

MEMORANDUM

November 19, 2020

TO: David Johnston
Assistant Superintendent

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

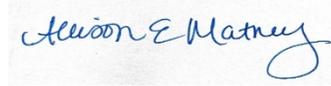
SUBJECT: **HISD LAUNCH IGNITE SCHOLAR PROGRAM: BUILDING SECONDARY STUDENTS' COLLEGE AND CAREER READINESS, 2019–2020**

To enhance college and career readiness of 10th and 11th grade high school students in the Houston Independent School District (HISD) the Launch Ignite Scholar Program was implemented. The Launch Ignite Scholar Program provided early exposure to college and career readiness supports to disadvantaged students through participation in one-on-one advising, presentations, and college and industry visits. The attached report examines Ignite Scholars' rate of access to the various program activities and changes in college and career readiness knowledge, mindset, and educational goal (educational aspiration and expectation) from pre to post-program participation. The evaluation used descriptive statistics and linear regression models to determine whether the 2019–2020 cohort of Launch Ignite Scholars were on track to meeting academic indicators of college readiness.

Key findings include:

- In the 2019–2020 academic year, there were four structured one-on-one advising sessions available to Ignite Scholars, with approximately 96 percent of scholars participating in 3 or more advising sessions.
- The Department provided 19 college campus or industry tours for 968 high school students; 33.8 percent of tour attendees were Ignite Scholars.
- Also, almost 60 percent of scholars reported they were knowledgeable of what was needed to be college and career ready.
- Compared to their campus peers, Ignite Scholars showed a positive significant difference ($p < .000$) in GPA (2.69 vs. 2.85, respectively), average daily attendance (154.65 vs. 160.88, respectively), and passing rate for AP courses (0.13 vs. 0.31, respectively).
- For Ignite Scholars whose attendance was 90 percent or more, the likelihood of getting a GPA of 3.0+ increased by a multiplicative factor of 2.93 ($p < .05$).
- Ignite Scholars who received advising were 4.49 times more likely to attain a cumulative GPA of 3.0+ than non-Ignite Scholars who did not participate in advising ($p < .01$).

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

A handwritten signature in blue ink that reads "Allison E. Matney". The signature is written in a cursive style with a large, looping 'y' at the end.

AEM

Attachment

cc: Grenita Lathan, Ph.D.
Silvia Trinh
Yolanda Rodriguez
Richard Cruz
Autumn Boyd



RESEARCH

Educational Program Report

**HISD LAUNCH IGNITE SCHOLAR PROGRAM:
BUILDING SECONDARY STUDENTS' COLLEGE
AND CAREER READINESS, 2019-2020**



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Houston Independent School District
Hattie Mae White Educational Support Center
4400 West 18th Street Houston, Texas 77092-8501

www.HoustonISD.org

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EVALUATION REPORT

BUREAU OF PROGRAM EVALUATION

HISD Launch Ignite Scholar Program: Building Secondary Students' College and Career Readiness, 2019–2020

Prepared by Georgia Graham, PhD

Abstract

Early exposure to college and career readiness supports were offered to disadvantaged grade 10 and 11 high school students through the Launch Ignite Scholar Program. Ignite Scholars were encouraged to build a stronger foundation for college and career through participation in one-on-one advising, college and industry tours, and college and career readiness presentations. In this study, Ignite Scholars' rate of access to the various program activities and changes in college and career readiness knowledge, mindset, and educational goal (educational aspiration and expectation) were calculated. Additionally, the academic performance of Ignite Scholars was compared to their campus-level peers, who opted out of participating in the program and did not participate in advising in the 2019–2020 school year. The self-reported educational aspiration of Ignite Scholars was high compared to their educational expectation. The rate of access to college and career readiness activities was comparable between Ignite Scholars and non-Ignite Scholars. Descriptive analysis showed that Ignite scholars were on track to meet academic indicators of college readiness, with Scholars outperforming their peers on all indicators. There was a positive association between educational aspiration and planning to go to college, an increase in educational aspiration was associated with increased odds of planning to go to college. The effect of mindset was also significant and positive, indicating that students with a growth mindset were more likely to plan to go to college than students with a fixed mindset. There was a statistically significant difference in the mean cumulative GPA, attendance, and AP course passing rate of Ignite Scholars and the comparative sample of campus peers. The findings indicated that there was an increased odds of meeting college-ready indicator of GPA 3.0+ for Ignite Scholars who participated in advising and had 90 percent or more attendance compared to their campus peers.

Adolescence is a crucial formative period for students because the knowledge and skills acquired set the stage for success in college and career (Radcliffe & Bos, 2013). Referred to as the “transition years,” adolescence is a challenging time for students as they face significant social, emotional, physical, and intellectual growth and pressures (Armstrong, 2006). Adolescence is also the educational stage when students are most at-risk of losing interest and disengaging from school if they are not challenged or fail to see the connection between their education and their long-term goals and aspirations (Juvonen, Kaganoff, Augustine, & Constant, 2004). This is particularly true for disadvantaged students (Radcliffe & Bos, 2013).

Nationwide, approximately 70% of students graduate from high school in four years; however, dropout rates are significantly higher in urban areas and among African American and Hispanic students (Brand, Board, & Work, 2009; Sum, Khatiwada, McLaughlin & Palma, 2009). Building college and career readiness, especially among disadvantaged students, should start early (Radcliffe & Bos, 2013). A student is college and career ready when they have attained the knowledge, skills, and disposition needed to succeed in credit-bearing (non-remedial) postsecondary coursework or a workforce training program. Thereby, allowing students to earn the credentials necessary to qualify for a meaningful career aligned to their goals and offering a

competitive salary (National Forum on Education Statistics, 2015).

Background

In 2015, the Houston Independent School District (HISD) received a grant for three million dollars over three years from the Houston Endowment Fund. The grant was matched dollar-for-dollar by the district to implement the College Success program. The combined funds allowed the HISD College and Career Readiness Department, which is under the division of College and Career Readiness, to increase the number of college success advisors; thereby, reducing advisor caseload and improving student outcomes. In the 2018–2019 school year, HISD rebranded the College Success program to *Launch HISD: Empowering Students, Launching Futures*. Launch is a comprehensive college and career readiness and advising program that serves every high school campus in the district, expanding advising and college and career exploration for larger groups of students (HISD, 2018). The HISD College and Career Readiness Department provides higher education access to all HISD students and works closely with campuses and district departments to create and maintain a college-bound culture throughout the district (HISD, n.d.). This early level of outreach enhances college and career options, and ultimately the success of all HISD students. The assumption

behind the program is that should the College and Career Readiness Department provide a scaled intervention that begins early (academic skills, advising, and post-graduation support to high school students) and promotes the development of a college-going culture, then more HISD graduates would be prepared for college and career and will pursue post-secondary education (HISD, n.d. p.8). To achieve this, the department implemented the Launch program in 2015.

HISD Launch Ignite Scholar Program

As part of Launch, in the 2018–2019 academic year, the district piloted a program targeting 9th, 10th, and 11th grade students at nine priority schools providing mandatory advising and presentations related to college and career readiness. In the 2019–2020 school year, HISD amended the pilot program and implemented the *Launch Ignite Scholar Program* which was expanded across eighteen priority district high schools to provide voluntary, targeted, early exposure to college and career readiness interventions to disadvantaged students that are in the ‘academic and professional middle’.

The Launch Ignite Scholar Program uses a caseload approach to empower sophomore and juniors, who may or may not attend college based on their profiles, to take ownership of their futures. Caseload students are known as Ignite Scholars. Ignite Scholars are connected to advisors who provide personalized supports and resources that ensure early exposure to college and career readiness at eighteen priority high schools in the district. Ignite Scholars are encouraged to be proactive, building a stronger foundation for college and career through one-on-one advising, college and industry tours, PSAT/SAT preparation, and Summer Learning Opportunities (HISD, 2018). For the 2019–2020 academic year, due to COVID-19, not all aspects of the program were implemented. Ignite Scholars in grades 10 and 11 were able to participate in one-on-one advising, college and career readiness presentations, and college and industry tours. The program activities were expected to help improve Ignite Scholars’ college readiness (see **Figure 1**).

