Breakthrough Miami:
A Quasi-Experimental
External Impact Evaluation

2021 – 2024 Evaluation Report

Prepared by:
QQ Research Consultants

Authors:
Spencer Dudley, PhD
Laura Schaffer, MA

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Executive Summary

Research finds that students from low-income and under-resourced backgrounds are at a critical academic and social disadvantage due to inequitable in-school and out-of-school-time (OST) learning opportunities. The Breakthrough Miami (BTM) AmeriCorps program is guided by a vision of ensuring that low-income, under-resourced, and traditionally underrepresented students in Miami-Dade County can succeed in school and attain post-secondary success.

BTM year-round programming addresses the opportunity gap by providing interventions to support students in accessing rigorous courses and learning environments, deep OST learning, academic advising, and socio-emotional development to help students meet distinct developmental needs at each grade level. BTM's model is rooted in a students-teaching-students model, where near peers teach and mentor participating BTM Scholars. Scholars are recruited at the end of elementary school and are requested to make a long-term commitment to the program lasting through high school.

During a six-week Summer Institute, BTM Scholars participated in developmentally appropriate and culturally responsive academic courses, electives, and socio-emotional learning daily over six weeks provided by BTM AmeriCorps members who serve as Teaching Fellows. During the academic year, BTM focused on delivering guidance on school options, academic advising, and academic support in addition to hands-on learning during 14 BTM Saturdays.

This external impact evaluation focused on BTM activities during the 2021-2024 grant cycle, during which the program received funding through AmeriCorps. More specifically, evaluation activities focused on the experience of participants in BTM programming over the summer of 2022. In particular, evaluation work focused on 1) the impact of participating on Scholars in grades six and seven as of 2021-2022 and 2) the role of AmeriCorps Members who served as teaching fellows.

Work assessed the impact of participation in BTM on Scholars' academic and behavioral outcomes. The specific outcomes included were grade point average (GPA), standardized test scores of English language arts and mathematics achievement, total number of school absences, number of unexcused absences, number of indoor suspensions, and number of outdoor suspensions. Impact analyses used data from Miami-Dade County Public Schools and employed a propensity score matching approach to ensure that participants were compared against a similar group of non-participating students.

The evaluation also incorporated a process evaluation component to explore the experience of BTM Scholars in the same two grade levels as well as their parents, Teaching Fellows, and Instructional Coaches. Since AmeriCorps Members served as near-peer Teaching Fellows, a key aspect of the BTM experience, analyses focused on

understanding their experience in the program and their role in supporting Scholar success. Toward this end, the research team conducted surveys, focus groups, and classroom observations during summer programming.

Surveys were conducted with Scholars, Teaching Fellows (AmeriCorps members), and parents to understand better their experiences and perceptions related to the program. Surveys were distributed to all Scholars in the two grade levels examined as well as to their parents and the Teaching Fellows they worked with.

Focus groups were conducted with Scholars at a sample of three sites where site visits were conducted. There was one focus group for each grade level at each site, for a total of six Scholar focus groups. The evaluation team also conducted two focus groups with Teaching Fellows, two with parents, and one with Instructional Coaches. The evaluation team also conducted 12 classroom observations at the three sites sampled to better understand the teaching and learning experience of BTM participants.

Findings from the external impact evaluation provided initial evidence for a positive effect of participating in BTM on Scholars academic outcomes.

- Participating Scholars had **significantly higher GPAs** than a comparison group that was matched based on sociodemographic characteristics and on baseline outcome measures. While the magnitude of this effect was small, it represents the effect of just one year of participation. The program's influence on academic outcomes may increase over time and with a greater duration of participation.

- BTM Scholars also had **significantly fewer total school absences** than the matched comparison group. Again, the magnitude of this effect was small, but points to improvements in school engagement.

- The effects for assessment scores, unexcused absences, and indoor/outdoor suspensions were not statistically significant.

The evaluation also showed that, overall, satisfaction with the BTM program was high among Scholars and their parents. Scholars expressed that they would recommend the program to peers, and parents similarly expressed that they would recommend participating to people in their networks.

Most BTM Scholars felt that participating helped them in school and helped them grasp new material. Parents also felt that BTM offered a quality learning experience and that participating allowed their child to explore interests. Despite this, a minority of Scholars and parents expressed that material could be more challenging and more tailored to

preparing for the upcoming school year, pointing to opportunities to differentiate learning opportunities and ensure all participating Scholars feel challenged.

Most Scholars found that BTM allowed them to make new friends and feel safe. They also mostly expressed that they had role models and positive relationships with Teaching Fellows (i.e., AmeriCorps members). Similarly, most Teaching Fellows felt able to connect with their students, have a positive impact on them, and deliver effective lessons. Despite this, there was evidence of some variability in the social environment across BTM sites. At one site where management was relatively new to implementing the BTM model, some students expressed concerns about disruptions and misbehavior among their peers.

Survey work also found that training and orientation procedures were in place to prepare Teaching Fellows to assume their role in delivering summer courses, although some findings pointed to opportunities to better ensure their ability to plan for lessons and implement project-based learning.

Parents found that BTM staff and management were dedicated and concerned with their children's progress. They felt that organizational communication was strong, they knew who to contact with questions, and they felt welcome at BTM sites.

Based on the work conducted, the evaluation team makes the following recommendations for continuous programmatic improvements:

- While there was evidence that summer courses were rigorous and prepared students for the upcoming school year, BTM may seek ways to differentiate academics to ensure that all students feel sufficiently challenged.
- The project-based learning aspect of the program was present, but there remain opportunities to develop this feature of the program further and train Teaching Fellows in its successful implementation.
- Lesson planning was one of the areas that Teaching Fellows found most challenging. BTM may want to emphasize lesson planning more during their training and orientation.
- Further developing a system for supporting new site leaders in implementing the BTM model to ensure consistency of implementation.
- Further developing systems for ensuring that any disciplinary issues are addressed in a positive way and uniformly across sites.
- Exploring novel ways of ensuring that the positive environment for Scholars starts from when they get on the morning bus. Some Scholars felt that this was the most likely place for disruptions to occur and that this impacted their day at the summer program.

Introduction

Breakthrough Miami AmeriCorps Program Background

Research consistently finds that students from low-income and under-resourced backgrounds are at a critical academic and social disadvantage due to inequitable in-school and out-of-school-time (OST) learning opportunities.[i] Educational inequities put Black and Hispanic children and youth at a particular disadvantage. For example, in 2019, National Assessment of Educational Progress data showed only 13% of Black 4th graders reached proficiency in reading and 21% in math, compared to 46% proficiency in reading and 55% in math among White students.[ii] Addressing inequitable access to learning opportunities is a vital priority for reducing achievement gaps and ensuring all children can reach their goals.

