening, speaking, or writing.

Liberty students had reading scores that were 0.10 points lower than non-Liberty students, which, again, was a small difference on a four-point scale.

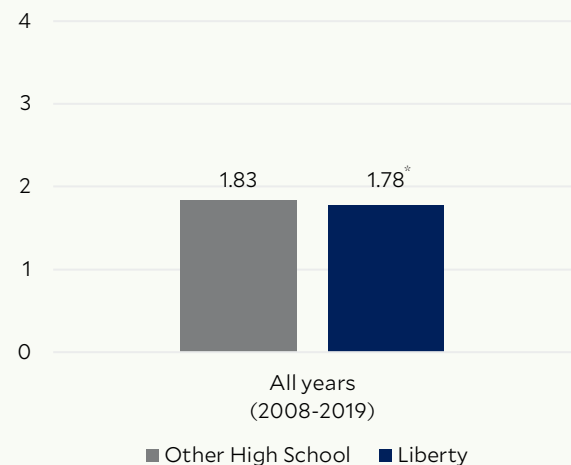
### Changes in academic performance after the addition of the day program

The similarities in GPA and TELPAS scores between Liberty students and other newcomers were consistent across the entire period of the study; specifically, there were no changes in the Liberty/non-Liberty difference in GPA or TELPAS scores after the introduction of the day program.

**FIGURE 1 Predicted first-year GPA of newcomer students**



**FIGURE 2 Predicted first-year TELPAS composite scores of newcomer students**



Note: \* indicates Liberty was significantly different from newcomers at other schools.

## 2 Liberty students took different coursework than other newcomers during their first year enrolled in HISD, and course-taking patterns changed after the addition of the day program.

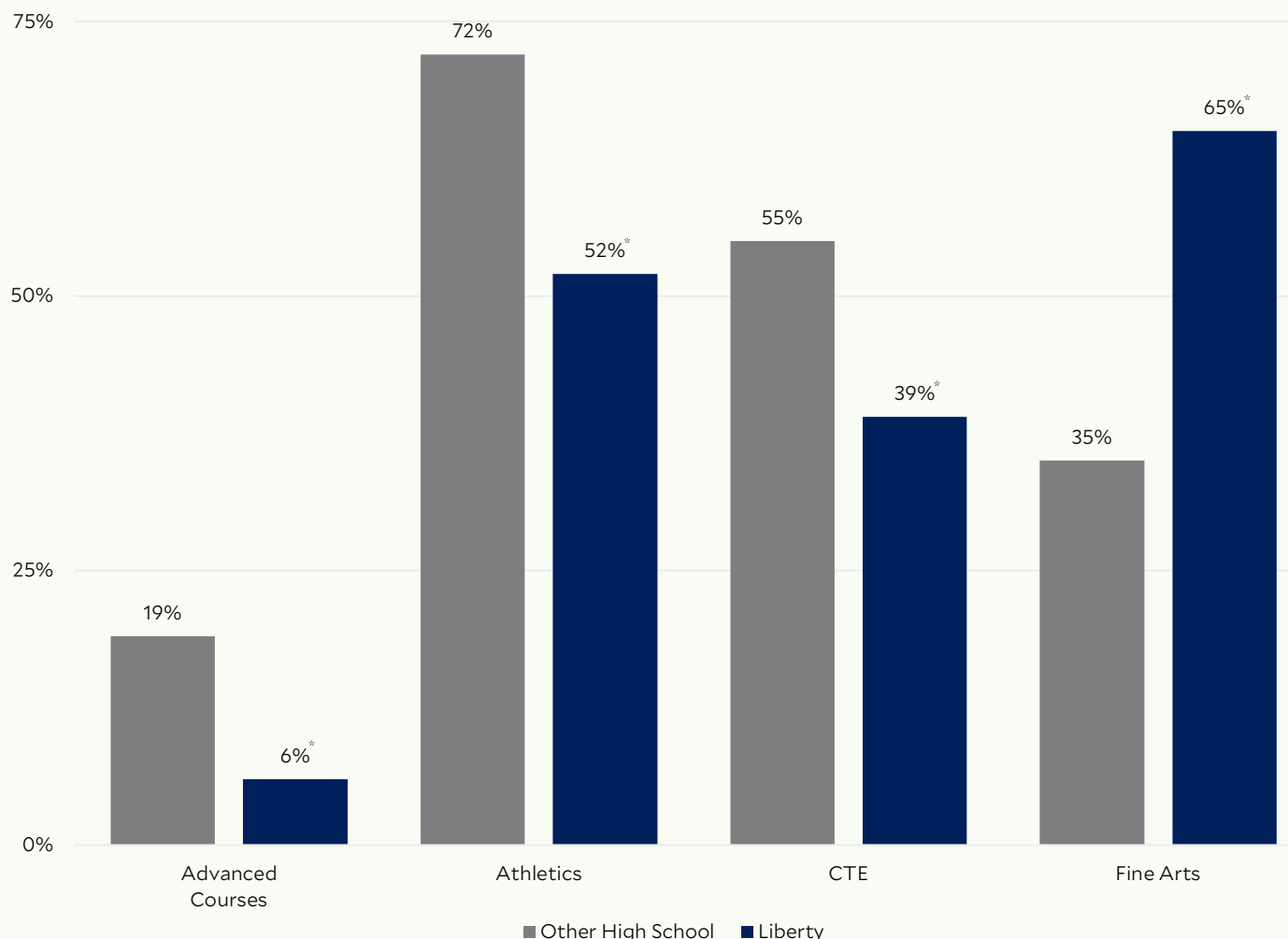
**A**mong newcomer students in their first year enrolled in HISD, those who attended Liberty High School were less likely to take advanced courses, athletics courses, and career and technical education (CTE) courses (see Figure 3). Liberty students, however, were more likely to take fine arts courses during their first year than newcomer students at other high schools.

