

MEMORANDUM

September 3, 2020

TO: Jharrett M. Bryantt
Executive Director, Innovation & Post-Secondary Programming

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

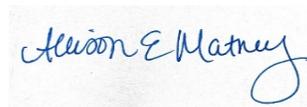
SUBJECT: SUPPORTING COLLEGE AND CAREER READINESS OF MIDDLE SCHOOL STUDENTS THROUGH PROJECT EXPLORE IN HISD, 2019–2020

Attached is a program evaluation of Project Explore. The program provided activities to foster positive academic mindsets of sixth-grade, seventh-grade, and eighth-grade students where college and career success is seen as attainable. Project Explore is aligned with meeting HISD District Goal 2, which is to improve the college and career readiness of high school graduates.

Key findings include:

- In 2019–2020, a total of 2,095 students were accepted for participation in the Project Explore program, and an additional 715 students were waitlisted for program participation.
- In 2019–2020, a total of 62.9 percent (n=1,317) of all Project Explore participants completed a survey through the HISD HUB compared to 28.4 percent (n=203) of waitlisted students.
- For program participants, grade eight students had the highest percentage of survey respondents who reported having either a strong growth mindset or growth mindset with fixed ideas (93.9 percent), followed by sixth grade (90.9 percent), and finally seventh grade (87.8 percent).
- Project Explore participants, across all grades, missed fewer days of instruction, on average, than waitlisted students in all grades during both the 2018–2019 school year and the 2019–2020 school year.
- In 2019–2020, both seventh and eighth grade Project Explore students experienced a positive difference in the number of students who met the benchmark on the RL360 math assessment at MOY compared to BOY (5 and 28, respectively).
- On the RL360 reading assessment, both grade seven and grade eight accepted students experienced a positive difference in the number of students that met the benchmark at MOY compared to BOY during the 2019–2020 school year (4 and 1, respectively).

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



_____AEM

Attachment

cc: Grenita Lathan
Yolanda Rodriguez

Rick Cruz
Mia Bradford



RESEARCH

Educational Program Report

**SUPPORTING COLLEGE AND CAREER
READINESS OF MIDDLE SCHOOL
STUDENTS THROUGH PROJECT
EXPLORE IN HISD, 2019–2020**



2020 BOARD OF EDUCATION

Susan Deigaard

President

Wanda Adams

First Vice President

Judith Cruz

Second Vice President

Patricia Allen

Secretary

Daniela Hernandez

Assistant Secretary

Katherine Blueford-Daniels

Holly Maria Flynn Vilaseca

Elizabeth Santos

Anne Sung

Grenita Lathan, Ph.D.

Interim Superintendent of Schools

Allison Matney, Ed.D.

Officer

Department of Research and Accountability

Kenneth Lee Powers, Ed.D.

Research Specialist

Venita Holmes, Dr. P. H.

Research Manager

Houston Independent School District

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

www.HoustonISD.org

It is the policy of the Houston Independent School District not to discriminate on the basis of age, color, handicap or disability, ancestry, national origin, marital status, race, religion, sex, veteran status, political affiliation, sexual orientation, gender identity and/or gender expression in its educational or employment programs and activities.



EVALUATION REPORT

BUREAU OF PROGRAM EVALUATION

Supporting College and Career Readiness of Middle School Students through Project Explore in HISD, 2019–2020

Prepared by: Kenneth L. Powers, Ed.D.

Abstract

Project Explore targeted minority students in grades six through eight who attended 28 Houston Independent School District (HISD) middle schools during the 2019–2020 academic year. In 2019–2020, a total of 2,095 students were accepted for participation in the Project Explore program, and an additional 715 students were waitlisted for program participation. The study measured students’ growth mindset to determine whether they perceived their academic talents can be developed. Over fifty percent of all program participants, regardless of grade level, reported having either a strong growth mindset or a growth mindset with fixed ideas. Project Explore program participants experienced fewer absences, on average, compared to waitlisted students. Further, there was a similar number of students who scored at/above the benchmark on the RL360 math and reading assessments when comparing 2019–2020 beginning of year (BOY) to the 2019–2020 middle of year (MOY) for both program participants and waitlisted students. Finally, the fewer absences for grade 7 students was the only independent variable that was statistically significant in predicting Project Explore participation. This evaluation was limited by the school closures related to the COVID–19 pandemic which forced Project Explore program activities to be limited to cohort meetings and 1:1 advising in spring 2020.

Background

The Houston Independent School District (HISD) identified a gap in the percentage of high school graduates who met the Global Graduate standards as measured by the College and Career Readiness component of the Texas accountability system (Houston Independent School District, 2019). To eliminate or reduce this gap, HISD adopted District Goal 2 to increase the percentage of graduates meeting the Global Graduate Standards as measured by the College and Career Readiness component of the Texas accountability system (Houston Independent School District, 2019).

HISD implemented Project Explore, which was designed to increase the college-going rates of middle-school students. Project Explore provides participating sixth grade, seventh grade, and eighth-grade students activities where college and career success is seen as attainable. The research has shown that developing students’ academic mindsets can play a significant role in improving students’ academic success in school (Blackwell, Trzesniewski, & Dweck, 2007). Project Explore is aligned with meeting HISD District Goal 2. To that end, this evaluation addressed the following questions.

Research Questions:

1. How did students who participated in Project Explore and students who were waitlisted assess their academic mindset?
2. How did students who participated in Project Explore and students who were waitlisted differ in terms of students’ attendance in 2019–2020?
3. How did students who participated in Project Explore and students who were waitlisted differ in terms of academic success on the Beginning of Year (BOY) and the End of Year of Renaissance Learning (RL360) reading and math assessments in 2019–2020?

Limitations

There were several data limitations to the study. These limitations were the result of HISD school closures on March 13, 2020, brought about by the COVID–19 pandemic. First, the program only interacted with students from August 2019 through March 2020, and therefore were unable to fully implement the Project Explore program. Second, absence rates for the 2019–2020 school year were based on the number of days available for instruction before school closures.

Therefore, the absence rates used in this report only cover the first 115 days of possible instruction for both the 2018–2019 school year and the 2019–2020 school year. Finally, students completed one survey to self-report their attitudes toward education. The single survey provides only a snapshot of the students' attitudes toward education at that one moment in time.

Project Explore

The Project Explore program encompassed students in grades six through eight attending an HISD middle school campus. On each participating campus, there were cohorts of a maximum of 25 students at each grade level. **Appendix A (Table 1)**, pp. 8–9, details the demographics of Project Explore students (students who received the intervention) and waitlisted students (students who met the criteria for inclusion but were waitlisted based on limited space).