OST and academic enrichment programs offer means of addressing achievement gaps and promoting the success of less advantaged students.[iii] Research evidence indicates gaps in opportunity relating to learning time beyond the classroom to be highly dependent on family socioeconomic status.[iv] Higher-income families spend seven times more on enriching activities than lower-income families.[v] This disparity is likely to produce compounding effects, as many enrichment activities help develop critical skills, beliefs, and behaviors associated with college readiness.[vi] Additionally, skill loss that occurs during the summer (summer slide) is more prevalent in lower-resourced communities, and its effect is cumulative, resulting in wider gaps as time goes on.[vii] Miami-Dade County Public Schools (M-DCPS) reports that summer slide is the most critical factor in the achievement gap.[viii]

The M-DCPS district serves the greater Miami area in southeastern Florida. It is the largest school district in the Southeastern United States and the third-largest district in the country. The district spans urban, suburban, and rural areas and serves a diverse student population. As of 2019, 20.1% of children under age 18 in Miami-Dade County lived under the federal poverty threshold.[ix] Moreover, while the five-year graduation rate for M-DCPS shows an upward trend, nearly 20% of Black, 15% of Latino, and 15% of low-income students do not graduate high school.[x]

The Breakthrough Miami (BTM) AmeriCorps program is guided by a vision of ensuring that low- income, under-resourced, and traditionally underrepresented students in Miami-Dade County can succeed in school and attain post-secondary success. BTM year-round programming addresses the opportunity gap by providing interventions to support students in accessing rigorous courses and learning environments, deep OST learning, academic advising, and socio- emotional development to help students meet distinct developmental needs at each grade level. BTM's work is informed by research that shows academic OST programs can demonstrably improve academic outcomes, linked to progress in reading and math performance and non- cognitive outcomes such as

teamwork, self-efficacy, and social responsibility.[xi] BTM's success is rooted in a students-teaching-students model. Aligned with education research, which shows that near-peer mentoring improves skills and cultivates interests for mentees while simultaneously furthering the training and development of the mentors,[xii] the BTM model engages outstanding older students as teachers and near-peer mentors. This model serves as the core framework for BTM's Member role and experience.

This evaluation report focuses on BTM activities during the 2021-2024 period, during which the program received competitive funding through AmeriCorps. More specifically, the evaluation focused on the experience of participants who were in BTM programming over the summer of 2022.

BTM's six-week Summer Institute ensures that under-resourced students in Miami have access to summer learning, proven to reduce academic achievement gaps, improve reading skills, and provide measurable academic gains. Over the summer of 2022, Scholars in the Summer Institute attended 28 days of programming. Each day they were on site for seven hours, with six hours of instruction, amounting to 168 hours of instruction time over the summer. BTM prepared and supported minimum-time (MT) members to engage 5th- 9th-grade students in the Summer Institute, during which they served as Teaching Fellows. Each Member was assigned a specific grade level and delivered core subject instruction designed for that particular grade in addition to developing and leading an elective course.

During the academic year, BTM focused on delivering guidance on school options, academic advising, and academic support in addition to hands-on learning during 14 BTM Saturdays. Accelerating the organization's advising capacity, BTM prepared and positioned reduced half- time (RHT) Members as advisors and mentors working with students from 5th -12th grade for nine months over the 2022-23 school year. This included 1:1 advising, group advising sessions, and touchpoints with Scholars to support goal setting and academic planning. Through these activities, Members (1) provided academic advising to ensure students could access high-quality critical academic support and build college preparatory non-academic skills to 5th-12th grade students leading to high school graduation; (2) ensured high school students took necessary steps to enroll in and succeed in college; (3) ensured college students successfully advance toward degree attainment.

Literature Review

A growing body of research indicates that OST and academic enrichment programs can benefit participating children and youth's educational and career outcomes. A meta-analysis of OST programs for at-risk youth found small but statistically significant effects of participation on reading and mathematics achievement, and the magnitude of these effects was larger for OST programs with a particular focus on reading and tutoring.[xiii]

Studies have also shown that participation in OST programs can positively influence career attitudes and aspirations, particularly related to the STEM fields.[xiv,xv]

Research evidence indicates that the specific BTM program activities, namely academic support, academic advising, and mentoring, are related to the outcomes of interest. For example, research finds that OST programs can demonstrably improve outcomes such as reading and math performance and non-cognitive outcomes such as teamwork, self-efficacy, and social responsibility.[xvi] In addition, research shows that summer learning programs can potentially reduce the academic achievement gap between students from low-income and higher-income households.[xvii]

While this evaluation is the first external impact evaluation employing quasi-experimental methods for BTM, a similar evaluation was conducted for a Breakthrough affiliate in Central Texas that has followed a cohort of students over time. That work evaluated students receiving the Breakthrough intervention compared to a matched group of their public-school peers who did not receive the intervention and demonstrated significant differences in the following areas: fewer absences, fewer disciplinary referrals, higher grades, more likely to take advanced math classes, more likely to take the SAT, and were more likely to say they would graduate high school. While the model implemented differs slightly from that of BTM, the Central Texas evaluation provides preliminary evidence for the effectiveness of BTM activities.

More research is needed to fully understand the benefits of academic enrichment and OST programs, particularly as related to under-served and under-resourced communities. This evaluation work adds to that evidence base while also providing insights that will help the BTM with efforts to continually improve their programming.

BTM Theory of Change and Evaluation Outcomes

Research shows that students from low-income and under-resourced backgrounds are at a critical disadvantage due to inequitable in-school and out-of-school-time (OST) learning opportunities.[i] Particularly concerning is that educational inequities put Black and Hispanic children and youth at a particular disadvantage. BTM works to ensure that low-income, under-resourced, and traditionally underrepresented students in Miami-Dade County can succeed in school and attain post-secondary success. To achieve this goal, BTM implements a Summer Institute program and year-round programming that targets academically promising under-represented children.

Summer Learning Interventions

BTM's six-week Summer Institute ensures that under-resourced students in Miami have access to summer learning, which has been proven to reduce academic achievement gaps, improve reading skills, and provide measurable academic gains. Over the summer

of 2022, Scholars in the Summer Institute attended 28 days of programming. Each day, they were on site for seven hours, with six hours of instruction, amounting to 168 hours of instruction time over the summer.

For the 2022 summer institute, BTM prepared and supported minimum-time (MT) members to engage 5th- 9th-grade students in the Summer Institute, during which they served as Teaching Fellows. Members were trained in a six-day intensive orientation focused on instructional and academic advising methodologies, mental health awareness, leadership, youth development, cultural competency, and compliance.