Students in the ‘academic and professional middle’ tend to fall within the second and third quartiles of their high school class and are not prepared to go on to a 2-year or 4-year college program (Gray & Herr, 2006). A few studies have reported that student success appears to vary widely depending on school factors (Christle, Jolivet, & Nelson, 2007; Griffin, 2002; Pietrowiak & Novak, 2002). For example, early school failure may act as a starting point in a cycle that weakens a student’s attachment to school and eventually leads to dropping out (Pietrowiak & Novak, 2002); and students’ inability to identify with academics (Griffin, 2002).

Early identification of college-bound and non-college bound students who are in the ‘academic and professional middle’ becomes essential to create pathways for learners. Academic advising offers the potential of linking students’ goals with institutional resources on a personalized basis (Drake, 2011). For students, the linkage of their goals with institutional resources may subsequently create a better appreciation of the benefits of education, greater involvement in the institution, increased learning, and a more satisfying school experience (Metzner, 1989).

Role of academic advising

Preparing students in the ‘academic and professional middle’ for academic success and career-readiness requires a focus on student motivation, interpersonal relationships that can help to build strengths, and salient educational and skill-building opportunities (Ecker-Lyster & Niileksela, 2016; Zaff et al., 2017), leading to positive academic, social, emotional, and vocational well-being (Lerner et al., 2009; Zaff & Smerdon, 2009). In a rapidly changing workplace, high school students require an education that provides them with the academic, career and technical, and guidance and counseling knowledge, skills, and temperaments that facilitate their career readiness upon graduation from high school (Gysbers, 2013).

The delivery system for school counseling programs are based on strength-based guidance content that is provided through a comprehensive program that consists of direct-service delivery components, specifically, guidance curriculum, individual student planning, and responsive services, but particularly through the guidance curriculum (Vondracek, Lerner, & Schulenberg, 2019). Strengths-based school counseling is characterized by counselors promoting development of student factors or strengths ... such as skills, attitudes, and knowledge that are both modifiable and have

Literature Review

There has been a substantial amount of focus on the ten percent of students who are on an academic or career path, neglecting a substantial percentage of the student population that are not performing well academically nor have any idea what they want to do when they graduate (Gray & Herr, 2006).

Figure 1: Ignite scholar program theory of change

	Activities	Outputs	Outcome
Problem Low number of high school students are college ready	One-On-One Advisor Meetings	# Advisor meetings	Change in attitudes and perceptions of ability to attend college
	Classroom Presentations	# Presentations	
	College & Career Exploration Tours	# College and Industry Tours	Scholars score higher on SAT than similar district peers
	Academic Support	# Students writing TSI / PSAT # Students pass TSI / PSAT	
			Improved academic performance

been shown to be empirically related to academic success (Geltner & Leibforth, 2008). The perspective emphasizes youth assets rather than their deficits or problems.

The guidance curriculum should be presented systematically and sequentially in classrooms by school counselors (Vondracek, Lerner, & Schulenberg, 2019). Also, school counselors organize and conduct large-group sessions, such as career days and college days. Such a system needs to integrate college and career readiness in the developmental context. A developmental approach to career decision making because it attends to grade and task suitability is the best approach to addressing the needs of students in the academic middle (Patton & Creed, 2001; Vondracek, Lerner, & Schulenberg, 2019). The overall challenge to the advisor is to meet the advisee's developmental needs whether they are emotional, academic, or career oriented.

Social and individual influencers

Much of the literature and research on the importance of communication and student support relating to college and career readiness highlights the importance of internal and external factors. These factors are related to the student and their peers, demographics, school and social environment, cultural, and generational status that impact student development (Leonard, 2013; Farmer-Hinton & Holland, 2008). In Holland's (2010) view, while students' social networks provided encouragement, there was a shortage of individualized, concrete, and comprehensive college planning. Student development entails increased and effective college and career readiness attributes, knowledge, and behaviors (Padilla, 2009). College planning and preparation for disadvantaged students must be more cohesive and focused toward providing access to academic, financial, and social information that is instrumental to the students' transition to college (Holland, 2010).

Increasingly, research has identified non-cognitive skills (social and emotional learning and mindset) as an important factor in improving college and career readiness (Dymnicki, Sambolt, & Kidron, 2013; Fehrenbach, 1993). More traditionally, college readiness has been defined in terms of a student's course performance based on course sequence and GPA. Conley (2007) posits that a more comprehensive definition would include mindset, academic knowledge and skills, academic behaviors, and contextual knowledge (2007). "Students with strong motivation and drive, a desire to achieve goals, a belief in their own capacity for success, the ability to reflect on their learning strategies, and a willingness to persist in the face of obstacles can overcome specific shortcomings in English and mathematics content knowledge or obtain the knowledge necessary to succeed" (Conley & French, 2014, p. 1019).

Research Questions

The Launch Ignite Scholar Program is a cohort of 401 students in grades 10 and 11 who participate in one-on-one advising, college and career readiness presentations, and

college and industry tours. The research will be examining the effectiveness of the program activities on Ignite Scholars' academic performance, college knowledge, and aspirations compared to their campus peers. As a result of the early intervention, students in the Ignite Scholar Program have not completed their high school senior year; therefore, the final data on their college acceptance or career readiness is not included in this study. The evaluation examines the impact of college and career readiness classroom presentations, tours, and advising on student's academic performance, mindset, and college readiness.

The research questions are as follows:

1. What were the demographic characteristics of the Ignite Scholars that were selected for the program based on the program criteria? Is the program reaching the intended audience?
2. What percentage of Ignite Scholars participated in the Launch Ignite program activities offered during the 2019–2020 academic year compared to their campus peers (tours, presentations, and events)?
3. Was there a change in non-cognitive performance (educational goals, college and career knowledge, and mindset) among Ignite Scholars?
4. What variables predict Ignite Scholars' education attainment and the likelihood that Scholars are on track for meeting academic indicators of college readiness?

Method

This evaluation used data on tenth and eleventh-grade students in one of the eighteen priority schools that were selected to participate in the Launch Ignite Scholar Program that commenced in fall 2019. Grade 10 and 11 students were identified for the program based on their previous year's GPA of less than 3.0, attending a target campus, economically disadvantaged status, minority status within a school context, immigrant status, homeless status, and first generation status. Potential scholars were selected using an algorithm developed by the department and potential participants were notified and given the option to opt-in or out of the program. Students were invited to attend an Orientation session in September, which included a "commitment" or "agreement" that they signed at that time to be inducted into the program. Over one academic year, Ignite Scholars were provided one-on-one advising, presentations, college and industry tours.

Description of the Launch Ignite Scholar Program

Students are assigned a College and Career Readiness Advisor (CCRA) who operates as their liaison between program objectives. The mission of the college and career advising program is to "Empower students to launch their futures by helping them pursue fulfilling careers through personalized higher educational pathways that emphasize their strengths, interests, and goals (HISD, n.d.)". Therefore,

the CCRA responsibilities extended beyond advising students on course selection rather it entailed assessing students' motivation, ability to build relationships, and access educational and skill-building opportunities that lead to positive academic, social, emotional, and vocational well-being. There is a total of nine CCRA that are assigned to one of the eighteen priority schools. Considering the depth of the support provided to Ignite Scholars, each CCRA has an average caseload of 44 assigned students. Non-caseload students have access to the CCRA on a walk-in basis.

Advising. This was the first time that HISD implemented a caseload approach to advising, therefore, CCRA were given the option to engage in conversations with students through a scripted conversation primer or just using questions to engage students. Students were required to participate in four scheduled advising sessions. Each session had an advising objective that the CCRA was expected to achieve (see **Table A1**, p. 15 for a list of advising objectives).

Presentations. Ignite Scholars and the general student population, non-Ignite Scholars, were able to participate in grade-level presentations. Presentations were delivered during scheduled class time. In the fall, all ninth-grade students were able to participate in a presentation on *Understanding Credits*. Another presentation was delivered in the spring to grade 9 students, *Calculating Your GPA*. Also, during the spring one presentation was delivered to grade eleven students on *Admission List Building*.

College and industry tours. Similarly, college tours were organized for Ignite Scholars and open to all HISD students based on space availability. Non-Ignite Scholars would hear about tours via the following means: text message, school announcements, posting in the college center, and email. Additionally, students would be approached by department staff based on having the ideal GPAs and/or test scores that met entry requirements for the College being visited.

Data Collection

To capture all the program components, data was collected between September 1, 2019 – May 31, 2020 using a multi-pronged approach to data collection. There were four data sources for this research, which included district data on student demographics, administration of a student self-assessment, case notes from the caseworkers, and district level data on student academics.