Project Explore Activities

The number of activities and the types of activities scheduled by Project Explore in 2019–2020 differed by grade level. All grade levels were given one-on-one advising with all sixth-grade participating students having a single advising session, all seventh-grade participants being provided two one-on-one advising sessions, and eighth-grade participants having three one-on-one advising sessions. Participating students in all grade levels made at least one college and/or one industry visit during the 2019–2020 school year (**Figure 1**). Additionally, there were scheduled industry professional visits to program participating middle schools (one in the fall and one in the spring for 6th grade, one in the fall and one in the spring for 7th grade, two in the fall and two in the spring for 8th grade). Additional activities had all participating students, regardless of grade level, engaging in four topics for learning: Who Am I/Self-Discovery; Communication Skills; Goal Setting; and School Choice. School closures related to the COVID–19 pandemic forced Project Explore to stop the majority of program activities in spring 2020. For a more detailed listing of scheduled activities refer to **Appendix B (Table 2)**, p. 10, and **Appendix C (Table 3 through Table 5)**, pp.11–12.

Review of Literature

The research has defined an academic mindset as the student’s attitudes, beliefs, dispositions about school and learning, and the relationship to academic outcomes and school success (Balfanz, 2009; Bassiri, 2014; Claro, Paunesku, & Dweck, 2016; Cook, Gas, & Artino, 2018; Hooker & Brand, 2010; Curry, Belser, & Binns, 2013; Dweck, Walton, & Cohen, 2014; Gaertner & McClarty, 2015; Gysbers, 2013; Snipes & Tran, 2016).

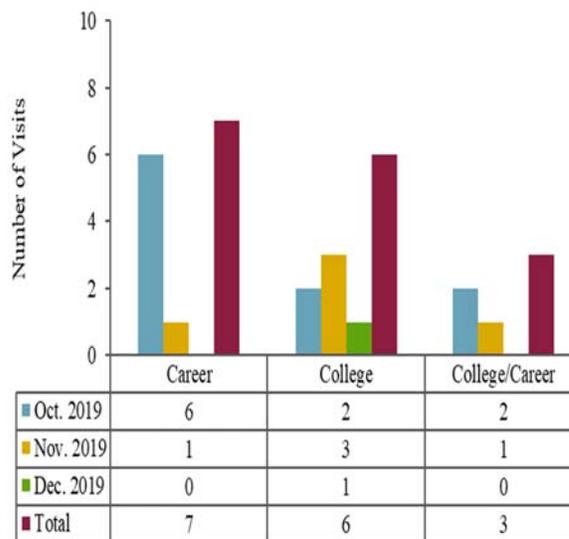


Figure 1: Project Explore visits to colleges and career sites, fall 2019

The academic behaviors adopted by students have been linked to a student’s academic mindset which is reflected in the social skills, academic perseverance, and learning strategies adopted by the student (**Figure 2**). Further, a student’s academic behavior is seen as being related to a student’s campus behavior. For example, when a student is persistent and fully engaged in learning they are more likely to attend school more often and have fewer disciplinary issues (Farrington, et al., 2012).

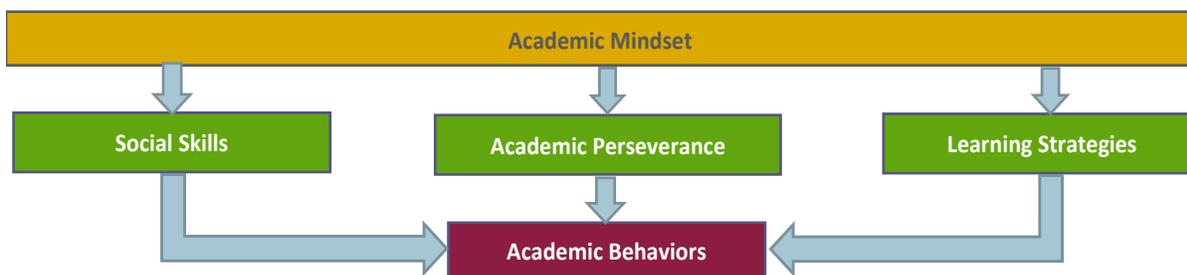


Figure 2: Mindset growth logic model, 2019–2020

Research has shown that a more negative academic mindset is related to a gap in the level of college and career preparation of high school students (Miller, Rudman, Hogman, & Gustavsson, 2016; Radcliffe & Bos, 2013; Snipes, Fancsali, & Stoker, 2012). This gap becomes greater when controlling for race/ethnicity, with Hispanic and African American students being less likely to meet benchmarks (i.e. grade point average, course completion, etc.) for college and career readiness. Further, fewer minority students than white students receive a regular diploma on-time with their ninth-grade cohort (Balfanz, 2009; Dweck, Walton, & Cohen, 2014).

The academic mindset is viewed as being on a continuum between two ways of thinking about academics: fixed academic mindset and growth academic mindset (Bassiri, 2014; Blackwell, Trzesniewski, & Dweck, 2007; Claro, Paunesku, & Dweck, 2016; Cook, Gas, & Artino, 2018; Dweck, 2002; Radcliffe & Bos, 2013). A student with a fixed academic mindset is defined as a student who is determined to prove how smart they are rather than improving their knowledge. Also, they believe their level of intelligence is unchangeable. By contrast, a student with a growth mindset views learning as a way to gain knowledge and that a person's level of intelligence is malleable and can be increased. Research has shown that the middle school years are a fertile period to foster a growth academic mindset in students (Bassiri, 2014; Curry, Belser, & Binns, 2013; Curry, Belser, & Binns, 2013; Dweck, 2002; Trei, 2007). A middle school student's beliefs about education have been measured through surveys where student's self-report on their academic mindset and data on the student's campus behaviors is collected (i.e. attendance, and discipline) (Balfanz, 2009; Claro, Paunesku, & Dweck, 2016; Cook, Gas, & Artino, 2018; Dweck, 2002; Dweck, 2015; Miller, Rudman, Hogman, & Gustavsson, 2016; Curry, Belser, & Binns, 2013; Petrosino, Fronius, Goold, Losen, & Turner, 2017).

Methods

Study Population and Sample

There was one study population in this program evaluation that attended one of 28 HISD middle schools in 2019–2020. The study population consisted of a total of 2,095 students across grades six through eight that were accepted for participation in the Project Explore program in 2019–2020. While the control group (n=715) consisted of students that met all criteria for participation in Project Explore but were waitlisted based on a lack of space.

Data Collection and Analysis

Data were collected using an online survey through the HISD HUB that was made available to Project Explore participants and waitlisted students.

The survey was opened on January 10, 2020 and was closed on March 6, 2020. For reliability, a Cronbach's alpha of .837 was calculated for all fourteen survey items combined (Trobia, 2020). For more detailed information on Project Explore survey responses refer to **Appendix D (Table 6 through Table 9)**, pp. 13–14.

Project Explore participating students completed 62.9 percent (n=1,317 of possible n=2,095) of the distributed surveys. Of all surveys completed by accepted students, the eighth grade had the largest percentage of students who completed the survey (66.9 percent, n=474). Of all waitlisted students, 28.4 percent (n=203) completed the survey. Of all surveys completed by waitlisted students, grade six had the highest percentage of completed surveys (32.6 percent, n=85).

The survey provided information on respondents' attitudes about academic and career success. Survey takers were placed into one of four groups based on their responses to the survey (minimum is zero and the maximum is 56). The four groups were: strong growth mindset (43–56); growth mindset with some fixed ideas (29–42); fixed mindset with some growth ideas (15–28); and strong fixed mindset (0–14) (MindsetQuiz.w.scores.pdf, 2020).