Each Member was assigned a specific grade level and delivered core subject instruction designed for that particular grade in addition to developing and leading an elective course. For core subjects, MT Members were provided with curriculum guides that detailed topics and required objectives. They then developed lesson plans and projects in line with curriculum guides. Before implementation, lesson and project plans were reviewed by Instructional Coaches, experienced and qualified educators who provided feedback and supported MT Members across the summer. In this way, Scholars in each grade level received instruction on the same topics and meeting the same objectives but tailored by MT Members.

School Year Interventions

During the academic year, BTM focused on delivering guidance on school options, academic advising, and academic support in addition to hands-on learning during 14 BTM Saturdays. Accelerating the organization's advising capacity, BTM prepared and positioned reduced half- time (RHT) Members as advisors and mentors working with students from 5th -12th grade for nine months over the 2022-23 school year. Each Member managed portfolios of up to 30 students. Members with portfolios of 5th-12th graders directed approximately 12 hours per week to 1:1 advising and eight hours developing and delivering group advising sessions and OST academic support, including an advisory class on 14 BTM Saturdays. Members also conducted a minimum of eight touchpoints with each student in their portfolio during the school year, supporting students in setting academic and personal goals, creating academic plans, and pursuing external academic support and acceleration opportunities.

Group advising for 5th and 8th-grade families included providing support to students in applying to matriculating schools with programs that were aligned with their interests. These interventions strive to ensure that students are enrolled in appropriate rigorous courses and academically supported to succeed. Members received resources on available matriculating schools with a variety of program options. They also received training via curriculum mapping, academic advising through a six-day orientation, regular professional development, and ongoing coaching. Through these activities, Members (1) provided academic advising to ensure students could access high-quality critical

academic support and build college preparatory non-academic skills to 5th-12th grade students leading to high school graduation; (2) ensured high school students took necessary steps to enroll in and succeed in college; (3) ensured college students successfully advance toward degree attainment.

Advising and mentoring services were geared toward maximizing students' in-school opportunities and accelerating and supporting OST academic and social enrichment during the school year. Through a combination of out-of-school learning time and individualized advising support, BTM's AmeriCorps program targets course planning/enrollment, academic achievement, and college-ready milestone completion for low-income students.

Theory of Change

Figure 1 shows the BTM theory of change. Through a combination of 1) an intensive summer program that integrates academic instruction, electives, and social-emotional learning and 2) academic advising throughout the school year that supports goal setting, academic planning, and the pursuit of external academic support, the program is anticipated to benefit students in several areas.

- In the short term, BTM participation is expected to support improved academic performance and achievement, attendance rates, and school behavior.
- In the mid-term, this is expected to, in turn, increase the likelihood of graduating high school and enrolling in post-secondary education.
- In the long term, BTM aims to improve participating Scholars' attainment of post- secondary degrees as well as their successful pursuit of professional interests and goals.

Figure 1. Breakthrough Miami Theory of Change
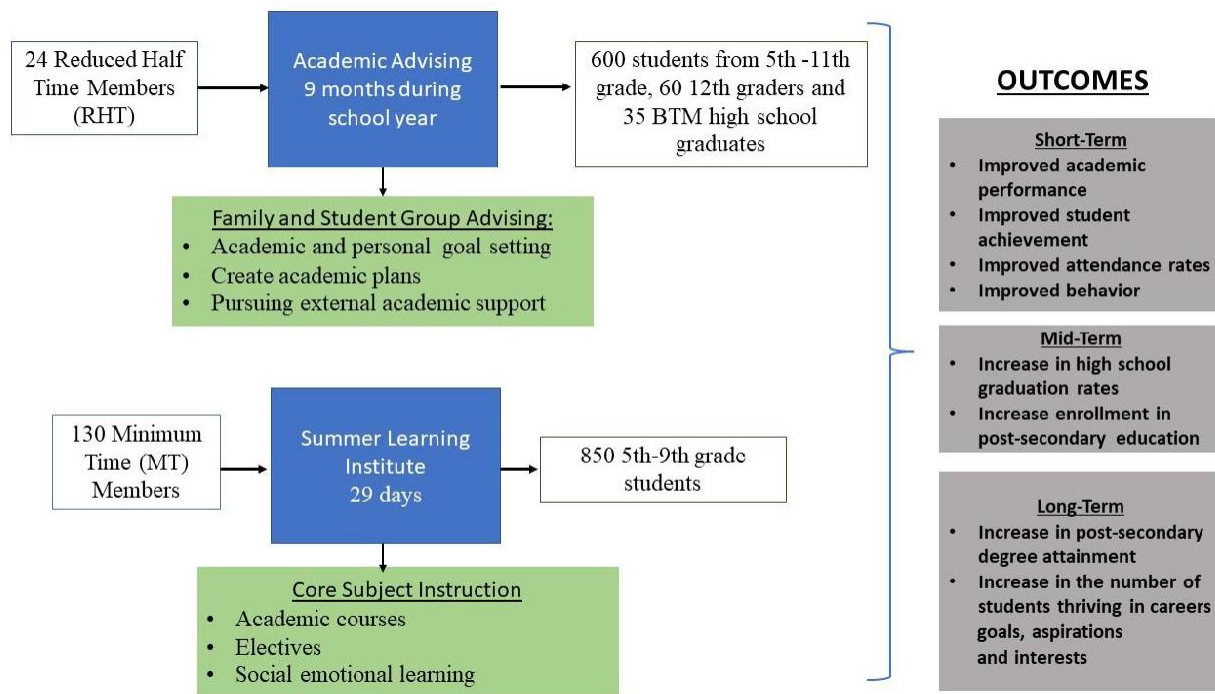
Outcomes of Interest

The impact evaluation for 2021-24 focuses on whether BTM participation has driven improvements in Scholar outcomes. Based on the theory of change and also on existing research on the effects of OST programs, the research team identified the following outcome areas for study:

Short-Term Outcomes
- Improved academic performance
- Improved student achievement
- Improved attendance rates
- Improved behavior

Mid-Term Outcomes
- Increase in students matriculating into aligned programs of interest
- Increase in students enrolling in rigorous courses

This evaluation focuses on findings for short-term outcomes. The research plan initially aimed to also explore mid-term outcomes, but this was not possible with current data sources. Exploration of BTM's impact on matriculation in advanced courses and programs

aligned with their interests remains a topic for further evaluation work.

To address academic performance and achievement, the evaluation focused on Scholar GPAs and results from statewide standardized assessments of English language arts (ELA) and math. To examine the effect of BTM participation on attendance rates, this report includes both overall and unexcused absences. Finally, to study the effect on behavior, outcomes included indoor and outdoor suspensions. Data to explore these areas were provided by M-DCPS, and further details on measures are provided in the Evaluation Overview section below.