Student demographics. The demographic characteristics of Ignite Scholars (n=400) and non-Ignite Scholars (n=332) used for this report were collected from the Public Education Information Management System (PEIMS) 2019–2020 HISD student database. Characteristics included gender, ethnicity, economically disadvantaged status, homelessness, and immigrant status. Each student was coded as '1' for Ignite Scholar, '0' for those who were invited to participate in the program but opted out. A list of invited program participants provided by the department was used to identify Scholars and the comparison group.

Case notes. The College and Career Readiness department provided the CCRA case notes on each Ignite Scholar for the

four-advising sessions that were administered in the 2019–2020. The department uses CoPilot Notes a data management system that analyzes notes to identify campuses falling behind on benchmarks, connect students to opportunities, and program evaluation (HISD, 2020). The case notes were used to establish an indicator for whether a student received advising (1) or not (0), and the number of advising sessions received.

Academic performance. The outcome measure used for this study was grade 10 and 11 academic performance. Academic performance was measured using pre-program weighted GPA, and post-program weighted GPA. Also included, was whether students participated in accelerated learning programs specifically advanced placement (AP) courses. Behavioral factors were also included – suspensions and attendance (Barnes & Slate, 2014; Hein, Morgan, Zakhem & Cooper, 2018; Jimerson, Patterson, Stein & Babcock, 2016; Smerdon, & Sambolt, 2013).

Student self-assessment. A pre-and-post survey instrument was used in this analysis was created and administered by the College and Career Readiness department for the Launch project. All students in the Ignite Scholar Program were invited to complete a pre-and-post survey. Participants were provided access to the pre-survey from November 13, 2019 to December 13, 2019, and the post-survey from May 6, 2020 to June 8, 2020. A link to the pre-and-post online survey was emailed out to students. Also, during advising sessions CCRA would follow-up with those students who had not completed the survey. However, due to the COVID-19 pandemic that led to school closures on March 13, 2020, students were only emailed the post-survey and were sent electronic reminders to complete the survey.

There were 313 survey responses during the Fall term of the 2019–2020 academic year, a response rate of 77.8%. The end of program post-survey yielded 157 responses to the same instrument, a 41.2 percent response rate. The literature suggests that, as a norm, response rates for online evaluations are lower than for paper-and-pencil by 20–30% (Goodman, Anson, & Belcheir). Paper response rates generally are 56%, while online evaluations are 33% (Nulty, 2008); however, lower response rates do not effect the average ratings (Goodman, Anson, & Belcheir, 2015). Once Ignite Scholars' pre-and-post surveys were matched, the final sample of students used for the student self-assessment part of the evaluation was 125 Scholars.

Measures

From the student survey, several Likert-type items were merged into a 'survey scale' using the factor analysis technique, Cronbach's alpha (α), to provide evidence that the components of the scale were sufficiently intercorrelated and that the grouped items measured the underlying variable (Sullivan & Artino, 2013). The Likert scales were normally distributed, and Cronbach's alpha indicated reliability or internal consistency for all college readiness measures (college and career knowledge, goals, and mindset).

College and career knowledge. Students self-reporting on

six questions, that ranged from *strongly agree* (4) to *strongly disagree* (1), was used to measure the change in students' perception pre-and-post program on their knowledge of college requirements, career aspirations, financial aid, and access to related information. The Likert scales were normally distributed, and Cronbach's alpha showed a reliability level of 0.9 denoting an 'excellent' rating.

Mindset. Empirical research has shown that academic achievement is influenced not solely by structural factors, such as socioeconomic background, but also motivational factors, such as students' beliefs about their abilities (Dweck, Walton, & Cohen, 2014). Mindset was measured based on students' survey responses relating to five items: students' perception of ability to improve grades (1), the difficulty of work (1), seeking help (2), and problem-solving (1). The Likert scales were normally distributed, and Cronbach's alpha showed a reliability level of 0.8 representing a 'good' rating.

Goals. Students self-reported on their educational aspirations and educational expectation for when they completed high school. Survey respondents were asked, "In a perfect world, what is the highest level of education you would like to get" (aspired) followed by *What is the highest level of education you will most probably get?* (expected). They were given several educational outcome to select from, which ranged from 1 to 6 (high school diploma=1, career-based certificate (such as cosmetology or welding)=2, some college (no degree)=3, associate's degree (2-year)=4, bachelor's degree (4-year)=5, post-graduate degree (law, medicine, Ph.D., etc.)=6). The Cronbach's alpha showed a reliability level of 0.7 representing an 'acceptable' rating.

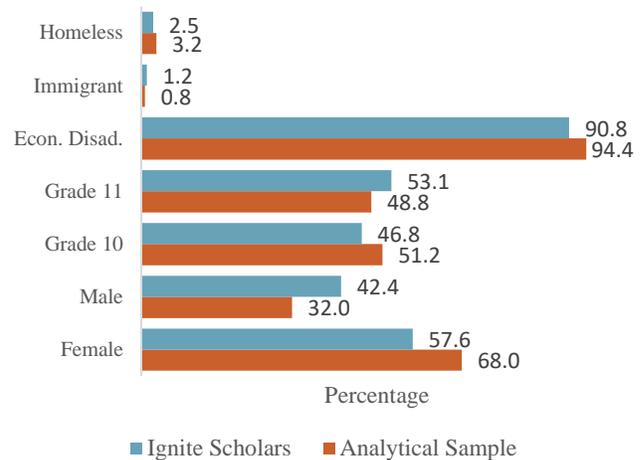
Sample

There were two analytical samples used. To explore questions relating to non-academic cognitive skills, the analytical sample consisted of Ignite Scholars who completed the pre-and-post survey. The analytic sample for the pre-and-post portion of the evaluation included 125 Ignite Scholars who completed both the pre-and-post survey. This sample represents 31.2 percent of the total number of students in the Ignite Scholar Program (n=400). Attrition analyses comparing the analytic sample with the population of Ignite Scholars indicated that the mean cumulative GPA was comparable 2.85 vs. 2.86, respectively. However, there were considerable differences in gender, grade level, and socioeconomic status. The final sample consisted of fewer male participants (10.4%), more female participants (2.4%), more tenth-grade students (4.4%), and fewer eleventh-grade students (4.3%), and more students identified as economically disadvantaged (3.6%).

The second part of the research used the full sample of 400 students who received the full dosage of the Ignite Program, structured academic advising, and a comparative sample of invited Scholars who opted out. The comparative sample was ascertained from the list of students who were invited to participate in the Ignite Scholar Program for the 2019–2020 school year. The list of invited scholars was then matched to the list of students who received advising in the 2018–2019

academic year. There were 89 invited scholars who participated in advising the previous year, these students were removed from the sample. Requirements used for selection into the 2019–2020 Ignite Scholar Program included attending one of the 18 priority schools, being in grade 10 or 11, economically disadvantaged status, minority status within the school context, immigrant status, and homeless status, and first-generation status.

Figure 2: Demographic composition of Ignite Scholar program vs analytical sample of Ignite Scholars, 2019–2020 (percentage)



Analyses

In this study, the rate of access to the various program activities and change in college and career readiness knowledge pre-and-post program was calculated for Ignite Scholars who completed the survey. Descriptive statistics attained from the survey were used to examine the demographic make-up of the Ignite Scholar Program participants relative to the program target population. Students were asked to self-report on a household, parents' level of education, siblings' level of education, family and friends' college aspiration. A comparative sample of non-ignite Scholars, students who were selected for the program but opted out of participation, was used to estimate the impact of advising, attendance, and AP course passing rate on the GPA of Ignite Scholars. Additionally, descriptive statistics and bivariate correlations were used to assess if there were significant changes in college readiness measures after participation in the program for the three variables measured: college and career knowledge, mindset, and goals. Two logistic regression models were then fitted to examine the likelihood that Ignite Scholars planned to go to college when non-cognitive factors were taken into consideration (mindset, educational aspiration, and supports). The second model examined the likelihood of attaining a college ready GPA of 3.0+ as measured by participation in advising, attendance, and passing AP course(s).

Study Limitations

The present investigation adopted a single group pre-test-

post-test design to examine the mean effect sizes and identify key predictors on student’s college readiness. One barrier to the Ignite Scholar Program was the administration of the questionnaire. Many Ignite Scholars who did not complete the survey did so during their academic advising session, making participation contingent on participation in advising. As a result, survey response rate was impacted by advising rates once schools were closed and in-person advising was no longer feasible. This is reflected in the low response rate on the post-survey, which created another limitation as it reflected a 40 percent reduction in the sample size.