The RL360 math and reading assessments provided a percentile rank for all Project Explore participants and waitlisted students in grades six through eight. Data for student performance was taken from two files: Star Reading (SR) and Star Math (SM). The percentile ranks for the BOY testing window in 2018–2019 (August 27, 2018, through October 3, 2018) were compared to the MOY testing window (January 7, 2019, through February 1, 2019) percentile ranks. Additionally, the BOY testing window percentile ranks in 2019–2020 (September 3, 2019, through September 24, 2019) were compared to the MOY testing window (January 6, 2020, through January 29, 2020). The percentile ranks were used to place test-takers in one of four categories: Tier 1 (At/Above Benchmark) for HISD test-takers that achieved at or above the 40th percentile rank score; On Watch for HISD test-takers that performed below the 40th percentile rank score but greater than or equal to the 25th percentile rank; Tier 2 (Intervention) for test-takers who performed below the 25th percentile rank score but greater than or equal to the 10th percentile rank; and Tier 3 (Urgent Intervention) for test-takers who performed below the 10th percentile rank score. For more detailed information on RL360 math and reading assessments refer to **Appendix E (Table 10 and Table 11)**, pp. 15–16.

Demographic data for this report were retrieved from the 2019–2020 Management System Average Daily Attendance (PEIMS ADA) file. Students were enrolled in grades six through eight on an HISD campus who either participated in Project Explore or who were waitlisted.

These include students' highest-grade level, economic disadvantage status, English Language Learner (ELL) status, special education status, gender, and race/ethnicity.

Finally, a binary logistic regression was performed, which allows for the testing of models to predict Project Explore program participation. The dependent variable was program participation (yes = 1 and 0 = no). There were five computed variables used in the binary regression. The first computed variable was the difference in the average number of absences between 2018–2019 and 2019–2020. Two computed variables looked at the differences in student achievement on the RL360 math assessment between BOY and MOY testing windows for both 2018–2019 and 2019–2020. The final two computed variables were the differences in student performances on the RL360 reading assessment between BOY and MOY testing windows for both 2018–2019 and 2019–2020 school years.

Results

How did students who participated in Project Explore and students who were waitlisted assess their academic mindset?

Survey respondents were placed into one of four groups based on answers to the survey.

Survey respondents with a strong growth mindset received total scores of 43–56. Respondents with a strong mindset with fixed ideas received total scores 29–42. A strong growth mindset is when a student sees levels of intelligence, skill, and success start at a basic level but with the capacity to grow compared to a student that reports having a growth mindset with fixed ideas where growth is seen as possible but the respondent reports not having the strategies to grow.

As shown in **Figure 3**, for Program Explore students, grade eight had the highest percentage of survey respondents who reported having either a strong growth mindset or growth mindset with fixed ideas with 93.9 percent, followed by sixth grade (90.9 percent), and finally, seventh grade (87.8 percent). For students that were waitlisted, sixth-grade survey takers reported the largest percentage having either a strong growth mindset or growth mindset with fixed ideas (93.0 percent), followed by seventh grade (92.5 percent), and finally eighth grade (90.8 percent) (Figure 5, p. 4). These percentages are tempered by the small number of survey responses of waitlisted students.

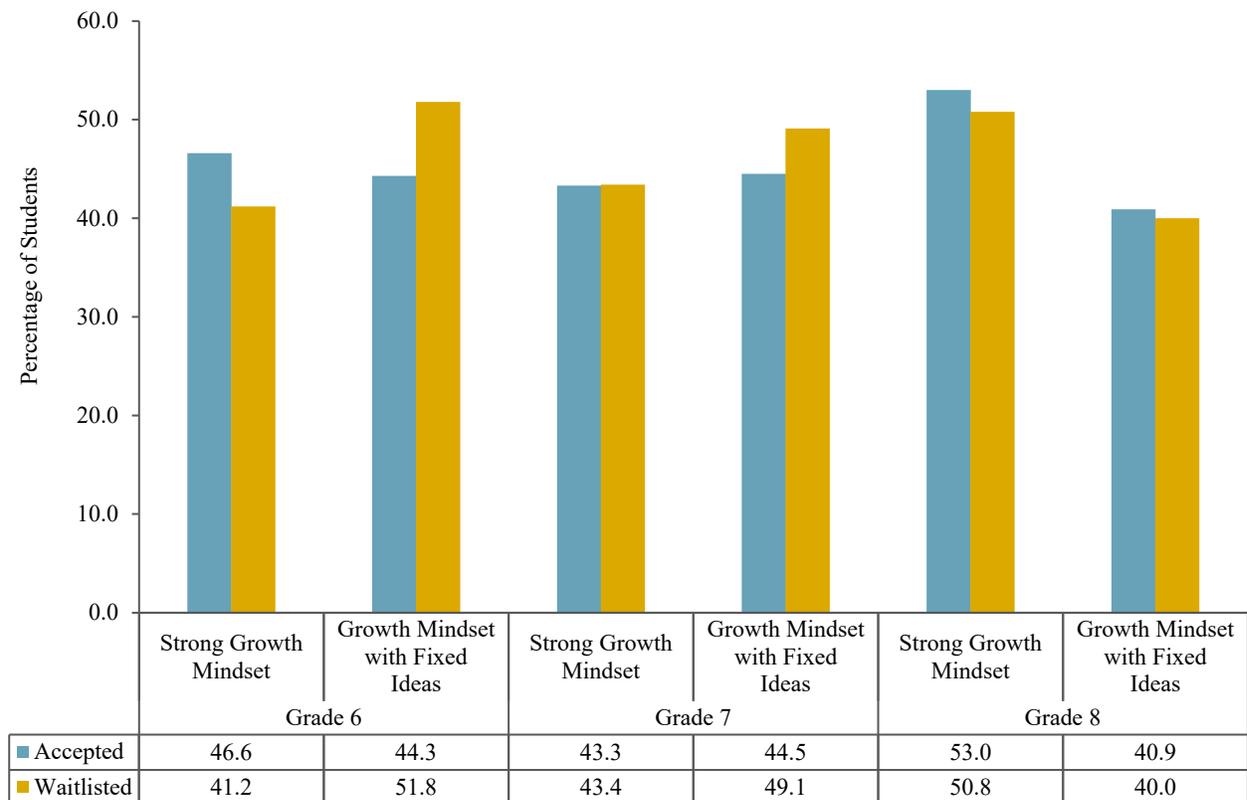


Figure 3: Self-reporting of growth mindset level for accepted and waitlisted students, 2019–2020

How did students who participated in Project Explore and students who were waitlisted differ in terms of students' attendance in 2019–2020?

Overall, Project Explore students in all grades had a smaller average number of days absent than waitlisted students in both 2018–2019 and 2019–2020 (Figure 4). As shown in Figure 3, all grades for both accepted and waitlisted students had a greater average number of absences in 2019–2020 when compared to 2018–2019. The largest difference in the average number of days absent between Project Explore students and waitlisted students were 1.7 days absent during the 2019–2020 school year. For more detailed information on absences for Project Explore participants and waitlisted students refer to Appendix F (Table 12), p. 17.