Evaluation Overview

Evaluation Scope and Purpose

This external impact evaluation asses the effect on Scholar outcomes and also includes a contains process evaluation component to understand better the experience of AmeriCorps members, who serve as Teaching Fellows. The impact evaluation assessed program effectiveness by examining the effect of the school year and summer learning interventions on short-term outcomes among students in 7th and 8th in the 2022-23 school year. By focusing on these grade levels, the evaluation examined program effectiveness during the critical years leading up to the transition into high school. Given the three-year duration of this evaluation, mid- and long-term outcomes were beyond the scope of the current study and represent areas of interest for future evaluation work. Thus, this evaluation focused on school academic performance (e.g., grade point average), student achievement (e.g., standardized test scores), attendance rates, and behavior.

The evaluation considers the effects of participating from a baseline (2021-22) to the outcome year (2022-23). It is worth noting that BTM asks that participating Scholars and their families commit to participating for multiple years.

The process evaluation aspect explores implementation fidelity and serves as a tool for continuous program improvement. Toward these objectives, the evaluation aids project staff in assessing efforts toward achieving short-term and medium-term outcomes through monitoring of progress in carrying out planned activities and collective qualitative data on participant perspectives and experiences. Overall, the evaluation model allowed for the use of informed, data-driven decision-making to assess program performance and effectiveness through quantitative and qualitative methods.

Evaluation Research Questions

The 2021-24 external impact evaluation of the BTM program included both process and impact evaluation questions noted below. Impact evaluation questions addressed the impact of participation on student success and focused on short-term outcome measures

as defined in the program logic model, as compared to comparable students not part of the BTM program. Process evaluation questions were designed to give insights into BTM operations, implementation, and service delivery, with particular emphasis on the experience of AmeriCorps Members (i.e., Teaching Fellows).

Impact Evaluation Questions:
1. Did students participating in the BTM program demonstrate significantly better academic performance, as measured by GPA, than comparison students?
2. Did students participating in the BTM program perform significantly better than comparison students on state assessments of English/language arts and mathematics?
3. Did students participating in the BTM program demonstrate significantly better attendance rates than comparison students?
4. Did students participating in the BTM program demonstrate significantly better school behavior than comparison students, measured by fewer disciplinary referrals?

Process Evaluation Questions:
5. To what extent were BTM program activities and services implemented with fidelity?
6. To what extent did professional development build the capacity of MTs (i.e., Teaching Fellows) to deliver rigorous curriculum preparing students for their next grade?
7. To what extent were student participants and parents satisfied with the BTM program?

Impact Evaluation Design

The 2021-24 external impact evaluation used a quasi-experimental design to assess whether participating in BTM influenced Scholar outcomes. The evaluation also incorporated mixed methods to evaluate the BTM program and answer the process evaluation questions listed above.

The impact of BTM on school academic performance, achievement, attendance, behavior, and advanced course enrollment rates was evaluated using a quasi-experimental control group design (QED), comparing the performance of students who participated in BTM (treatment group) with the performance of selected control students enrolled in the same year, in the same grades, and in the same district (comparison group). This evaluation employed a QED that met the following criteria: 1) established distinct comparison students, 2) ensured baseline equivalence between the participant and comparison groups, and 3) accounted for the influence of confounding factors that

may influence the outcome for only one group.

Data Collection and Analysis

To address research questions 1-6 (i.e., impact evaluation questions), the QED was conducted comparing the outcomes of 7th and 8th-grade students who participated in the BTM program (treatment group) with the outcomes of selected comparison students enrolled in the same year, in the same grades, and in the same school district (i.e., the comparison group). For each sample, baseline data used for matching came from the 2021-22 school year, when the sample students were in the 6th and 7th grades, respectively. Outcome data were drawn from the 2022-23 school year to determine how one year of program participation influenced outcomes of interest. Table 1 provides an overview of the sample, the grade levels included, and the time points for data collection.

Table 1. Sample Overview

	Baseline Data	Outcome Data
Sample 1 (n=208)	2021-2022 (Grade 6)	2022-2023 (Grade 7)
Sample 2 (n=188)	2021-2022 (Grade 7)	2022-2023 (Grade 8)

To evaluate the impact of the BTM program on school academic performance, student achievement, attendance rates, behavior, and advanced course enrollment, comparison students were selected from the pool of non-participating students matched to BTM students on 1) several observable demographic characteristics, and 2) prior academic achievement. The bias of concern in quasi-experimental design is referred to as "selection bias," or the chance that any differences in the outcome variable of interest between the treatment and control groups might be due to selection characteristics rather than the programmatic intervention.

In the case of a program like BTM, families of students who choose to participate may be markedly different from the families of those who do not. When examining an outcome like student academic achievement, if selection bias is operating, it may be that any differences observed in outcomes between BTM and comparison students are really due to variations in family or student characteristics rather than the impact of the BTM program. A QED can reduce the influence of confounds that may be present due to selection bias by matching intervention students to comparison students on several relevant variables.[xviii] By matching treatment and control group students on demographics and prior achievement, we can expect much of the selection bias to be eliminated. Including prior achievement scores in the matching model is essential as prior achievement can serve as a proxy for several unobserved variables thought to influence achievement, such as motivation.

QEDs do not employ random assignment as in the case of randomized experiments. Instead, assignment to conditions (treatment versus comparison) is by means of self-selection (participants or their families choose whether to participate for themselves). Instead of a true control group, QEDs use a comparison group that approximates the treatment group as closely as possible as determined by baseline individual participant characteristics. Thus, the comparison group is thought to be an adequate representation of what the outcomes would have been if the project had not been implemented (i.e., the counterfactual). The selection process for control group students is described in more detail in the following section, along with the data analytic plan for the QED.

The impact evaluation questions were assessed using archival data maintained by the M-DCPS Student Database System. To adhere to the Federal-Wide Assurance (FWA) requirements for the protection of Human Subjects, Q-Q Research obtained an independent Institutional Review Board (registered with the Office for Human Research Protections (OHRP) and reviews research in accordance with the requirements of the Department of Health and Human Services (HHS) Protection of Human Subjects regulations) to receive approval before beginning data collection.