Additionally, similarities in test formats may have limited the validity of pre and post-test responses as there was little statistically significant differences between pre-and-post-test measures. There is a lack of consensus in regards to the optimal composition, layout, and design of tests used to assess effectiveness of educational interventions; pre- and post-tests that are too similar are unreliable as participants’ performance are heavily confounded by repeat exposure and development of familiarity to questions asked in the pre-test (Lim, Loo, Goldie, Adams, & McMenamin, 2016). Timing of test administration was also a critical factor in pre-test-post-test design. The basic premise behind the pretest–post-test design involves obtaining a pretest measure of the outcome of interest prior to administering some treatment, followed by a post-test on the same measure after treatment occurs (Salkind, 2010). Pre-survey was administered, approximately two months after students started participation in the program.

Finally, due to the COVID-19 pandemic that closed the district schools, students did not receive the full measure of the program activities. Program employees had to adjust the program to an online platform and modify many components, such as the Summer Learning Opportunities, which is not included in this evaluation. Therefore, while the program id delivered from August to June, a program year, the evaluation only covers the academic year, which runs from August to May. The results of the evaluation needs to therefore be interpreted with caution.

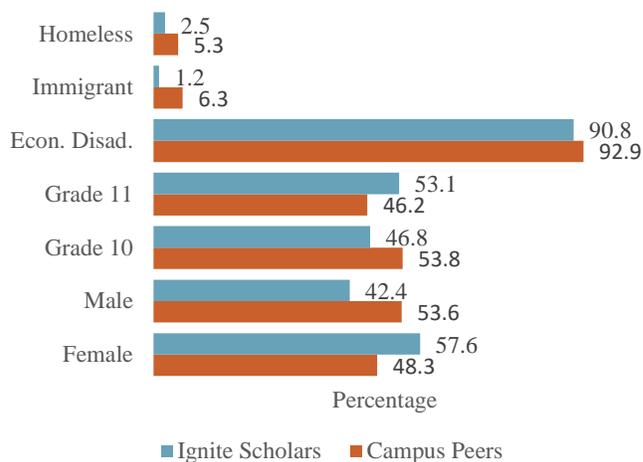
Results

What were the demographic characteristics of the Ignite Scholars that were selected for the program based on the program criteria? Is the program reaching the intended audience?

The demographic composition of the Ignite Scholars 2019–2020 cohort were predominately female, with 57.6 percent of the population being female compared to 48.3 percent of the population at the priority schools (see **Figure 3**). The representation of tenth and eleventh-grade students was comparable within the Ignite Scholar Program and campus peers, with 46.8 percent of students in the program in grade 10 and 53.1 percent of the students in grade 11, compared to their campus peer (53.8 and 46.2, respectively). There was a small percentage of Ignite Scholars that were homeless (2.5%) and immigrant (1.2%). The majority of

Ignite Scholars and non-Ignite Scholars were economically disadvantaged, with 90.8 percent of Ignite Scholars and 92.9 percent of non-Ignite Scholars being identified as economically disadvantaged.

Figure 3: Demographic composition of Ignite Scholars vs campus peers, 2019–2020 (percentage)



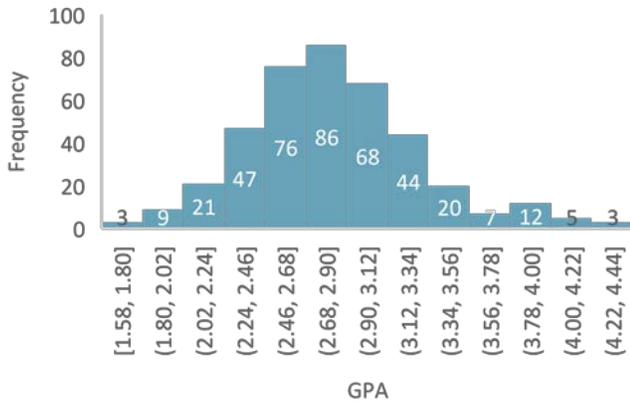
When looking at ethnic and racial composition within priority schools, 30.2 percent of Ignite Scholars were identified as having a minority status at their campus (see **Table A2**, p. 16). The department’s determination of minority status refers to a numeric minority, being a smaller part of the student population, and not based on the more popular usage that focuses on inequalities. Yates High School had the lowest number of Ignite Scholars that had a minority status within their school, overall the school had a less diverse student population with an ethnic composition that was predominantly black (85.6%) (see **Table A2**, p. 16). With a more diverse population, Sterling High School had the highest number of students with minority status in the school (66.7%) (see **Table A2**, p. 16).

When examining GPA, 68.3 percent of Ignite Scholars, at the beginning of the program, had a GPA below 3.0 (n=274) and the mean GPA for the group was 2.82 (S.D.=0.46) (see **Figure 4**). The distribution of the grades was roughly symmetric and normally distributed, and the spread of the GPA fell between approximately 1.58 and 4.44 (see **Figure 4**). Therefore, the lowest GPA for those accepted in the Ignite Scholar Program was 1.58 and the highest GPA was 4.44. There was a larger number of students whose GPA fell between the range of 2.68 and 2.90 (n=86).

Of those Ignite Scholars that completed the pre-survey (n=313), 51.4 percent reported that they lived in a two-parent household (n=161), 39.9 percent in a single-parent household (n=125), and 8.6 percent (n=27), resided with other relatives (grandparents, siblings, etc.) or friends. Parents’ educational status varied; 61.0 percent of Ignite Scholars reported their parents had less than a high school education (n=191), 57.8 percent reported their parents were high school graduates (n=186), 20.1 percent had an associate’s degree or career

certificate (n=63), 28.8 percent attained some college or a college degree (BA, MA, Ph.D.) (n=90), and 32.3 percent of students did not know their parents' level of education (n=101).

Figure 4: Histogram of Ignite Scholar prior year GPA, 2018–2019



Noteworthy, is that 21.4 percent of Ignite Scholars reported that both their parents had less than a high school education (n=67), 16.0 percent reported that both of their parents graduated from high school (n=50), 3.2 percent reported that both of their parents had an associate's or career certification (n=10), 5.4 percent reported that both of their parents went to college or had college degree (n=17), and 10.9 percent did not know the educational level of both their parents (n=34).

When asked whether their siblings went to college, 60.7 percent reported that none of their brothers or sisters have gone to college (n=190) and 36.1 percent reported that one or more of their siblings went to college (n=113). Of the Ignite Scholars, 89.8 percent reported that someone in their life expected them to go to college (parent guardian, teacher, guidance counselor, friend, etc.) (n=281), 7.0 percent reported they do not know what others expected (n=22), and 3.2 percent reported that no one expected them to go to college (n=10). When asked how many of their friends they thought would be going to college, most Ignite Scholars indicated a few (58.1%), most of them (33.9%), and all of them (6.4%).

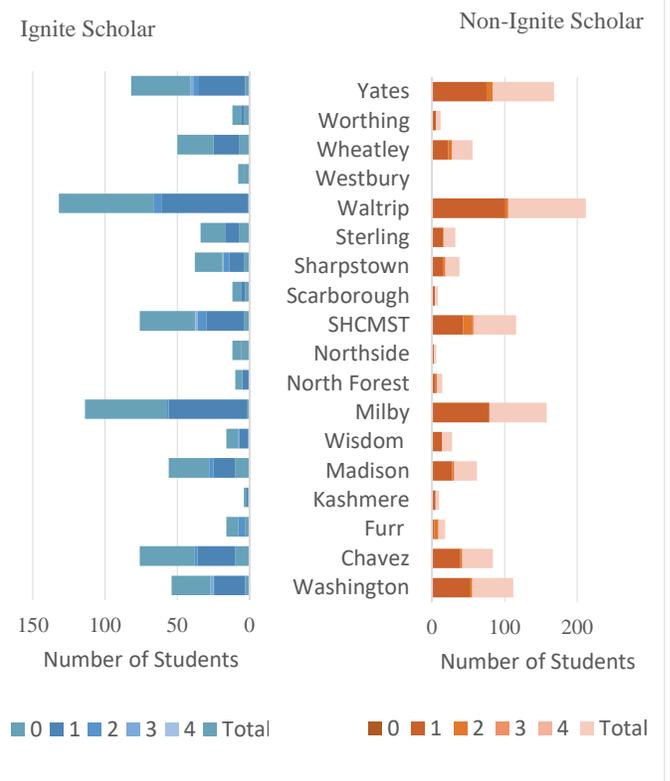
What percentage of Ignite Scholars participated in the Launch Ignite program activities offered during the 2019–2020 academic year by campus (advising, tours, presentations, events)?