How did students who participated in Project Explore and students who were waitlisted differ in terms of academic success on the Beginning of Year (BOY) and the End of Year of Renaissance Learning (RL360) reading and math assessments in 2019–2020?

As shown in Table 10 (p. 15), there was a positive difference in the number of Project Explore students in seventh and eighth that met the benchmark on the RL360 math assessment at MOY when compared to BOY during the 2019–2020 school year (n=5 and n=28, respectively). Of all waitlisted grade levels, grade eight experienced a

positive difference in the number of students that met the benchmark on the RL360 math assessment at MOY when compared to BOY during the 2019–2020 school year (n=6).

As shown in Table 11 (p. 16), Project Explore students in grade seven and grade eight both experienced a positive difference in the number of students that met the benchmark at MOY compared to BOY on the RL360 reading assessment during the 2019–2020 school year (n=4 and n=1, respectively). By contrast, no grade level of waitlisted students experienced a positive difference in the number of students meeting the benchmark at MOY when compared to BOY on the RL360 reading assessment during the 2019–2020 school year.

Binary Logistic Regression

Binary logistic regression was performed to assess the impact of a number of factors on the likelihood that respondents participated in Project Explore during the 2019–2020 school year. The model contained five independent variables (difference in total absences, difference in math 2018–2019, difference in math 2019–2020, difference in reading 2018–2019, and difference in reading 2019–2020).

The full model containing all predictors was statistically significant for seventh-grade respondents only, $\chi^2(5, N = 546) = 13.39, p < .020$, indicating that the model was able to distinguish between respondents who reported being a Project Explore participant and did not report being a Project explore participant.

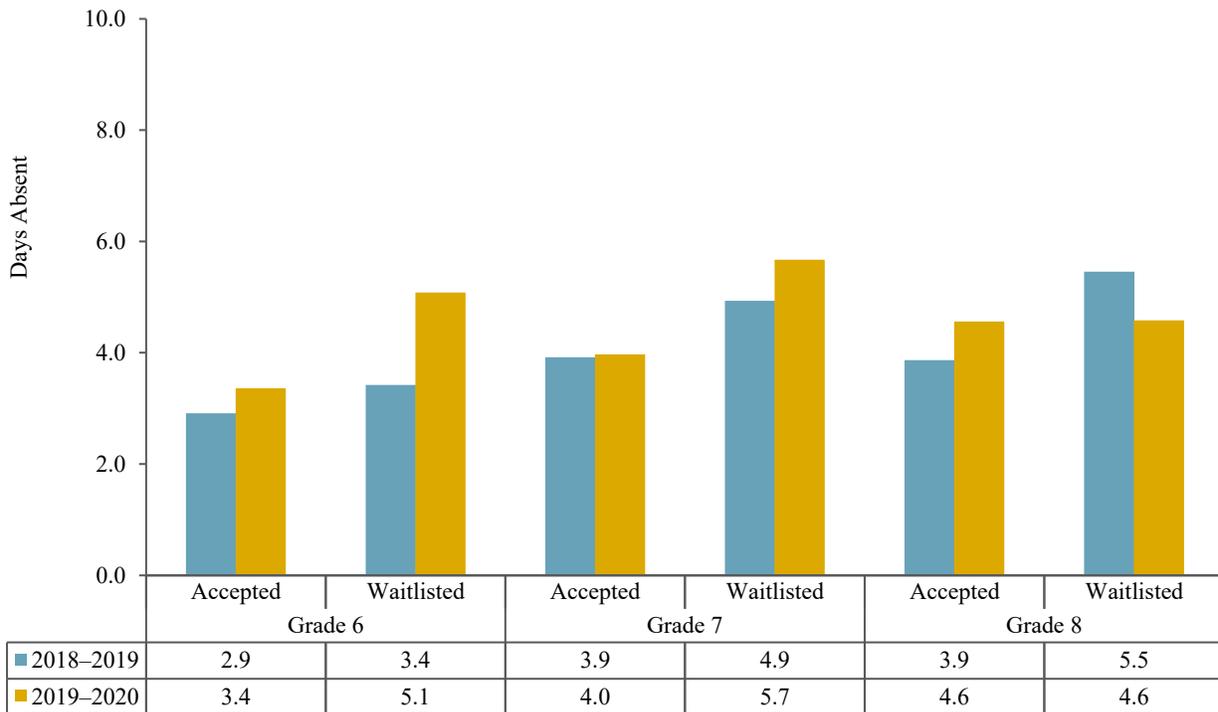


Figure 4: Mean number of days absent for accepted and waitlisted students, 2018–2019 and 2019–2020

The model as a whole explained between 2.4% (Cox and Snell R square) and 3.7% (Nagelkerke R squared) of the variance in Program Explore participation status, and correctly classified 78.0% of cases. As shown in **Table 13** (p. 18), only one of the independent variables made a unique statistically significant contribution to the model (difference in total absences) recording an odds ratio of 0.93. The odds ratio of 0.93 was less than 1, indicating that each additional day in the difference in absences, respondents were 0.93 times less likely to have participated in Project Explore, controlling for other factors in the model.

Discussion

In 2019–2020 a total of 2,095 students were accepted for participation in the Project Explore program, and an additional 715 students were waitlisted for program participation. A total of 64.6 percent (n=1,353) of all the Project Explore participants completed a survey through the HISD HUB. Of all the waitlisted students, 23.4 percent (n=167) completed a survey through the HISD HUB. For Project Explore students, grade eight had the highest percentage of survey respondents who reported having either a strong growth mindset or growth mindset with fixed ideas (93.9 percent), followed by sixth grade (90.9 percent), and finally seventh grade (87.8 percent).

Additionally, both Project Explore and waitlisted students experienced an increase in the average number of absences in 2019–2020 when compared to 2018–2019. Project Explore students had on average fewer absences during the 2019–2020 school year. This increase in the average number of absences could be explained by the uncertainty surrounding the Covid-19 pandemic.

Furthermore, there was a positive difference in the number of Project Explore students in both seventh and eighth grade who met the benchmark on the RL360 math assessment at MOY when compared to BOY during the 2019–2020 school year (5 and 28, respectively). On the RL360 reading assessment, Project Explore students in both grade seven and grade eight experienced a positive difference in the number of students that met the benchmark at MOY compared to BOY 2019–2020 school year (n=4 and n=1, respectively). This increase in the number of Project Explore students who met the benchmark on RL360 assessments could be explained by the additional supports provided by Project Explore.

Finally, the full model was predictive of between 2.4% and 3.7% of the variance in Project Explore participation for grade seven respondents. The differences in absences was the only independent variable that made a statistically significant contribution to the model. In other words, Project Explore students were more likely to have, on average, fewer absences.

There were several limitations associated with the Project Explore program evaluation that resulted from the HISD school closures on March 13, 2020, brought

about by the COVID–19 pandemic. These limitations did not allow for a more robust evaluation of the 2019–2020 Program Explore Program.