These differences might reflect the different course offerings at HISD campuses. It is important to note this study only looked at a student's first year of enrollment. For example, Liberty students might have taken advanced courses in subsequent school years.

### Changes in course-taking patterns after the addition of the day program

After adding the day program, there were changes in Liberty students' course-taking patterns. The gap in advanced course-taking between Liberty and non-Liberty newcomers grew (see Figure 4), while gaps in athletics and CTE course-taking narrowed (see Figures 5 and 6). Liberty students were nearly twice as likely to enroll in fine arts courses after the start of the day program (see Figure 7).

**FIGURE 3 Predicted probability of newcomer student course-taking during the first year**

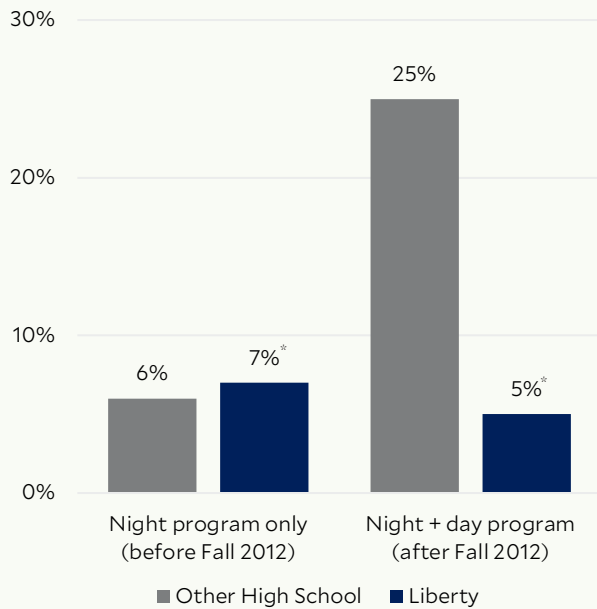


Note: \* indicates Liberty was significantly different from newcomers at other schools.