All BTM Scholars participating in summer 2022 and in 6th and 7th grade were included as treatment observations. The selection of students to create a valid comparison group was completed using a propensity score matching (PSM) technique.[xix] PSM is considered a best practice in quasi-experimental design.[xx] In PSM, each student is not matched on each observable variable entered into the matching model, but rather on a statistic called a propensity score. In lay terms, a propensity score estimates the likelihood that an individual would participate in the program (predicted likelihood of participation) given their measured characteristics. To this effect, PSM guarantees that the average characteristics of the treatment and comparison groups are similar, which is deemed satisfactory to reduce selection bias.[xxi]

The research team conducted PSM using two separate procedures:
1. First, the treatment group (BTM Scholars) was matched to non-participating students based on sociodemographic characteristics as provided by M-DCPS. The variables included for matching under this approach were:
    a. Race/ethnicity
    b. Gender
    c. Free- and reduced-price lunch (FRL) status, which serves as a proxy for family socioeconomic status
    d. English language learner (ELL) status
    e. Exceptional student status
2. Second, the research team also conducted PSM matching BTM participants to non- participants based on:
    a. The same set of social and demographic factors listed above for approach 1

b. A set of baseline measures from the 2021-22 school year for the outcomes of interest:
   i. A standardized measure of English language arts (ELA) achievement
   ii. A standardized baseline measure of math achievement
   iii. Total number of absences during the baseline (2021-22) school year
   iv. Number of unexcused absences for the baseline school year
   v. Number of recorded tardies for the baseline school year
   vi. Number of indoor suspensions for the baseline school year
   vii. Number of outdoor suspensions for the baseline school year

The data received included all students in M-DCPS schools in the two grade levels targeted for this evaluation (i.e., 6th and 7th grade students as of the 2021-22 school year.) The dataset included an indicator variable for determining which students were BTM participants. This was determined by the district based on student ID numbers provided by BTM. The baseline dataset containing variables from the 2021-22 school year comprised 51,292 observations, of which 396 were BTM participants.

For the baseline time point, MDCPS provided a set of variables that allow for rigorous matching.

- Race/ethnicity was a categorical variable, taking the response options of Hispanic, Black, White, Asian, Multiple races, Pacific Islander, or Native American.
- Gender was categorized as male or female.
- Free- or reduced-price lunch status was categorized as either 0 (not FRL) or 1 to 3, representing tiers of support and serving as a proxy for family socioeconomic status.
- ELL status was also categorical and was coded as either LY (ELLs who are in an English as a second language program), LF (a former ELL who is still in a two-year monitoring period), or LN (students identified as ELLs but not yet enrolled in a program). Those students who were not assigned an ELL status were re-coded as being non-ELL.
- Exceptional student status was also categorical, with 16 possible values (See Table 4 below). Students who were not assigned an ESE status were re-coded as non-ESE.

In addition to measures of socioeconomic factors, M-DCPS also provided data for baseline measures of outcomes of interest. This included:

- Grades for each class taken. Since the district does not provide grade point averages (GPAs) for students in these grade levels, the research team calculated a GPA by assigning a value of four for each A, three for each B, two for each C, one

- for each D, and zero for each F. This resulted in a continuous measure with a maximum value of four.
- Standardized test measures of English and math skills were the Florida Standards Assessment of English Language Arts (FSA ELA) and Florida Standards Assessment of Mathematics (FSA MAT), respectively. In each case, these are continuous variables.
- Total number of absences, number of unexcused absences, and number of tardies over the baseline school year.
- The number of indoor suspensions and outdoor suspensions, also over the baseline school year.

The availability of both socioeconomic and baseline outcomes confers advantages for the PSM approach in this evaluation. First, matching on socioeconomic measures allows us to ensure that BTM participants are being compared against non-participants who are comparable in terms of factors that may be expected to bias findings.

For example, if female students were over-represented in the BTM sample, and female students tend to perform better on standardized assessments, this could bias upward an estimate of the effect of participation on assessment scores. The set of variables provided allows to compare the outcomes of BTM students against a comparison group that is comparable in terms of 1) race/ethnicity, 2) gender, 3) family socioeconomic status (FRL), 4) English proficiency (ELL), 5) and exceptional student status (ESE).

Notably, the inclusion of baseline measures of outcomes further enhances the internal validity of PSM-based estimates of program impact. By including these in the matching procedure, we can also ensure that BTM participants are compared against a set of students who are comparable in terms of prior academic achievement, attendance, and conduct. In addition, research shows that including such baseline outcome measures addressed bias potentially caused by unobservable factors.

For example, BTM participants are recruited in part based on evidence of academic motivation. If participants were, on average, more academically motivated than non-participants, the motivation factor could bias estimates in a favorable direction. Since there is no variable for student motivation, this cannot be explicitly accounted for in the matching procedure. However, including baseline outcome measures addresses potential bias from such unobservable sources. For example, by including prior attendance and achievement in the matching procedure, potential bias caused by an unobserved factor such as motivation is successfully reduced.

Table 2. Sociodemographic Characteristics of BTM Scholar Sample Compared to the District as a Whole at Baseline

Baseline Variable	BTM Participants	District Students
Race/Ethnicity		
Asian	1.5%	0.9%
Black	40.2%	17.4%
Hispanic	54.0%	74.9%
Native American	0.0%	0.0%
Pacific Islander	0.0%	0.0%
Multiple races	0.5%	0.5%
White	3.8%	6.1%
Gender		
Female	65.2%	48.9%
Male	34.8%	51.1%
FRL Status		
0 (non-FRL)	12.6%	21.5%
1	2.8%	2.8%
2	74.0%	68.3%
3	10.6%	7.3%
ELL Status		
Non-ELL	70.7%	53.8%
LF	28.0%	33.1%
LN	0.3%	0.3%
LY	1.0%	12.8%
N	396	50,896

Table 2 shows the sociodemographic composition of BTM students in the two target grades compared to non-participating students across the district. Non-participating students include all M-DCPS students in the same two grade levels. In other words, these differences are prior to matching and show how BTM Scholars differ from non-BTM peers across the district.

- Participating students were substantially more likely to be identified as Black and less likely to be identified as Hispanic than what is observed across the district.
- Participants were also more likely to be female.
- In keeping with BTM's focus on under-represented children and youth, participants were more likely to qualify for free- or reduced-price lunch.
- BTM students were less likely to be identified as English language learners.

These substantial differences between BTM students and other students in the district

highlight the importance of using an analytical approach that accounts for potential sources of bias, such as PSM.

Table 3 shows the proportion of BTM students who were identified as having an exceptional student status compared to the proportions of non-participating students across the district in the two grade levels sampled. The BTM sample was more likely to have an ESE designation, particularly being labeled as gifted. BTM participants were also slightly less likely to be labeled as having a learning disability than non-participating students district-wide. This again indicates that BTM students differ substantially from non-participating students across the district. Including the ESE designation in the matching procedure helps ensure that we are comparing BTM Scholars against a similar comparison group.