The College and Career Readiness Department provided industry and campus tours to Ignite and non-Ignite scholars. There were nineteen tours offered in the 2019–2020 school year, with 968 students attending from the eighteen priority campuses. Of the 968 attendees, 33.8 percent were Ignite Scholars (n=328) and 65.2 percent were non-Ignite Scholars. Of the non-Ignite Scholars 89.8 percent attended 1 tour and 9.35 percent attended two tours. Of the Ignite Scholars (n=401), 81.8 percent of Ignite Scholars attended a college and industry tour, with 88.4% of Ignite Scholars attending 1 tour

(n=290), 7.7 percent (n=31) attending 2 tours, and 1.7 percent attending 3 or more tours.

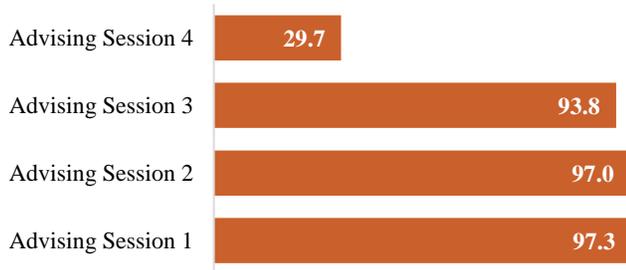
The top three campuses for recruitment of students for tours included Waltrip with 66 Ignite Scholars and 106 non-Ignite Scholars, Milby with 57 Ignite Scholars and 79 non-Ignite Scholars, and Yates with 41 Ignite Scholars and 84 non-Ignite Scholars (see **Figure 5**). The campus with the greatest number of students participating in multiple tours is Sam Houston Center for Math, Science & Technology (SHCMST), which had 6 Ignite Scholars and 13 non-Ignite Scholars participate in two campus tours.

Figure 5: Number of Ignite and non-Ignite Scholars attending industry and college tours, 2019–2020



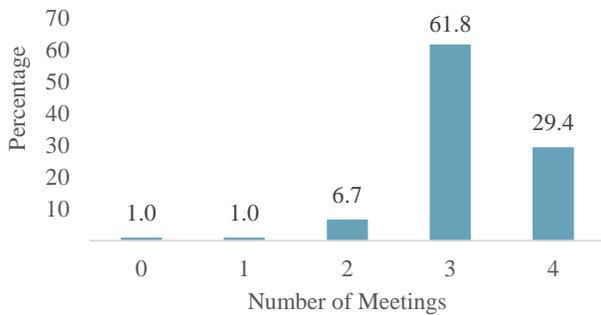
Four structured one-on-one advising sessions were made available to Ignite Scholars only. Each session focused on a college readiness topic (for details on the model see Table A1 P. 15). There was 97.3 percent of Ignite Scholars who attended the first advising session on goal setting to improve learning outcomes (n=390) (see **Figure 6**, p. 8). Similarly, 97.0 percent attend the second advising session on career planning, with Scholars completing a career assessment (n=389). The third session which focused on career decision-making had 93.8 percent of scholars participating in advising (n=376). The final advising session focused on college planning with 29.7 percent of Ignite Scholars meeting with the advisor (n=119). The attrition in participation in the fourth advising session can be attributed to the school closure due to COVID–19. CCRA had to rely on tele-advising via conference calls, text messages, or emails.

Figure 6: Percentage of Ignite Scholars at each advising session



When examining the number of sessions that was attended, it was found that there were 8.7 percent of Ignite Scholars who participated in two or less advising meetings (see **Figure 7**). The majority of Ignite Scholars attended three meetings, with 61.8 percent of Scholars having met with their advisor three times (n=248). When broken down by GPA, 8.8 percent of Ignite Scholars with a GPA below 3.0 attended less than 2 advisory meetings (n=24). The majority, 63.9 percent, attended 3 meetings, and 27.4 percent attended 4 meetings.

Figure 7: Percentage of advisory meetings attended by Ignite Scholars, 2019–2020



Was there a change in non-cognitive performance (educational goals, college and career knowledge, and mindset) among Ignite Scholars?

On the sample of survey respondents (n=125), descriptive and bivariate correlations for all study variables at the beginning of the year are provided in **Table A3**, p. 17. The results indicated that 6 out of the 13 correlations were statistically significant and were greater or equal to r_s (124) = +.18 –.58, $p < .05$, two-tailed. The correlations of educational goals with other non-cognitive measures were not significant, except for educational goals with cumulative GPA ($r_s = .27$), mindset ($r_s = .21$), and educational expectations ($r_s = .57$). College and career knowledge were positively associated with mindset and educational expectations. In general, the results suggest that students with high educational expectations tended to rate themselves as college ready in other areas.

Educational goals

The educational goal scores are based on students’ survey responses and were divided into three groups, representing

“less than a college education”, “some college or college degree”, and “advanced degree”. The educational goal was analyzed in relation to the educational aspiration and educational expectation of Ignite Scholars. Frequencies for the groups of educational scores at the beginning of the program and end of the program are provided in **Table 1**. The educational aspirations of Ignite Scholars at the start of the program was high, with 76.8 percent of Scholars indicating that they aspire to attain an advanced degree, 13.6 percent aspired to attain some college or a college diploma, and 9.6 percent technical training or less. By the end of the program, 80.0 percent of Scholars indicated that they aspired to attain an advanced degree, 12.8 percent aspired to attain some college or a college diploma, and 7.2 percent reported that they aspired a technical training, $\chi^2(4) = 47.63$, $p < .000$. For each level of educational aspiration, there was little movement from one level to the other over the academic year.

Table 1: Educational goals on pre-and-post survey

Group	Educational Aspiration				Educational Expectation			
	Pre-test		Post-test		Pre-test		Post-test	
	n	%	n	%	n	%	n	%
1	12	9.6	9	7.2	24	19.2	17	13.6
2	17	13.6	16	12.8	44	35.2	48	38.4
3	96	76.8	100	80.0	56	44.8	60	48.0

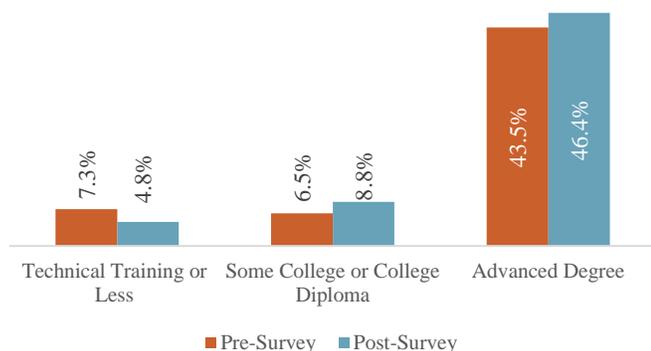
Note: For educational aspiration and expectation, group 1= technical training or less, group 2= some college or college; group 3= advanced degree.

When asked what level of education they would expect to achieve, there was a difference between their aspired and expected educational goals. Of the respondents, 44.8 percent reported that they would expect to attain an advanced degree, 35.2 percent expected to attain some college or a college diploma, and 19.2 percent indicated technical training or less (see Table 4). Post-survey responses showed that 48.0 percent reported that they would expect to attain an advanced degree, 38.4 percent expected to attain some college or a college diploma, and 13.6 percent indicated technical training or less. For expected educational achievement, the same held true as with educational aspiration, there was little movement from pre-test to post-test in the level of expected education. For educational expectations, 62.9 percent (n=78) of Ignite Scholars did not change groups, with the majority remaining in the higher expected levels of their aspired educational level, $\chi^2(4) = 47.04$, $p < .000$.