References

- Balfanz, R. (2009). *Putting middle grades students on the graduation path*. Policy and Practice Brief, National Middle School Association, Everyone Graduates Center and Talent Development Middle Grades Program.
- Bassiri, D. (2014). *Research study: The forgotten middle*. ACT, Inc., ACT Policy Brief.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007, January/February). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*(1), 246–263. doi:https://srcd.onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-8624.2007.00995.x
- Card, D. &. (1994, September). Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania. *The American Economic Review, 84*(4), 772–793. Retrieved January 15, 2020, from <http://links.jstor.org/sici?sici=00028282%28199409%2984%3A4%3C772%3AMWAEAC%3E2.0.CO%3B2-O>
- Claro, S., Paunesku, D., & Dweck, C. S. (2016, August). *Growth mindset tempers the effects of poverty on academic achievement*. doi:https://doi.org/10.1073/pnas.1608207113
- Cook, D. A., Gas, B. L., & Artino, A. R. (2018). Measuring mindsets and achievement goal motivation: A validation study of three instruments. *Academic Medicine, 93*(9), 1391–1399.
- Curry, J. R., Belser, C. T., & Binns, I. C. (2013). Integrating postsecondary college and career options in the middle level curriculum: Middle level educators must find ways to integrate postsecondary education and career exploration throughout the curriculum. *Middle School Journal, 44*(3), 26–32. doi:https://doi.org/10.1080/00940771.2013.11461852
- Dweck, C. S. (2002). The development of ability conceptions. In A. Wigfield, & J. Eccles (Eds.), *The development of achievement motivation* (pp. 57–120). New York, New York: Academic Press.
- Dweck, C. S. (2015). *Mindset Survey (3 question version)*. Retrieved from <https://survey.perts.net/take/toi>
- Dweck, C. S., Walton, G. M., & Cohen, G. L. (2014). *Academic Tenacity: Mindsets and Skills that Promote Long-Term Learning*. Retrieved January 15, 2020, from Bill & Melinda Gates Foundation: www.gatesfoundation.org

- Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., & Beechum, N. O. (2012). *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. Chicago: University of Chicago Consortium on Chicago Consortium on Chicago School Research. Retrieved April 14, 2020, from <https://consortium.uchicago.edu/publications/teaching-adolescents-become-learners-role-noncognitive-factors-shaping-school>
- Gaertner, M. N., & McClarty, K. L. (2015, April). Performance, perseverance, and the full picture of college readiness. *Educational Measurement: Issues and Practice*, 34(2), 1–14.
- Gysbers, N. C. (2013, September). Career-ready students: A goal of comprehensive school counseling programs. *The Career Development Quarterly*, 61, 283–288. doi:10.1002/J.2161-0045.2013.00057.x
- Hanson, J. (2017). Testing the difference between school level and academic mindset in the classroom: Implications for developing student psycho-social skills in secondary school classrooms. *Journal of Educational Issues*, 3(1), 44–63. doi:10.5296/jei.v3i1.10479
- Hooker, S., & Brand, B. (2010). College knowledge: A critical component of college and career readiness. *New Directions for Youth Development*, 2010(127), pp. 75–85. doi:https://doi.org/10.1002/yd.364
- Houston Independent School District. (2019, July). Mission, Vision, Beliefs, Constraints, and Goals. Retrieved from Houstonisd.org: <https://www.houstonisd.org/Page/32469>
- Houston Independent School District. (2020, February 10). *What is Project Explore?* Retrieved from <https://www.houstonisd.org/ProjectExplore>.
- Huerta, J. J., Watt, K. M., & Butcher, J. T. (2013). Examining Advancement Via Individual Determination (AVID) and its impact on middle school rigor and student preparedness. *American Secondary Education*, 41(2), 24–37.
- Kuehn, D. (2014, September 4). *The importance of study design in the minimum-wage debate*. Retrieved April 14, 2020, from Economic Policy Institute: <https://www.epi.org/publication/importance-study-design-minimum-wage-debate/>
- Meyer, B. D. (1995, April). Natural and quasi-experiments in economics. *Journal of Business & Economics Statistics*, 13(2), 151–161. Retrieved November 8, 2019, from <http://links.jstor.org/sici?sici=0735-0015%28199504%2913%3A2%3C151%3ANAQIE%3E2.0.CO%3B2-T>
- Miller, E., Rudman, A., Hogman, N., & Gustavsson, P. (2016). *Mindset interventions in academic settings: A review*. Retrieved November 8, 2019, from Semantic Scholar: <https://www.semanticscholar.org/paper/Mindset-Interventions-in-Academic-Settings-A-review-Miller-Rudman/586545805ffc76fa271ff7528e39b0e24c3b031f>
- MindsetQuiz.w.scores.pdf. (2020). Retrieved January 15, 2020, from <http://homepages.math.uic.edu/~bshiple/MindsetQuiz.w.scores.pdf>
- Oliveira, I. M., Taveira, M. C., & Porfeli, E. J. (2017, April 24). *Career preparedness and school achievement of Portuguese children: Longitudinal trend articulations*. doi:10.3389/fpsyg.2017.00618
- Pallant, J. (2013). *SPSS SURVIVAL MANUAL: A step by step guide to data analysis using IBM SPSS*. New York: McGraw Hill.
- Petrosino, A., Fronius, T., Goold, C. C., Losen, D. J., & Turner, H. M. (2017). *Analyzing student-level disciplinary data: A guide for districts (REL 2017–263)*. Retrieved January 15, 2020, from U. S. Department of Education, Institute of Education Services, National Center for Education Evaluation and Regional Assistance, Regional Education Laboratory Northeast and Islands: <http://ies.ed.gov/ncee/edlabs>
- Radcliffe, R. A., & Bos, B. (2013). Strategies to prepare middle school and high school students for college and career readiness. *The Clearing House*, 86(4), 136–141. doi:10.1080/00098655.2013.782850
- Shaefer, M. B., Rivera, L. M., & Ophals, E. (2010, November). Creating collaborative career development program for middle school grades students. *Middle School Journal*, 42(2), 30–38. doi:https://doi.org/10.1080/00940771.2010.11461754
- Snipes, J., & Tran, L. (2016). *Early indicators and academic mindsets in the Clark County School District*. San Francisco: REL West @ WestEd. Retrieved January 15, 2020, from <http://relwest.wested.org/>.
- Snipes, J., Fancsali, C., & Stoker, G. (2012). *Student academic mindset interventions: A review of the current landscape*. IMPAQ International, LLC. doi:https://www.impaqint.com/work/project-reports/student-academic-mindset-interventions-review-current-landscape
- Trei, L. (2007, February 7). *New study yields instructive results on how mindset affects learning*. Retrieved April 14, 2020, from Stanford News: <https://news.stanford.edu/news/2007/february7/dweck-020707.html>
- Trobia, A. (2020, April). *Encyclopedia of Survey Research Methods*. (P. J. Lavrakas, Ed.) doi:http://dx.doi.org/10.4135/9781412963947.n117