Table 3. Exceptional Student Status of BTM Scholar Sample Compared to the District as a Whole at Baseline

ESE Status	BTM Participants	District
Non-ESE	58.3%	70.8%
Orthopedically impaired	0.0%	0.0%
Speech impaired	0.8%	0.4%
Language impaired	0.3%	0.3%
Deaf or hard of hearing	0.3%	0.1%
Visually impaired	0.0%	0.0%
Emotional or behavioral disability	0.0%	0.6%
Specific learning disabled	1.5%	6.6%
Gifted	37.1%	15.7%
Hospital or homebound	0.0%	0.1%
Dual sensory impaired	0.0%	0.0%
Autism spectrum disorder	0.8%	2.0%
Traumatic brain injured	0.0%	0.0%
Developmentally delayed	0.0%	0.0%
Other health impaired	1.0%	2.6%
Intellectual disability	0.0%	0.7%
N	396	50,896

Table 4 shows averages of baseline measures of outcome variables for BTM participants and non- participating students, also from the 2021-22 school year. At baseline, participating students performed better than non-participating students district-wide. They had, on average, higher GPAs and higher scores on standardized tests of ELA (FSA ELA) and mathematics (FSA MAT) achievement.

BTM Scholars also had fewer total and unexcused absences and fewer suspensions than non- participating students across the district. These observations align with BTM's focus on recruiting academically promising children and youth into their programming. It also highlights again that BTM participants differ systematically from non-participating students in the district.

Table 4. Baseline Outcome Measures of BTM Scholar Sample Compared to the District as a Whole at Baseline

Baseline Variable	BTM Participants	District
Baseline Academic Achievement		
GPA	3.24	2.93
FSA ELA Score	341.02	328.12
FSA MAT Score	334.92	324.98
Baseline Attendance		
Total Absences	8.97	12.55
Unexcused Absences	6.44	8.98
Tardies	6.12	7.16
Baseline Conduct		
Indoor Suspensions	1.34	1.83
Outdoor Suspensions	1.12	1.29
N	396	50,896

Outcome Measures

The school district also provided data on outcome measures for the second time point (i.e., the same students in 7th and 8th grade as of the 2022-23 school year). As with the baseline dataset, data were provided for all students in the district in the two grade levels targeted for this evaluation. The outcome dataset comprised a total of 47,181 observations from across Miami- Dade County. Outcomes of interest included measures of academic achievement, attendance, and conduct.

As with at baseline, M-DCPS provided data on student grades for each class taken:
- Again, GPAs were not available for the grade levels in the evaluation sample. The research team calculated a GPA using the same approach taken for baseline data. This resulted in a continuous variable with a maximum value of four.
- Standardized assessment measures differed from those at baseline due to a transition in assessment procedures across the district. For ELA achievement, the district provided results from the Florida Assessment of Student Thinking - English Language

Arts (FAST ELA). For mathematics achievement, the outcome of interest was the Florida Assessment of Student Thinking – Mathematics (FAST MAT). These were both continuous measures that were about normally distributed.

- Other outcomes were the same as in the baseline dataset. For attendance, the district provided overall absences and unexcused absences across the 2022-23 school year. For conduct, outcomes were the number of indoor suspensions and the number of outdoor suspensions, also across the school year.

While comparisons of BTM Scholars to other students district-wide show that participants performed better than non-participating students during the outcome year, this comparison does not account for the systematic differences between BTM and non-BTM students. The Evaluation Results section below compares participants' outcomes against comparable students.

Propensity Score Matching and Analytical Procedures

Participating BTM Scholars were matched to non-participants using the *matchit* program[xxii] in the R Program for Statistical Computing.[xxiii] A logistic regression model was used to estimate the probability of participating in the program (i.e., the propensity score), contingent on baseline variables. The research team conducted two sets of analyses.

- First, participants were matched to non-participants based only on baseline socioeconomic factors (race/ethnicity, gender, FRL status, ELL status, and ESE status).
- Subsequently, a second set of analyses matched BTM participants to non-participants using these same baseline socioeconomic characteristics and also baseline measures of outcome variables (GPA, FSA ELA, FSA MAT, total absences, unexcused absences, tardies, indoor suspensions, outdoor suspensions).

The latter analysis allowed us to determine whether findings were robust to a more stringent matching approach with stronger internal validity. Results from both matching approaches are presented in the findings section for comparison.

For each set of analyses, the matching procedure used nearest neighbor, one-to-one matching without replacement. In other words, the matching algorithm sought matches with the closest propensity score and selected one unique non-participating match for each BTM participant. Since the dataset contained students from the two different grade levels under examination, the matching algorithm also included an exact match on student grade level.

After matching, the research team verified baseline equivalency by 1) checking standard mean differences provided through the *matchit* program (See Appendices F and G) and 2) running statistical tests (t-tests for continuous measures and chi-squared tests for categorical measures) to very equivalence. No statistically significant differences existed between BTM participants and the matched comparison groups for any of the measures included.

Once the matched datasets were established, the average treatment on treated (ATT), or the effect of the intervention for those who are similar to the participant sample, was estimated using standard regression procedures. To improve accuracy, the same variables used for matching were also included as covariates when estimating the difference in outcome between participants and the matched comparison group.

For continuous outcomes (GPA, FAST ELA, and FAST MAT), analyses used ordinary least squares regression. Analyses used generalized linear models assuming a Poisson distribution for count variables with right skew (total absences, unexcused absences, tardies, indoor suspensions, and outdoor suspensions). Determination of statistical significance used cluster robust standard errors as implemented in the *lmtest* package for R[xxiv] and a standard significance threshold of $\alpha = 0.05$.

Process Evaluation Methods

The process evaluation component was designed to shed light on BTM operations, implementation, and service delivery. Given the central role of AmeriCorps members in delivering content, the process evaluation questions and methods gave particular attention to their experience as Teaching Fellows in the Summer Institute.

Tools and Data Collection

As a mixed methods evaluation, the study included multiple quantitative and qualitative tools which were designed to inform each other and paint a picture of BTM implementation. Process evaluation research questions were assessed using data from multiple sources, including surveys, focus groups, and classroom observations.

Scholar surveys: Surveys were conducted on-site at all BTM summer sites in late July of 2022 and were made available to all Scholars in the two grade levels sampled. Surveys were hosted on the Qualtrics platform, and Scholars completed the survey on computers at BTM sites. Care was taken to ensure that those monitoring the survey would not influence their response, and participants were encouraged to openly share their opinions to help understand their experience and give insights that could help improve the program. A landing page on all surveys similarly encouraged respondents to share honest opinions that would help inform further programmatic developments.

The survey tool was designed to shed light on Scholar experiences, particularly to give

insights into the fidelity of BTM implementation (RQ5) and satisfaction (RQ7). More specifically, questions assessed 1) reasons for participating, 2) academic challenge, 3) quality of peer relationships and the social environment, 4) effectiveness of Teaching Fellows, and 5) perceptions of project-based learning. The survey also included a set of items related to Scholar demographics. The full survey is available for reference in Appendix A. Within the grade levels targeted for this evaluation, 102 Scholars completed the survey, with a completion rate of 26%.