To further examine the association between educational aspirations and expectations, a separate cross-tabulation of pre-survey and post-survey results was conducted using the aforementioned educational groups. On the pre-survey, for 57.3% of Ignite Scholars, aspirations and expectations fell into the same category (7.3% had aspirations and expectations for less than a college education, 6.5% for some college or college, and 43.5% for advanced degrees) (see **Figure 7**); however, for the remaining 42.7% of the sample, aspirations

and expectations fell into different categories (see **Table A4**, p.17). On the post-survey, for 60% of Ignite Scholars, aspirations and expectations fell into the same category (4.8% had aspirations and expectations for less than a college education, 8.8% for some college or college, and 46.4% for advanced degrees); however, for the remaining 40.0% of the sample, aspirations and expectations fell into different categories (Figure 7).

Figure 7: Pre-and-post crosstabulation of Ignite Scholars education aspiration and expectation



A paired t-test was run on the sample of 125 Ignite Scholars to determine whether there was a statistically significant mean difference between their aspired educational goal and their expected educational goal at the start of the program. Ignite Scholars reported a higher level of educational aspiration (2.69, ± 0.63 S.D.) compared to their expected level of educational achievement (2.26, ± 0.76 S.D.); a statistically significant increase of 0.43 (95% CI, 0.31 to 0.55), $t(123) = 7.16$, $p < .000$, $d = 0.66$.

College and career knowledge

Response options ranged from 1 (strongly disagree) to 4 (strongly agree). Using the mean Likert scale score as a midpoint, the college and career readiness scores were divided into three groups, representing “limited knowledge” (1.0 to 2.4), “knowledgeable” (2.5 to 3.5), and “very knowledgeable” (3.5 to 4.0) (see **Table 2**). For college and career knowledge, 55.2 percent (n=69) of Ignite Scholars did not change groups, $\chi^2(4) = 13.06$, $p < .01$. The majority of students self-reported that their college and career knowledge was knowledgeable (60.0%), followed by very knowledgeable (22.4%), and limited knowledge (17.6%).

In examining the pre-and-post survey results for college and career knowledge, 55.2% of responses fell into the same category. Analysis of responses showed that on the pre-and-post survey 3.2% or Ignite Scholars reported they had limited college and career knowledge, 40.0% reported they were knowledgeable, and 12.0% very knowledgeable. For the remaining 44.8% of the sample, level of college and career knowledge fell into different categories (see **Table 3**). There was an improvement in level of knowledge for Ignite Scholars that indicated they had limited knowledge on the pre-survey, with 12.0 percent reporting post-program being

knowledgeable. Of the 13.6 percent of Ignite Scholars who rated themselves as being knowledgeable on the pre-survey, at the end of the program self-reported being very knowledgeable. While there was an upward directional increase in Ignite Scholars pre-and-post level of college and career knowledge, this difference was not significant.

Table 2: College and career knowledge on pre-and-post survey

Group	College and Career Knowledge			
	Pre-test		Post-test	
	n	%	n	%
1	22	17.6	14	11.2
2	75	60.0	76	60.8
3	28	22.4	35	28.0

Note: *For college and career knowledge: group 1= limited knowledge, group 2= knowledgeable, and group 3= very knowledgeable.

Table 3: Comparison of Ignite Scholar college and career knowledge pre-and-post survey response

Group	Post-survey						
	1		2		3		
	n	%	n	%	n	%	
Pre-survey	Limited	4	3.2	15	12.0	3	2.4
	Knowledgeable	8	6.4	50	40.0	17	13.6
	Very Knowledgeable	2	1.6	11	8.8	15	12.0

Note: *For college and career knowledge: group 1= limited knowledge, group 2= knowledgeable, and group 3= very knowledgeable.

Mindset

The mindset scores were divided into three groups, representing “fixed with some growth ideas (1 to 2.5)”, “growth with some fixed ideas (2.6 to 3.5)”, and “Strong growth mindset (3.6 to 4.0)”. Frequencies for these categories at the beginning of the program and end of the program are provided in **Table 4**, p. 10. The pre-survey data analysis showed that 62.4 percent of Ignite Scholars had a growth mindset with some fixed, 33.6 percent had a strong growth mindset, and 4.0 percent of Ignite Scholars had a fixed mindset with some growth. On the post survey, the majority of Ignite Scholars showed a growth mindset with some fixed (60.0%), strong growth mindset (31.2%), and fixed with some growth (8.8%).

Analysis of responses relating to mindset revealed that 70.4 percent of Ignite Scholars (n=88) did not change groups, with the majority (49.6%) remaining in the growth with fixed mindset, $\chi^2(4) = 34.3$, $p < .000$. Therefore, for each level of mindset there was little movement from one level to the other over the academic year. For the remaining 29.6 percent of the sample, Ignite Scholars’ mindset response fell into different categories (see **Table 5**). Among the Ignite Scholars that were found to have a growth with fixed mindset at the

beginning of the program, 8.8 percent developed a strong growth mindset at the end of the program; these results were not statistically significant.

Table 4: Mindset ratings on pre-and-post survey

Group	Mindset			
	Pre-test		Post-test	
	n	%	n	%
1	5	4.0	11	8.8
2	78	62.4	75	60.0
3	42	33.6	39	31.2

Note: For mindset: group 1= fixed with some growth; group 2= growth with some fixed; and group 3= strong growth.

Table 5: Comparison of Ignite Scholar mindset pre-and-post survey response

Pre-survey	Group	Post-survey					
		1		2		3	
		n	%	n	%	n	%
Fixed with Growth		1	0.8	1	0.8	3	2.4
Growth with Fixed		5	4.0	62	49.6	11	8.8
Strong Growth		5	4.0	12	9.6	25	20.0

Note: For mindset: group 1= fixed with some growth; group 2= growth with some fixed; and group 3= strong growth.

A logistic regression model was fitted using the analytical sample of Ignite Scholars who completed the survey. The model examined whether non-academic measures were predictive of the likelihood that students would plan to attend college based on Ignite Scholars self-reporting (See **Table 6**). The results for the logistic regression model indicated that almost half of the variables included in the model were found to be significantly predictive ($\chi^2=49.323$, $N= 313$, $p < .000$) of Ignite Scholars self-reporting that they planned to attend college once they graduated from high school. The model was able to correctly classify 65.9% of those who did not plan to go to college after graduating and 62.9% of those who did, for an overall success rate of 64.2 percent, and explained 15 percent of the variance (Nagelkerke R^2).

Looking at the results for educational aspirations there was a highly significant overall effect (Wald=29.09, $df=2$, $p<.000$). The educational aspiration levels (0=less than technical, 1=college or less than college, and 2=advanced degree) are significant and positive, indicating that increasing educational aspiration is associated with increased odds of planning to go to college. Students who self-reported their highest educational aspiration was an ‘advanced degree’ were 20.92 times more likely to indicate that they were planning to go to college when they graduated from high school. Students who reported their highest educational aspiration was college or some college were 8.25 times more likely to self-report they planned to go to college when they graduated than those who aspired for ‘technical college or less’. Comparatively, those

who aspire to attend some college or college diploma were about 6.06 times more likely to self-report planning to go to college than those with lower educational aspirations. The effect of mindset was also significant and positive, indicating that students with a growth mindset were 4.36 more likely to plan to go to college than a student with a fixed mindset, even after controlling for educational aspiration and parents’ level of education. Students who reported that both their parents had a high school diploma or lower were .39 times less likely to report they planned to go to college once they graduated compared to those who reported their parents attended college or more.

Table 6: Logistics regression of likelihood of Ignite Scholars self-reporting planning to attend college after graduating

	B	S.E.	Wald	β
Mindset	1.47	.48	9.34**	4.36
Educational Aspiration (0=technical or less)			29.09***	
College or some college	1.80	.63	8.25**	6.06
Advanced degree	3.04	.57	28.73***	20.92
College Career Knowledge	.58	.61	.89	1.78
2018 GPA	.20	.46	.19	1.22
Parent Education	-.95	.48	3.88*	.39
Sibling Education	.20	.45	.20	1.22
People Expectation	.58	.63	.85	1.79
Constant	-1.83	.80	5.19*	.16

* $p < .05$; ** $p < .01$; *** $p < .000$

What variables predict Ignite Scholars’ education attainment and the likelihood that Scholars are on track to meeting academic indicators of college readiness?