FIGURE 4

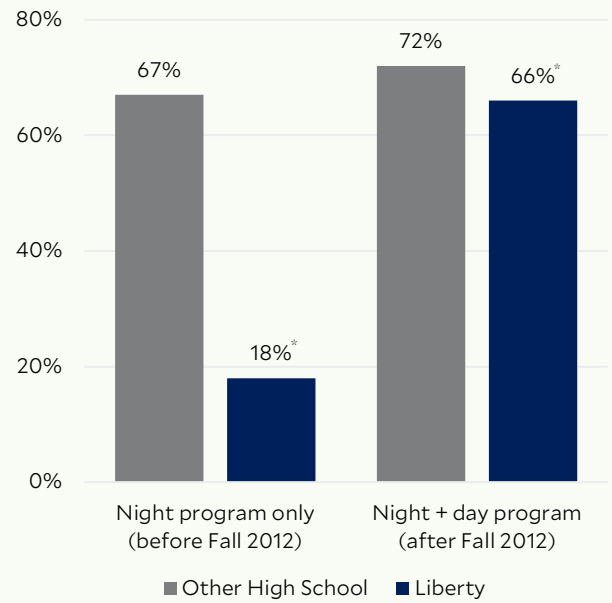
### Predicted probability of newcomers taking an advanced course before and after the day program



Note: \* indicates Liberty was significantly different from newcomers at other schools.

FIGURE 5

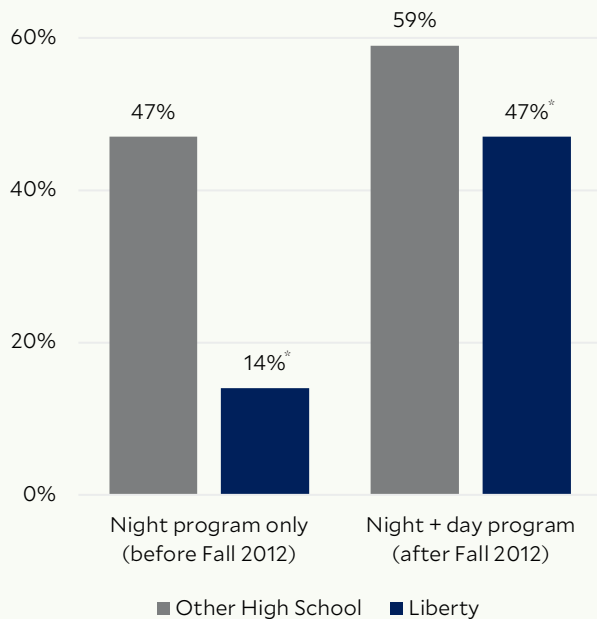
### Predicted probability of newcomers taking an athletics course before and after the day program



Note: \* indicates Liberty was significantly different from newcomers at other schools.

FIGURE 6

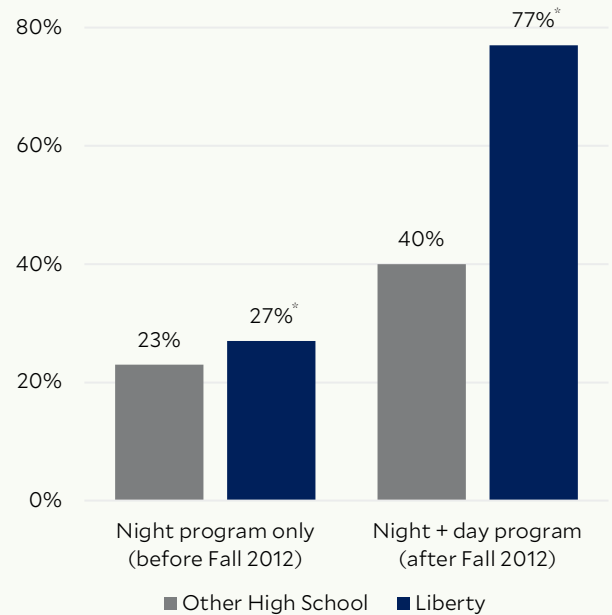
### Predicted probability of newcomers taking a CTE course before and after the day program



Note: \* indicates Liberty was significantly different from newcomers at other schools.

FIGURE 7

### Predicted probability of newcomers taking a fine arts course before and after the day program



Note: \* indicates Liberty was significantly different from newcomers at other schools.

### 3 Liberty High School students had lower attendance rates than newcomers who enrolled at other HISD schools, but this gap shrunk after the addition of the day program.

Students at Liberty High School had lower attendance rates in their first year than newcomers at other HISD high schools (see Figure 8).