Appendix A

Table 1: Project Explore Demographics for Accepted and Waitlisted Students, 2019–2020						
Applicant Status	Grade Level	Total (N)	Student Gender			
			F		M	
			N	%	N	%
Total		2,810	1,584	56.4	1,226	43.6
Accepted Total		2,095	1,170	55.8	925	44.2
	6	688	367	53.3	321	46.7
	7	698	387	55.4	311	44.6
	8	709	416	58.7	293	41.3
Waitlisted Total		715	414	57.9	301	42.1
	6	261	139	53.3	122	46.7
	7	223	137	61.4	86	38.6
	8	231	138	59.7	93	40.3

Source: 2019-2020 Project Explore; PEIMS ADA_2019–2020

Table 1: Project Explore Demographics for Accepted and Waitlisted Students, 2019–2020 (continued)												
Applicant Status	Grade Level	Total (N)	Ethnicity									
			Black or African American		Latino/Hispanic		Asian		White		Other*	
			N	%	N	%	N	%	N	%	N	%
Total		2,810	1,027	36.5	1,663	59.2	41	1.5	55	2.0	16	0.6
Accepted Total		2,095	801	38.2	1,211	57.8	31	1.5	34	1.6	14	0.7
	6	688	259	37.6	399	58.0	8	1.2	16	2.3	3	0.4
	7	698	267	38.3	397	56.9	13	1.9	14	2.0	7	1.0
	8	709	275	38.8	415	58.5	10	1.4	4	0.6	4	0.6
Waitlisted Total		715	226	31.6	452	63.2	10	1.4	21	2.9	3	0.4
	6	261	70	26.8	177	67.8	3	1.1	8	3.1	2	0.8
	7	223	80	35.9	124	55.6	6	2.7	11	4.9	0	0.0
	8	231	76	32.9	151	65.4	1	0.4	2	0.9	1	0.4

Source: 2019-2020 Project Explore; PEIMS ADA_2019–2020

Note: * means Two or More or Native American

Appendix A (continued)

Table 1: Project Explore Demographics for Accepted and Waitlisted Students, 2019–2020 (continued)										
Applicant Status	Grade Level	Total (N)	At Risk		Title I		Special Ed		ELL	
			N	%	N	%	N	%	N	%
Grand Total		2,810	1,892	67.3	2,777	98.8	162	5.8	751	26.7
Accepted Total		2,095	1,345	64.2	2,071	98.9	112	5.3	497	23.7
	6	688	435	63.2	681	99.0	44	6.4	177	25.7
	7	698	469	67.2	691	99.0	39	5.6	183	26.2
	8	709	441	62.2	699	98.6	29	4.1	137	19.3
Waitlisted Total		715	547	76.5	706	98.7	50	7.0	254	35.5
	6	261	203	77.8	259	99.2	19	7.3	104	39.8
	7	223	166	74.4	218	97.8	10	4.5	73	32.7
	8	231	178	77.1	229	99.1	21	9.1	77	33.3

Source: 2019-2020 Project Explore; PEIMS ADA_2019–2020

Appendix B

Table 2: Scheduled Project Explore Student Interactions by Program Activity, 2019–2020	
Program Activity	Interactions with Student Participants
<i>Advising (All students)</i>	8th Grade Parent Night
	School Choice Application Preparation
	Student Follow Up (Selection of campus, waitlist, etc.)
<i>Advising (Cohort)</i>	1, 1:1 advising session with 6th graders
	1:1 Parent Meeting for 8th-grade parents (Cohort)
	2, 1:1 advising sessions with 7th graders
	3, 1:1 advising sessions with 8th graders
	6th and 7th Grade Parent Night (Cohort)
<i>Cohort Expectations/Meetings</i>	Ensure all 8th-grade cohort students complete a PGP
	Ensure all 8th-grade cohort students complete a School Choice application (if eligible)
	Meet with 6th, 7th, and 8th-grade cohort students every other week to deliver the required curriculum (begins in October)
<i>Curriculum (All students)</i>	Reach 50% of all 7th and 8th graders on campus with CCR Curriculum /survey completion (8th-fall, 7th-spring)
<i>Data Collection/Reporting</i>	Data Collection (Co-Pilot)
	Monthly newsletter submissions
	Review Naviance reports for follow up
<i>Exposure</i>	6th Grade College Visit
	6th Grade Industry Visit
	7th Grade College Visit
	7th Grade Industry Visit
	8th Grade College Visit
	8th Grade Industry Visit
	Eight industry professional visits to the campus (1 in the fall and 1 in the spring for 6th grade, 1 in the fall and 1 in the spring for 7th grade, 2 in the fall and 2 in the spring for 8th grade)
	Explore Houston Summer Camp
	Facilitation of a College/Career Day in collaboration with campus staff
<i>Partner Expectations</i>	Attend weekly sessions with cohort students and our mentor partners
	Provide a space and guidance on the pull-out periods for Discover U to provide advising
<i>Recruitment/Retention</i>	Recruit 75 students (25 at each grade level)
	Maintain 75 students
<i>Test Preparation (All students)</i>	Khan Academy Account creation/Practice (7th & 8th-cohort)
	PSAT Score Review with 8th Grade
	Purpose of the PSAT with 7th (cohort)/ 8th Grade

Source: 2019–2020 Project Explore Program Activities, January 8, 2020

Appendix C

Table 3: Scheduled Project Explore Advising Sessions Topics for Participating Students by Grade Level, 2019–2020			
Grade Level	Advising Session 1 Topic	Advising Session 2 Topic	Advising Session 3 Topic
6th Grade	Initial Project Explore Advisor Student Interview, MS Course Choices/Extracurriculars	N/A	N/A
7th Grade	Initial Project Explore Advisor Student Interview	Middle School Course Choices/ Extracurriculars/College SuperMatch	N/A
8th Grade	Career Interest/Endorsement/ School Choice, School Choice Application Support	College SuperMatch/Post-secondary Choices	HS Course Selection/Personal Graduation Plan