High school academic performance and engagement outcomes and measures identified in the literature as indicators of students on track for high school graduation and college ready were used to predict the likelihood that Ignite Scholars would be college ready. Logistic regression analysis was employed to predict the likelihood students would meet a college ready GPA of 3.0+. The predictor variables were participants’ attendance, participation in advising, and passing of AP course (see **Table 7**, p. 11). A test of the full model versus a model with intercept only was statistically significant, $\chi^2(4.66 N=732) = 131.32$, $p < .01$. The model was able to correctly classify 65.9% of those who participated in the Ignite Scholar Program and 62.9% of those who did not, for an overall success rate of 64.2 percent. The model explained 15 percent of the variance (Nagelkerke R^2) in program participation.

Table 7 shows the logistic regression coefficient, Wald test, and odds ratio for each of the predictors. Employing a .05 criterion of statistical significance, attendance and advising had significant partial effects. Holding advising at a fixed value, the odds of meeting college indicator for GPA for those Ignite Scholars who participated in advising increased by a multiplicative factor of 2.93 ($p < .05$). Also, the effect of attendance was significant having a slightly larger effect than attendance. Ignite Scholars whose attendance was 90 percent or

more, were 4.49 times more likely to attain a cumulative GPA of 3.0+ than non-Ignite Scholars whose attendance was less than 90 percent.

Table 7: Logistics regression of advising on likelihood of students improving performance

	B	S.E.	Wald	β	95% C.I. for β
Attendance	1.50	.61	6.06**	4.49	1.36–14.87
Advising	1.07	.46	5.47*	2.93	1.19–7.20
AP Pass Rate	-.27	.51	.29	.77	0.28–2.08
Constant	-2.22	.68	10.78**	.11	

* $p < .05$; ** $p < .01$; *** $p < .000$

Descriptive analysis indicated that Ignite Scholars had a higher GPA, attendance, and passing rate for AP courses than non-Ignite Scholars (see **Table A4**, p. 15). The difference in 2019–2020 mean GPA between Ignite Scholars (Mean= 2.85; S.D.= 0.46) and non-Ignite Scholars (Mean= 2.69; S.D. = 0.38) was significant ($t(694) = 4.93$; $p < .000$) (see **Figure 8**). The difference in 2018–2019 mean GPA between Ignite Scholars (Mean= 2.79; S.D.= 0.46) and non-Ignite Scholars (Mean= 2.65; S.D. = 0.35) was significant ($t(704) = 4.45$; $p < .000$). The difference in the passing of AP course between Ignite Scholars (Mean = .31; S.D. = 0.47) and non-Ignite Scholars (Mean = .13; S.D. = 0.33) for the 2019–2020 school year was significant ($t(105) = 2.23$; $p < .05$) (see **Figure 9**).

Figure 8: Comparative mean GPA for Ignite Scholars and Non-Ignite Scholars



Figure 9: Comparative percentage of AP course passing for Ignite Scholars and Non-Ignite Scholars



The difference in average attendance between Ignite Scholars (Mean= 160.88; S.D.= 11.95) and non-Ignite Scholars (Mean = 154.65; S.D.= 25.77) for the 2019–2020 school year was significant ($t(730) = 4.31$; $p < .000$) (see **Figure 10**). Ignite Scholars had a lower mean rate of in-school suspension in 2018–2019 academic year (Mean= 0.85; S.D.= 0.94) compared

to non-Ignite Scholars (Mean= 0.92; S.D.= 0.88) (**Figure 11**). They also had a lower mean rate of in-school suspension in the 2019–2020 academic year (Mean= 0.69; S.D.= 0.78) compared to non-Ignite Scholars (Mean= 0.91; S.D.= 0.95) (**Figure 11**). Ignite Scholars had a lower mean rate of out-of-school suspension (Mean= 0.63; S.D.= 0.73) in the 2019–2020 school year compared to non-Ignite Scholars (Mean= 0.88; S.D.= 1.31) (**Figure 11**). The mean difference in the number of suspensions (in-school and out-of-school) for the 2018–2019 and 2019–2020 school year was not significant (see **Table A4**, p. 15).

Figure 10: Comparative mean daily attendance for Ignite Scholars and Non-Ignite Scholars



Figure 11: Comparative mean suspensions for Ignite Scholars and Non-Ignite Scholars



Discussion

While many states, over the years, have increased the high school graduation requirements, too many graduates are still underprepared for college (Bailey, 2009) and the workforce (Symonds, Schwartz, & Ferguson, 2011). Reasons for this under-preparedness include a lack of clear information on students' progress toward college and career readiness during the high school years that could allow students to address gaps in knowledge and skills (Venezia, Kirst, & Antonio, 2003). This evaluation sought to explore HISD students' progress towards college and career readiness. The evaluation used the high school academic performance outcomes and measures identified in the literature as indicators of students being on track for high school graduation and college and career readiness.

The evaluation focused on the performance of grades 10 and 11 students who participated in the Ignite Scholars Program, one of the College and Career Readiness Advising programs offered at HISD high schools. The 2019–2020 school year was the first time a structured advising approach

was implemented. A comparison was made between Ignite Scholars who participated in the program as well as a comparable group of students who were selected but opted not to participate in the program. Students were selected for participation in the program based on an algorithm that took into consideration students' demographic characteristics (grade, gender, economic disadvantaged status, immigrant, and homelessness) and school environment (attendance at one of 18 priority schools and minority status at their campus).

Program participants reflected those students in the 'academic and professional middle'. Based on the program demographic and socio-economic criteria for participation, 30.2 percent of Ignite Scholars had a minority status at their campus, 90.8 percent were economically disadvantaged, and 72.0 percent had a GPA below 3.0 at the start of the program. Family educational status varied, with 61.0 percent of Ignite Scholars' self-reported their parents had less than a high school education, 57.8 percent reported their parents were high school graduates, and 60.7 percent reported that none of their siblings had gone to college. When parents' educational status was further analyzed, it was found that 21.4 percent of Ignite Scholars self-reported that both their parents had less than a high school education. In terms of household composition, 51.4 percent reported that they lived in a two-parent household and 39.9 percent in a single-parent household. In terms of social support, 89.8 percent self-reported that someone in their life expected them to go to college (parent guardian, teacher, guidance counselor, friend, etc.), and 58.1 percent reported that a few of their friends planned to go to college.

Students were assigned a college and career readiness advisor who operated as their liaison between program objectives. CCRAs worked with a small caseload of students to monitor student progress and collaborate with other departments to provide support. Research has showed that a smaller advising caseload may increase students' access to key college preparation resources and raise four-year college enrollment rates (Woods & Domina, 2014). The four advising sessions that structure the Ignite Scholar Program is higher than the average number of sessions (1–3) found to be offered at most educational institutions (Fosnacht, McCormick, Nailos, & Ribera, 2017). Approximately 99 percent of Ignite Scholars participated in 3 or more advising sessions.

There was a low participation rate on campus and industry tours among Ignite Scholars compared to their campus peers (33.8% vs. 65.2%, respectively). Ignite Scholars were not permitted to participate in campus and industry tours due to their less than competitive GPA, attendance, and in general, due to being in the 'academic and professional middle.' As a result, Ignite Scholars were not able to meet the campus-level requirements for participation in offsite experiences that entailed missing instructional time. The preconditions for participation in offsite experiences varied from campus to campus. For some campus leadership, good academic performance was a prerequisite, which could be based on passing coursework for a 6-week period, for example. Attendance during this 6-week period may be taken into consideration.

College tours have been found to be beneficial in improving at-risk students' college readiness (Cates & Schaeffle, 2011; Radcliffe & Bos, 2013). The participation rate among Ignite Scholars on college and career tours, may also reflect the strength of the advising relationship between CCRAs and their caseload. As Gordon (1992) has pointed out, the primary purpose of the advising session is to help develop the advisor and advisee relationship so student can use the interaction with the advisor and appropriate resources to make sound decisions as a part of their academic and career planning process. Further research is needed to assess the advisor-advisee relationship within the Ignite Scholar Program and the level of support received from campus administrators.

Ignite Scholars completed a pre-and-post survey to measure changes in educational goals (educational aspiration and educational expectation), mindset, and college and career knowledge. Ignite Scholars self-reported a high educational aspiration, with 76.8 percent of Scholars on the pre-survey indicating that they aspired to attain an advanced degree (Master's or Ph.D.). There was a statistically significant difference between Scholars' aspirations and educational expectations as reported on the pre-survey, with 44.8 percent of Scholars self-reporting an educational expectation of advanced degree. For over 50 percent of Scholars, education and aspiration fell into the same category on the pre-and-post-survey.