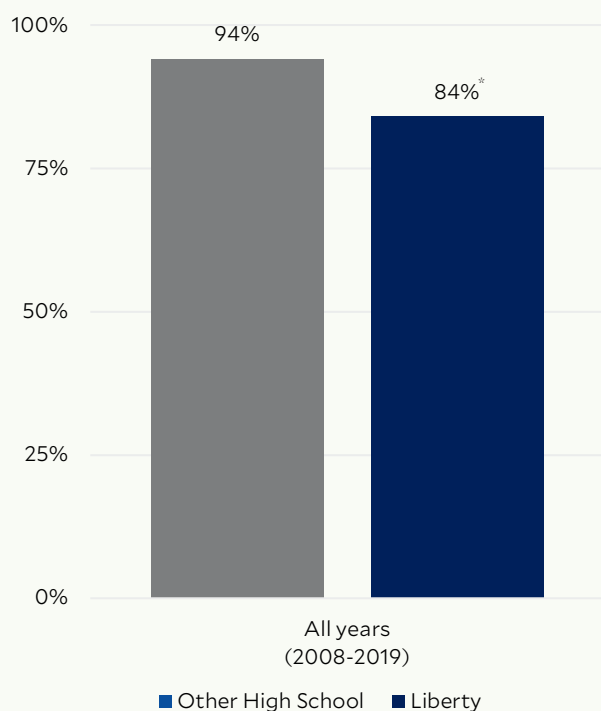
#### Changes in attendance after the addition of the day program

When Liberty only offered night classes, students' attendance rates were 20 percentage points lower than their peers at other high schools (see Figure 9). However, after the addition of the day program, Liberty students had attendance rates only seven percentage points lower. This narrowed gap might reflect how the day program attracted or targeted newcomer students who did not need to take night classes—students who were not over-age, who were not working full-time, or who did not have other responsibilities that might affect their attendance.



FIGURE 8

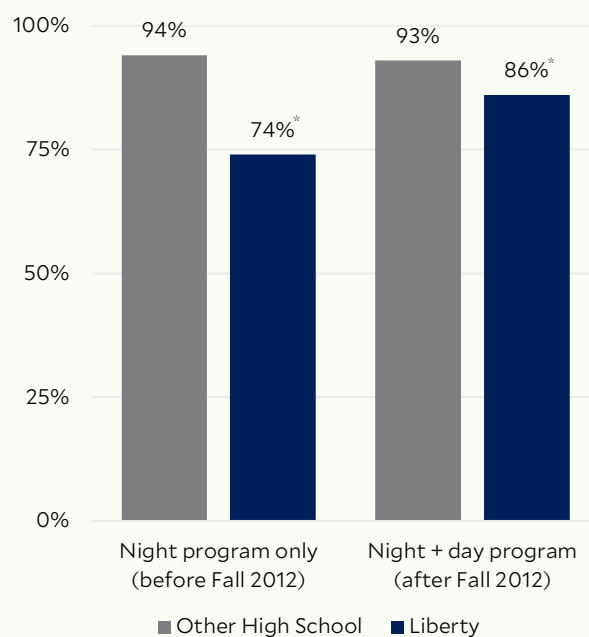
#### Predicted first-year attendance rates of newcomer students



Note: \* indicates Liberty was significantly different from newcomers at other schools.

FIGURE 9

#### Predicted first-year attendance rates of newcomer students before and after the day program



Note: \* indicates Liberty was significantly different from newcomers at other schools.

## 4 Liberty High School students were more likely to drop out and less likely to graduate than newcomer students attending other high schools.