Teaching Fellow surveys: Surveys were also conducted on-site at all BTM summer sites in late July of 2022. They were distributed by email to all Teaching Fellows (MT members) working with the two grade levels sampled. Surveys were again hosted on the Qualtrics platform and completed electronically. Participants were encouraged to openly share their opinions to help understand their experience and give insights that could help improve the program. A landing page on surveys similarly encouraged respondents to share honest opinions that would help inform further programmatic developments.

The survey tool was designed to address implementation fidelity (RQ5) and the effectiveness of professional development efforts (RQ6). Questions assessed 1) satisfaction with training and orientation, 2) experiences with classroom teaching, 3) availability of resources and support, 4) ability to connect with and positively influence Scholars, and 5) general views about education. The survey also included a set of demographic items. The full survey is available in Appendix B. 54 Teaching Fellows took the survey, with a completion rate of 96%.

Parent surveys: Surveys were emailed to all parents in the two grade levels sampled during July of 2022. Parents completed the survey electronically at a time convenient to them. As with other surveys, a landing page encouraged parents to share honest opinions that would help inform further programmatic developments.

The survey was designed to explore fidelity of implementation (RQ5) and general satisfaction (RQ7). Particular constructs assessed included 1) reasons for participating, 2) general satisfaction with the BTM experience, 3) perceptions of the learning and social environments at BTM, and 4) perceptions of how participating has influenced their child. A set of items also addressed demographic characteristics. The survey is available for reference in Appendix C. In total, 250 parents completed the survey, with a response rate of 63%.

Scholar focus groups: The evaluation team conducted on-site monitoring visits over a period of three days (July 20th-22nd of 2022), and focus groups with Scholars were conducted during these visits. The timing toward the end of the summer allowed respondents to reflect on their experiences over the Summer Institute. One focus group was led with each grade level examined at each site, making for a total of six Scholar focus groups. A total of 37 scholars participated across the three sites. A purposive sampling approach was taken to ensure that participants were representative of the

varied backgrounds and experiences of BTM Scholars.

Focus group guides were developed that provided an introductory script and a set of questions to guide conversations. Questions were designed to explore topics related to fidelity of implementation (RQ5) and general satisfaction (RQ7). The protocol and focus group guide is available for reference in Appendix D.

Teaching Fellow focus groups: Two focus groups were conducted with a total of 13 Teaching Fellows who worked with Scholars in our sample. They were selected from across all six BTM sites, and a purposive sampling approach was used to ensure the inclusion of varied experiences and viewpoints. The focus groups were conducted virtually by Zoom in August 2022 to facilitate scheduling. The timing allowed participants to reflect on their experience during the 2022 Summer Institute, which had recently concluded. Guides were developed in advance that provided an introductory script and questions to guide conversation. In particular, questions were designed to address the fidelity of BTM implementation (RQ5), quality of professional development and preparation (RQ6), and general satisfaction with the BTM experience (RQ7). Related materials are included in Appendix D.

Parent focus groups: Two focus groups were conducted with a total of 12 parents of children in the sampled grade levels. A purposive sampling approach was used to select parents who reflected the varied backgrounds of BTM families. The research team conducted focus groups with parents via Zoom in August 2022. Questions were designed to address the fidelity of BTM implementation (RQ5) and overall satisfaction with the program (RQ7). Focus group protocols and guides are shown in Appendix D.

Instructional Coach focus groups: One additional focus group was conducted with the instructional coaches who trained, supported, and gave feedback to participating Teaching Fellows. Six coaches participated in the group, which was conducted virtually via Zoom in August of 2022. Discussion questions focused on fidelity of implementation (RQ5) and quality of professional development (RQ6). Further details, including discussion questions, are provided in Appendix D.

Classroom observations: A series of 12 classroom observations were carried out across the three sites selected for site visits (July 20th-22nd of 2022). The research team conducted four observations at each site, each lasting about an hour. The classes observed were selected to include both core classes and electives across each site. The research team created rubrics for use in conducting observations. Observation protocols are shown in Appendix E.

Analysis

Data from Scholar, Teaching Fellow, and parent surveys were analyzed to provide descriptive statistics. Items were largely Likert-style items targeting agreement with

statements and frequency of experiences. Analysis of qualitative data from observations, open-ended survey items, and focus groups used an inductive coding approach to identify emergent themes. The evaluation team also incorporated cross-site analysis to explore whether implementation was consistent across sites.

Evaluation Results

Impact Findings

Research questions under the impact evaluation umbrella focused on evidence for BTM's effect on short-term outcomes, namely academic achievement, attendance, and school conduct. The initial evaluation proposal also included a research question focused on Scholar uptake of advanced placement courses as well as their grades in those courses. At present, the research team was unable to address those questions with the data received from the district. Enrolment and performance in advanced classes remains an area for further exploration in future evaluation work. For this evaluation, the research team focused on findings in the areas of general academic achievement (GPA, FAST ELA score, and FAST Math score), school attendance (total absences and unexcused absences), and school conduct (indoor suspensions and outdoor suspensions).

RQ #1. Did students participating in the BTM program demonstrate significantly better <u>academic performance</u> as measured by GPA than comparison students?

Table 5 shows the estimates of BTM's effect on these outcomes for the period from baseline (2021-22) to the following academic year (2022-23) for the outcomes included. It is worth noting that this represents the effect of one year of participation since students were matched on data from the prior academic year. The left panel shows estimates for PSM based only on baseline socioeconomic measures (race/ethnicity, gender, FRL status, ELL status, and ESE status. The right panel shows estimates for PSM based on the same baseline socioeconomic factors as well as baseline outcome measures (GPA, FSA ELA, FSA Math, overall absences, unexcused absences, tardies, indoor suspensions, and outdoor suspensions). Since the latter approach is a best practice for PSM, as described above, estimates from the right panel serve as our final estimates of the effect of participating in the program.

Table 5. Estimated Effect on Academic Performance

	Without Baseline Outcome Measures				With Baseline Outcome Measures			
	ATT	*SE*	*ES*	*Sig.*	*ATT*	*SE*	*ES*	*Sig.*
GPA	0.259	0.018	0.369	***	0.076	0.019	0.108	***

*** = p < 0.001, ** = p < 0.01, * = p < 0.05, . = p < 0.10.
N = 792 (396 BTM and 396 non-BTM controls)

In Table 5, and other tables in this section, ATT represents the average treatment on treated, or the estimate of BTM's effect on participant outcomes, and SE is the standard error for this estimate. ES is the effect size, which is a standardized depiction of the magnitude of the effect. Effect sizes were calculated as Cohen's d for GPA.

Findings pointed to a statistically significant and meaningful impact of participating in BTM on Scholars' grades, as determined by GPA. As shown in Table 5 above, BTM Scholars had significantly higher GPAs than both matched comparison groups.