Source: 2019–2020 Project Explore Program Activities, January 8, 2020

Table 4: Scheduled Project Explore Cohort Curriculum Objectives for Participating Students, 2019–2020				
Cohort	Topic 1: Who Am I/Self-Discovery	Topic 2: Communication Skills	Topic 3: Goal Setting	Topic 4: School Choice
6th Grade	Lesson 1: <u>Who Am I?</u>	Lesson 1: <u>Flipping the Switch</u>	Lesson 1: <u>Roadmap to Success</u>	Lesson 1: <u>Matrix Score and Magnet Schools</u>
	Lesson 2: <u>Never Underestimate the Power of Positive Mental Attitude</u>	Lesson 2: <u>Oh, Puh-leeze</u>	Lesson 2: <u>What Does Success Mean to Me?</u>	Lesson 2: <u>CTE Choices and Endorsement</u>
	Lesson 3: <u>Changes, Choices, and Lessons</u>	Lesson 3: <u>Listen Hear!</u>	Lesson 3: <u>Navigating the Road to My Future</u>	Lesson 3: <u>Time Management</u>
	Lesson 4: <u>Who Are the Copilots in My Life?</u>	Lesson 4: <u>Quit Talkin?! I know what to do!</u>	Lesson 4: <u>SMART Goals</u>	Lesson 4: <u>Interest Surveys</u>
7th Grade	Lesson 1: <u>Who Do I Want to Become?</u>	Lesson 1: <u>Intention and Purpose of Communication</u>	Lesson 1: <u>Long-Term and Short-Term Goals</u>	Lesson 1: <u>What high school is right for me?</u>
	Lesson 2: <u>Naviance Career Cluster Finder Survey</u>	Lesson 2: <u>Sticks and Stones May Break My Bones...</u>	Lesson 2: <u>Hypothetical scenarios</u>	Lesson 2: <u>What high school is right for me? (Continued)</u>
	Lesson 3: <u>Vision Board Activity</u>	Lesson 3: <u>Types of Communication</u>	Lesson 3: <u>Hypothetical scenarios Part II</u>	Lesson 3: <u>Endorsements</u>
	Lesson 4: <u>Vision Board Activity continued</u>	Lesson 4: <u>Career Day</u>	Lesson 4: <u>Hypothetical Scenarios Part III</u>	Lesson 4: <u>Magnet eligibility requirements</u>
8th Grade	Lesson 1: <u>Imagining My Future: Dream a Little Dream</u>	Lesson 1: <u>Ways to Communicate</u>	Lesson 1: <u>What Does Success Mean to Me?</u>	Lesson 1: <u>Understanding the 5 High School Endorsements</u>
	Lesson 2: <u>Self-Discovery</u>	Lesson 2: <u>Developing Soft Skills</u>	Lesson 2: <u>Developing S.M.A.R.T. Goals</u>	Lesson 2: <u>Which High Schools can I apply to?</u>
	Lesson 3: <u>True Colors: Exploring Who I Am</u>	Lesson 3: <u>Developing Soft Skills</u>	Lesson 3: <u>Informed Decision-Making</u>	Lesson 3: <u>College Research</u>
	Lesson 4: <u>Vision Board Activity</u>	Lesson 4: <u>Understanding Directions: Quit Talkin?! I know what to do!</u>	Lesson 4: <u>Informed Decision-Making (Continued)</u>	Lesson 4: <u>College Research (Continued)</u>

Source: 2019–2020 Project Explore Program Activities, January 8, 2020

Appendix C (continued)

Table 5: Scheduled Project Explore College and Career Readiness Training Objectives for Grade 7 and Grade 8 Participating Students, 2019–2020				
Training Module	7th Grade		8th Grade	
	Texas OnCourse		My Personal Highway	
Module 1	<u><i>Who Am I?</i></u>	Students will identify their personal interests and how they relate to your high school, college and career planning. The student will complete the Cluster Finder or Career Key in Naviance.	<u><i>Who Am I?</i></u>	Students will identify their personal interests and how they relate to your high school, college and career planning. The student will complete the Cluster Finder or Career Key in Naviance.
Module 2	<u><i>Investigating Career Clusters</i></u>	Students will relate interests to career clusters and programs of study. The student will recall strategies for exploring career choices. Students will identify available resources for investigating career choices, relate career goals with career learning experience opportunities, and identify education and training requirements for career choices.	<i>High School Research</i>	Students will identify careers and endorsements as it pertains to selecting a high school. Students will find and research high schools according to their individual preferences. Students will practice using various high school research tools.
Module 3	<u><i>Understanding the Five High School Endorsements</i></u>	Students will recognize the career clusters and programs of study within each endorsement area, learn how career interests align with endorsement selection, describe how to choose, change and/or add an endorsement, and identify the pitfalls to graduating without an endorsement.	<i>Career Pathways and School Choice</i>	Students will explore endorsements and career pathways that are offered at each high school. Students will understand how to choose the best fit high school. Students will be able to compare subjective and objective information about high schools.
Module 4	N/A		<i>Personal Graduation Plan (PGP)</i>	Students will be guided through the components of the PGP to prepare for completion in 9th grade. Students will connect their personal interests with high school planning and school choice.

Source: 2019–2020 Project Explore Program Activities, January 8, 2020

Appendix D

Table 6: Project Explore Survey, 2019–2020				
How true are the following about you? * ($\alpha = .788$)	Strongly Agree	Agree	Disagree	Strongly Disagree
My intelligence (ability to acquire and apply knowledge and skills) is something that I can't change very much.	1	2	3	4
Challenging myself won't make me any smarter.	1	2	3	4
There are some things I am not capable of learning.	1	2	3	4
If I am not naturally smart in a subject, I will never do well in it.	1	2	3	4
In typical class, how true are the following? ($\alpha = .815$)	Never	Seldom	Often	Always
I don't participate in discussions because I am afraid people might think I am foolish.	1	2	3	4
I would rather do easy work that I can do well than challenging work where I might learn more.	1	2	3	4
I don't ask questions in class because people might think my questions are not smart.	1	2	3	4
I stop doing work if I feel like I can't do it well.	1	2	3	4
I only volunteer to answer a question if I am sure my answer is right.	1	2	3	4
In a typical class, how often do you: ($\alpha = .773$)	Never	Seldom	Often	Always
Do the readings or other assigned work to prepare for class.	1	2	3	4
Turn in assignments on the due date.	1	2	3	4
Actively participate in class.	1	2	3	4
Have all my class materials with me.	1	2	3	4
Do more than what is expected.	1	2	3	4
Scores of Growth Mindset (Overall $\alpha = .837$)	14	28	42	56

Source: 2019–2020 Project Explore Survey

Note: * Reverse code for the degree to which the student reports a Growth Mindset.

Table 7: Students Self-reported Level of Growth Mindset on Project Explore Survey, 2019–2020	
Strong Growth Mindset	43-56
Growth Mindset with some Fixed ideas	29–42
Fixed Mindset with some Growth ideas	15–28
Strong Fixed Mindset	0-14

Source: Adapted from - MindsetQuiz.w.scores.pdf, 2020

Appendix D (continued)

Table 8: Percentage of Completed Surveys for Accepted and Waitlisted Students, 2019–2020						
Grade Level	Accepted			Waitlisted		
	Surveys (N)	Completed Survey (N)	%	Surveys (N)	Completed Survey (N)	%
6	688	427	62.1	261	85	33
7	698	416	59.6	223	53	24
8	709	474	66.9	231	65	28
Total	2,095	1,317	62.9	715	203	28

Source: 2019–2020 Project Explore Survey

Table 9: Self-assessment of Growth Mindset for Accepted and Waitlisted Students, 2019–2020						
Participation Status	Grade 6		Grade 7		Grade 8	
	N	%	N	%	N	%
Accepted	427	100.0	416	100.0	474	100.0
Strong Growth Mindset	183	46.6	180	43.3	251	53.0
Growth Mindset with Fixed Ideas	205	44.3	185	44.5	194	40.9
Fixed Mindset with Growth ideas	30	7.4	42	10.1	26	5.5
Strong Fixed Mindset	9	1.6	9	2.2	3	0.6
Waitlisted	85	100.0	53	100.0	65	100.0
Strong Growth Mindset	35	41.2	23	43.4	33	50.8
Growth Mindset with Fixed Ideas	44	51.8	26	49.1	26	40.0
Fixed Mindset with Growth ideas	5	5.9	3	5.7	5	7.7
Strong Fixed Mindset	1	1.2	1	1.9	1	1.5