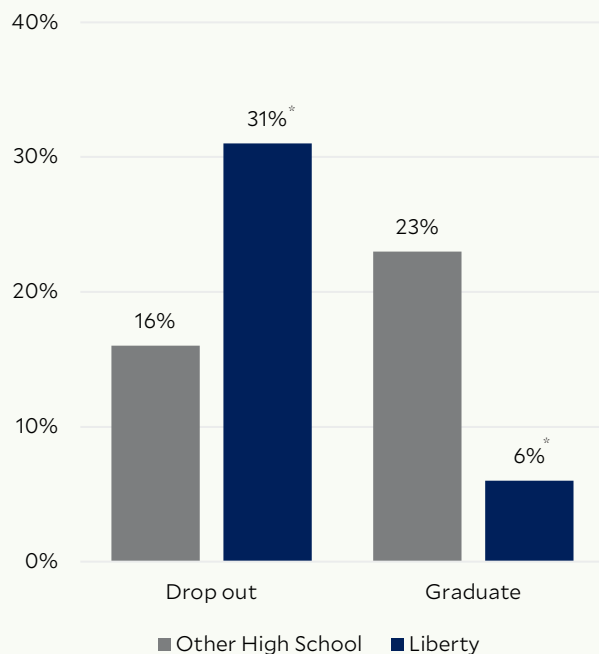
Compared to newcomer students at other schools, Liberty students, on average, had a 31% likelihood of dropping out before age 20, compared to a 16% likelihood among non-Liberty newcomers (see Figure 10). Similarly, Liberty students had a 6% chance of graduating high school before age 20, compared to a 23% chance among other newcomers. It is important to note that these findings were based on students we observed either dropping out or graduating from high school before age 20. It is possible that newcomers who attended Liberty or other high schools might complete their diplomas in another school district or earn a certificate of high school equivalency like a GED.

### Changes in dropout and graduation rates after the addition of the day program

There were no meaningful changes in graduation rates at Liberty or other HISD high schools after the introduction of the day program. While dropout rates increased among Liberty and non-Liberty newcomers after the introduction of the day program, there was, at best, a small reduction in the dropout gap between the two groups.

FIGURE 10

**Newcomer students' predicted probability of dropping out or graduating by age 20**



Note: \* indicates Liberty was significantly different from newcomers at other schools.



# Conclusion

## Summary and Discussion

This study examined the outcomes of newcomer students in their first year at HISD, focusing on differences between students who attended Liberty High School and students who attended other high schools. While Liberty served a more disadvantaged newcomer population, Liberty students demonstrated similar levels of academic performance to their non-Liberty peers, as measured by TELPAS scores and GPA. However, Liberty students had different course-taking patterns, lower attendance rates, higher dropout rates, and lower graduation rates. After the addition of the day program, gaps in attendance rates and athletics and CTE course-taking narrowed, while gaps in advanced and fine arts course-taking grew.

While it is important to understand the differences between Liberty students and other high school newcomers, one limitation of this study was the inability to distinguish day program students from night program students. Day program students at Liberty would have been a better comparison group for newcomer students at other HISD schools because they might be more similar in age and not have full-time jobs or other responsibilities.

## Recommendations

- **Make more advanced-course offerings available for newcomer students at Liberty.** Despite similar levels of academic performance, Liberty students (6%) were less likely to take an advanced course than non-Liberty students (19%). For comparison, 45% of HISD students in grades 9-12 took an advanced or dual-credit course during the 2018-2019 school year (Texas Education Agency, 2020). This may limit access to postsecondary education for Liberty students, as advanced course-taking is strongly associated with college outcomes (Holzman et al., 2019).
- **Make more CTE courses available to Liberty students.** Career and technical education courses, especially those that offer pathways into skilled jobs directly out of high school, may benefit newcomer students who have low graduation and college-going rates.
- **Identify evidence-based practices and interventions to support the educational attainment of newcomer students who arrive in high school,** especially since dropout rates were high and graduation rates were low for newcomer students. Guidance counselors and wraparound specialists may be able to assist with these efforts.
- **Identify strategies to boost attendance rates among HISD students who may be older than average students, including those attending Liberty.** Potential strategies may include partnering with free or reduced-cost child care services, offering flexibility through remote or hybrid options, and creating an attendance policy conducive to students with work or family responsibilities.
- **Collect data through the student information system on whether Liberty High School students are enrolled in the day program, the night program, or both.** This would allow for a more thorough and nuanced analysis of the school's impact on student outcomes.



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RICE UNIVERSITY

Kinder Institute for Urban Research

6100 Main Street MS-208 • Houston, TX 77005  
713-348-4132 • [kinder@rice.edu](mailto:kinder@rice.edu)  
[kinder.rice.edu](http://kinder.rice.edu)