The majority of Ignite Scholars, approximately 60 percent, on the pre-and-post survey rated their college and career readiness knowledge as 'knowledgeable', reporting a slight increase in college and career knowledge after completion of the program. Similarly, the majority of Ignite Scholars, approximately 60 percent, self-reported having a growth mindset with some fixed idea. Mindset has emerged as a key indicator of student success. People who adopt growth mindset thought and behavior patterns believe intelligence can be built over time with targeted improvements, whereas those who cling to a fixed mindset believe their intelligence is fixed and unchangeable (Dweck, 2006). The difference in change in mindset and college and career knowledge was not statistically significant. This can be attributed, as discussed in the limitations, to the delayed administration of the pre-survey. The pre-survey should be administered prior to the start of the program, in order to attain a baseline measure of participants' mindset, college and career readiness knowledge, and educational goals.

Attendance, participation in advising, and passing of AP courses were used as academic performance indicators of Ignite Scholars being on track for high school graduation and college readiness. Descriptive analysis indicated that Ignite Scholars had a higher GPA, attendance, and passing rate for AP courses than non-Ignite Scholars ($p < .000$). The odds of meeting college-ready indicator of GPA 3.0+ for those Ignite Scholars who participated in advising increased by a multiplicative factor of 2.93 ($p < .05$). Attendance was also significant and had a larger effect than advising on the likelihood that Ignite Scholars would attain a cumulative GPA of 3.0+. Ignite Scholars whose attendance was 90 percent or

more, were 4.49 times more likely to attain a cumulative GPA of 3.0+ than non-Ignite Scholars whose attendance was less than 90 percent. The findings are in alignment with other research that found that students who used centralized academic advising instead of no advising experienced an increase in their GPA (Kot, 2014; Woods, Park, Hu, & Betrand, 2018).

The difference in performance between Ignite Scholars and non-Ignite Scholars needs to take into consideration motivation. The motivation to learn in school means seeking to acquire the knowledge or skill that an academic activity is designed to develop, not merely getting the activity finished or doing the minimum necessary to meet requirements (Brophy, 1983). Ignite Scholar's willingness to participate in the program compared to their peers who declined participation can be construed as a difference in levels of motivation.

It is recommended that the district continues to develop the program creating greater synergy between the Ignite Scholar Program and other college and career readiness programs to create early college readiness continuum from middle school to high school to improve student outcomes. College readiness of high school graduates has become a core objective of the education policy of the United States (Kolluri & Tierney, 2020) and to meet indicators of college readiness in high school students would need to be prepared starting in grade 8 when high school course selection begins. This would ensure that those students in the 'academic and career middle' are provided the supports needed at the start of high school to boost their academic performance.

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APPENDIX–A

Table A1. Career advising model for high school students

Advising Session	Advising Stage	Junior Advising	Sophomore Advising
1	Trust-building	Share significant experiences that have shaped who you both are	Share significant experiences that shaped them
	Goal setting	Share how junior year performance will determine postsecondary options	Have one personal and one academic short-term (6 weeks) goal
		Share the importance of utilizing Khan Academy	Articulate class standing
		Identified at least 1 study or organizational strategy to assist with academic success	Articulate the uses of Khan Academy
2	Career Planning	Articulate success and areas of improvement in 6 week’s performance	Articulate success and areas of improvement in 6 week’s performance
		Articulate differences between post-high school options	Reflect on approach to last 6 week’s goals Complete a Career Assessment
3	Decision-making	Articulate success and areas of improvement in 6 week’s performance	Articulate success and areas of improvement in 6 week’s performance
		Identify the ideal pathway and why this pathway is the best fit for them	Articulate reflections of career assessment findings
		Identify steps needed to be taken to get pathway	Articulate how to use Khan Academy to increase PSAT scores Identify or describe an ideal summer experience of interest
4	College Planning	Articulate success and areas of improvement in 6 week’s performance	Articulate success and areas of improvement in 6 week’s performance
		Discuss their ideal postsecondary program/institution and how grades and testing impact that trajectory	Identify colleges that correlate with career interests.
		Articulate uses of Khan Academy for school day SAT preparation	Identify or describe an ideal summer experience of interest.
		Identify a productive way to engage in their summer experience	

Source: College Readiness Department, Division of College and Career Readiness (2019)

Campus Name	N	Gender		Grade					Ethnicity					Socio-economic Status		
		Female	Male	Grade 9	Grade 10	Grade 11	Black	Hispanic	White	Asian	Other	Econ. Disad.	Immigrant	Homeless		
Chavez High School	2,699	1,276	1,423	871	615	546	249	2,312	22	109	7	2,410	106	71		
Furr High School	1,109	525	584	415	258	206	196	881	18	7	7	1,061	89	66		
Houston MSTC	2,759	1,249	1,510	924	645	550	194	2,515	37	2	11	2,609	132	71		
Kashmere High School	798	384	414	277	169	190	478	299	14	0	7	768	42	8		
Madison High School	1,757	814	943	613	441	367	637	1,085	14	10	11	1,526	67	162		
Milby High School	2,078	1,032	1,046	609	565	507	76	1,966	18	8	10	1,935	83	157		
North Forest High School	990	504	486	325	251	196	591	389	5	1	7	942	23	143		
Northside High School	1,454	719	735	423	352	341	193	1,242	7	4	8	1,362	5	59		
Scarborough High School	730	339	391	223	176	161	131	570	19	3	7	697	75	33		
Sharpstown High School	1,799	838	961	523	488	389	334	1,374	29	56	6	1,671	280	161		
Sterling High School	1,556	698	858	564	383	318	744	775	16	9	12	1,435	45	85		
Waltrip High School	1,895	927	968	566	485	460	245	1,498	125	6	21	1,365	21	7		
Washington BT High School	777	344	433	282	188	129	369	394	11	0	3	732	37	13		
Westbury High School	2,409	1,163	1,246	749	609	531	772	1,540	45	31	21	2,144	188	100		
Wheatley High School	777	382	395	274	160	154	411	361	1	1	3	742	29	45		
Wisdom High School	1,996	861	1,135	664	499	394	266	1,496	110	114	10	1,868	459	105		
Worthing High School	854	436	418	281	215	189	634	201	8	3	8	823	16	75		
Yates High School	835	432	403	307	214	140	732	91	4	1	7	760	0	51		
Overall - Summary	26,763	12,923	14,349	8,890	6,713	5,768	7,252	18,989	503	365	166	24,850	1,697	1,412		

Source: 2019-2020 Cognos, retrieved on March 5, 2020.

Table A3. Correlation for measures of college readiness

Measures	1	2	3	4	5	6	7	8	9	10	11
1. College	-										
2. Career Certification	-.02	-									
3. Gender	-.05	-.13	-								
4. Economic Disadvantaged	.16	-.06	.13	-							
5. Immigrant	.03	.13	-.13	.02	-						
6. Homeless	.06	-.12	-.07	-.15	-.02	-					
7. Cumulative GPA	.09	.03	.07	.03	.12	.10	-				
8. College and Career Knowledge	.09	-.23**	.02	.05	-.09	.09	.07	-			
9. Mindset	.01	-.08	-.03	-.05	-.10	.06	.07	.58**	-		
10. Educational Aspiration	.26**	-.15	.10	-.13	-.14	.10	.12	.07	.10	-	
11. Educational Expectation	.21*	-.19*	-.03	.03	.09	.00	.27**	.25**	.23*	.53**	-

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table A4: Comparative rates of performance for Ignite Scholars and non-Ignite Scholars, 2019–2020

	Ignite Scholar			Non-Ignite Scholar			<i>t-test</i>
	n	Mean	S.D.	n	Mean	S.D.	
2018 In School Suspension	75	.85	.94	75	.92	.88	-.34
2019 In School Suspension	68	.69	.78	69	.91	.95	-.94
2018 Out School Suspension	75	.80	1.00	75	.67	.99	1.14
2019 Out School Suspension	68	.63	.73	69	.88	1.31	.42
2018 GPA	379	2.79	0.46	327	2.65	0.35	4.45***
2019 GPA	382	2.85	0.46	314	2.69	0.38	4.93***
2018 Attendance	398	159.34	20.22	331	157.36	23.45	1.23
2019 Attendance	401	160.88	11.95	331	154.65	25.77	4.31***
Pass AP Course	67	0.31	0.47	40	0.13	0.34	2.23*

* $p < .05$; ** $p < .01$; *** $p < .000$