Source: 2019–2020 Project Explore Survey

Appendix E

Table 10: BOY and MOY RL360 Math Tier Group for Accepted and Waitlisted Students, 2018–2019 and 2019–2020								
Participation Status	2019-2020 Grade Level	Tier	2018-2019			2019-2020		
			BOY	MOY	Difference	BOY	MOY	Difference
Accepted	6	At/Above Benchmark	330	336	6	299	276	-23
		On Watch	66	58	-8	77	78	1
		Intervention	71	76	5	69	72	3
		Urgent Intervention	55	52	-3	77	96	19
	7	At/Above Benchmark	293	282	-11	283	288	5
		On Watch	72	70	-2	74	78	4
		Intervention	82	79	-3	87	76	-11
		Urgent Intervention	64	80	16	67	69	2
	8	At/Above Benchmark	328	338	10	339	367	28
		On Watch	80	76	-4	84	80	-4
		Intervention	67	62	-5	59	50	-9
		Urgent Intervention	52	51	-1	45	30	-15
Waitlisted	6	At/Above Benchmark	102	105	3	81	78	-3
		On Watch	25	28	3	32	28	-4
		Intervention	24	23	-1	32	31	-1
		Urgent Intervention	30	25	-5	36	44	8
	7	At/Above Benchmark	66	67	1	68	64	-4
		On Watch	22	27	5	25	25	0
		Intervention	29	17	-12	25	24	-1
		Urgent Intervention	27	33	6	26	31	5
	8	At/Above Benchmark	83	89	6	86	92	6
		On Watch	24	23	-1	27	30	3
		Intervention	32	27	-5	31	20	-11
		Urgent Intervention	22	22	0	17	19	2
Total		2,046	2,046	0	2,046	2,046	0	

Source: 2018–2019 RL360 Math file; 2019–2020 RL360 Math file

Appendix E (continued)

Table 11: BOY and MOY RL360 Reading Tier Group for Accepted and Waitlisted Students, 2018–2019 and 2019–2020								
Participation Status	2019-2020 Grade Level	Tier	2018-2019			2019-2020		
			BOY	MOY	Difference	BOY	MOY	Difference
Accepted	6	At/Above Benchmark	181	191	10	175	142	-33
		On Watch	88	103	15	85	104	19
		Intervention	115	97	-18	117	84	-33
		Urgent Intervention	128	121	-7	135	182	47
	7	At/Above Benchmark	146	149	3	141	145	4
		On Watch	90	85	-5	111	112	1
		Intervention	145	118	-27	119	90	-29
		Urgent Intervention	140	169	29	150	174	24
	8	At/Above Benchmark	197	190	-7	185	186	1
		On Watch	101	97	-4	116	127	11
		Intervention	130	129	-1	123	96	-27
		Urgent Intervention	128	140	12	132	147	15
Waitlisted	6	At/Above Benchmark	41	46	5	36	34	-2
		On Watch	33	37	4	31	41	10
		Intervention	52	52	0	41	22	-19
		Urgent Intervention	67	58	-9	85	96	11
	7	At/Above Benchmark	35	33	-2	30	30	0
		On Watch	18	20	2	25	26	1
		Intervention	32	37	5	33	21	-12
		Urgent Intervention	61	56	-5	58	69	11
	8	At/Above Benchmark	34	30	-4	34	34	0
		On Watch	24	26	2	27	35	8
		Intervention	54	47	-7	40	28	-12
		Urgent Intervention	46	55	9	57	61	4
Total		2,086	2,086	0	2,086	2,086	0	

Source: 2018–2019 RL360 Reading file; 2019–2020 RL360 Reading file

Appendix F

Table 12: Mean Absences for Accepted and Waitlisted Students, 2018–2019 and 2019–2020				
Grade Level	2018–2019		2019–2020	
	N	Mean Absences	N	Mean Absences
Accepted	1,951	3.6	1,853	4.12
6	621	2.9	592	3.36
7	658	3.9	627	3.97
8	672	3.9	634	4.56
Waitlisted	647	4.5	586	5.07
6	243	3.4	220	5.08
7	194	4.9	175	5.67
8	210	5.5	191	4.58
Total	2,598	3.8	2,439	4.58

Source: SIS ad hoc_2018–2019 and 2019–2020 Attendance file

Appendix G

Table 13: Logistic Regression Predicting Likelihood of Reporting Participation in Project Explore by Grade Level, 2019–2020

		B	S.E.	Wald	df	p	Odds Ratio	95.0% C.I. for Odds Ratios	
								Upper	Lower
Grade 6	Difference in Absences	-0.04	0.02	2.72	1	0.10	0.96	0.92	1.01
	Difference in math 2018–2019	0.00	0.01	0.02	1	0.90	1.00	0.99	1.01
	Difference in math 2019–2020	0.00	0.01	0.81	1	0.37	1.00	0.99	1.01
	Difference in reading 2018–2019	-0.01	0.01	0.85	1	0.36	0.99	0.98	1.01
	Difference in reading 2019–2020	0.00	0.01	0.22	1	0.64	1.00	0.99	1.01
	Constant	1.03	0.10	99.63	1	0.00	2.81		
Grade 7	Difference in Absences	-0.07	0.03	7.45	1	0.01	0.93	0.89	0.98
	Difference in math 2018–2019	-0.01	0.01	2.03	1	0.15	0.99	0.98	1.00
	Difference in math 2019–2020	0.01	0.01	1.05	1	0.31	1.01	0.99	1.02
	Difference in reading 2018–2019	-0.01	0.01	1.90	1	0.17	0.99	0.97	1.01
	Difference in reading 2019–2020	-0.01	0.01	1.46	1	0.23	0.99	0.98	1.01
	Constant	1.37	0.11	144.87	1	0.00	3.92		
Grade 8	Difference in Absences	0.03	0.03	1.05	1	0.31	1.03	0.98	1.08
	Difference in math 2018–2019	-0.01	0.01	1.91	1	0.17	0.99	0.98	1.00
	Difference in math 2019–2020	0.01	0.01	1.51	1	0.22	1.01	1.00	1.02
	Difference in reading 2018–2019	0.00	0.01	0.11	1	0.74	1.00	0.99	1.02
	Difference in reading 2019–2020	-0.01	0.01	1.14	1	0.29	0.99	0.98	1.01
	Constant	1.18	0.10	130.75	1	0.00	3.26		

Source: SIS ad hoc 2018–2019 and 2019–2020 Attendance file; 2018–2019 RL360 Math file; 2019–2020 RL360 Math file; 2018–2019 RL360 Reading file; 2019–2020 RL360 Reading file