- Scholars had GPAs that were 0.259 points higher than a comparison group matched on only sociodemographic factors at baseline ($p < 0.001$), representing an effect size of $d = 0.369$, considered moderate in magnitude.
- When matching both on sociodemographic factors and baseline outcome measures (the more rigorous approach for causal inference), Scholar GPAs were, on average, 0.076 points higher than the comparison group ($p < 0.001$).

While the final effect size is considered small in magnitude, this finding stands out as initial evidence for a meaningful impact of BTM participation on Scholars' academic achievement. Importantly, this estimate represents the effect of participating for just one year, while BTM Scholars commit to ongoing participation through the middle and high school years. Thus, this effect size may be expected to increase over time and with a greater duration of engagement in BTM activities.

In addition, BTM Scholars are encouraged through academic advising and mentoring to pursue more rigorous and advanced coursework. The uptake of advanced classes remains a topic of future evaluations, but it may be that these Scholars earned higher GPAs while also taking more rigorous courses.

RQ #2. Did students participating in the BTM program perform significantly better than comparison students on state assessments of ELA and mathematics?

Table 6 shows the estimated effect on Sholar's standardized assessment scores. As mentioned above, the estimates from the right panel serve as our final estimates of program effect. The effect size was again calculated as Cohen's d.

Results do not at present provide evidence for a significant effect of participating in BTM on standardized assessment of either ELA or math. While estimates were positive and statistically significant when matching only on sociodemographic characteristics measured at baseline (left panel), estimates lost statistical significance when also matching on baseline outcome measures (right panel). This suggests that, while BTM

outcomes on standardized assessments are higher than non-participating peers, the difference may be due to factors such as academic motivation that are accounted for by including baseline outcome measures.

Table 6. Estimated Effect on Standardized Assessments

	Without Baseline Outcome Measures				With Baseline Outcome Measures			
	ATT	*SE*	*ES*	*Sig.*	*ATT*	*SE*	*ES*	*Sig.*
FAST ELA	7.686	2.314	0.291	***	-0.698	0.539	-0.026	
FAST Math	8.193	0.620	0.311	***	-1.253	1.078	-0.048	

*** = p < 0.001, ** = p < 0.01, * = p < 0.05, . = p < 0.10.
N = 792 (396 BTM and 396 non-BTM controls)

RQ #3. Did students participating in the BTM program demonstrate significantly better <u>attendance rates</u> than comparison students?

Table 7 shows the estimated effect of participating on BTM Scholar's school attendance over the academic year. In this case, effect size was calculated using Wilcoxon's r. This is an alternative approach to calculating effect size that accounts for the fact that attendance variables are skewed, resulting in a smaller effect size estimate than using Cohen's d.

Table 7. Estimated Effect on School Absences

	Without Baseline Outcome Measures				With Baseline Outcome Measures			
	ATT	*SE*	*ES*	*Sig.*	*ATT*	*SE*	*ES*	*Sig.*
Overall Absences	-0.012	0.040	-0.018		-0.054	0.001	-0.041	***
Unexcused Absences	-0.086	0.052	-0.054	.	-0.094	0.055	-0.064	.

*** = p < 0.001, ** = p < 0.01, * = p < 0.05, . = p < 0.10.
N = 792 (396 BTM and 396 non-BTM controls)

Findings indicated a significant reduction in overall school absences for BTM Scholars.

- When comparing Scholars against the comparison group matched only on sociodemographic characteristics, findings were not statistically significant for either overall or unexcused absences.
- However, analyses that matched BTM Scholars to non-participants on both sociodemographic characteristics and

baseline outcomes measures indicated a statistically significant impact of participating in BTM on total school absences ($p < 0.001$), although the effect was small in magnitude. The effect size, calculated using the Wilcoxon's r method in light of the variable's heavy right skew, was just -0.041, representing a small magnitude of effect.

RQ #4. Did students participating in the BTM program demonstrate significantly better school behavior than comparison students, as determined by <u>indoor and outdoor suspensions</u>?

Table 8 shows estimates for the effect of participating in BTM on Scholars' school behavior, as determined by indoor and outdoor suspensions during the school year. Because the number of suspensions was skewed, the effect size was again reported using Wilcoxon's r.

Table 8. Estimated Effect on School Behavior

	Without Baseline Outcome Measures				With Baseline Outcome Measures			
	ATT	*SE*	*ES*	*Sig.*	*ATT*	*SE*	*ES*	*Sig.*
Indoor Suspensions	-0.440	0.346	-0.143		-0.029	0.061	-0.004	
Outdoor Suspensions	-0.510	0.310	-0.114	.	-0.082	0.143	-0.015	

*** = p < 0.001, ** = p < 0.01, * = p < 0.05, . = p < 0.10.
N = 792 (396 BTM and 396 non-BTM controls)

Findings did not indicate a significant effect of the BTM program on Scholars' school conduct as measured by indoor or outdoor suspensions.

- When matching only on sociodemographic characteristics, the difference was negative but not significant for indoor suspensions and negative but only marginally significant ($p < 0.1$) for outdoor suspensions.
- When matching on both sociodemographic characteristics and baseline outcome measures, the differences were lesser in magnitude and not statistically significant.

This suggests that, while BTM Scholars may have fewer conduct referrals than non-participating peers, this difference may be due to factors such as academic motivation that are not accounted for in the model matching only on sociodemographic characteristics.

Process Findings

This section provides findings from the process component of the evaluation. Research questions were designed to give insights into BTM implementation and help guide internal work for continuous programmatic improvements. As described in the Evaluation Overview section above, findings are based on 1) surveys conducted with Scholars, Teaching Fellows, and parents; 2) focus groups conducted with Scholars, Teaching Fellows, Instructional Coaches, and parents, and 3) classroom observations conducted during a three-day series of site visits.

RQ #5. To what extent were BTM program activities and services implemented with fidelity?

The BTM experience comprises several key facets, including the academic aspect, mentoring and peer relationships (including social and emotional learning), and the role that management plays in guiding program implementation. To address this research question, findings are presented separately for those three areas.

Academic Activities

Through the Scholar survey, BTM Scholars were asked about various attitudes and experiences related to their academic success, particularly as related to their participation in BTM. Most scholars (86%) agreed or strongly agreed that what they learned at BTM would help them in school (***Table** 9*). Also, 85% of scholars agreed or strongly agreed that the feedback they received in BTM summer classes helped them learn.

BTM strives to incorporate project-based learning (PBL) as a key feature of their learning experiences, and Scholars were asked about how PBL helped their learning and participation. Three-quarters of Scholars (75%) surveyed agreed or strongly agreed that PBL helped them understand material more easily than traditional teaching methods (Table 9). They relied on their teaching fellows to check their understanding as well. Overall, 79% agreed or strongly agreed that teaching fellows checked their understanding (

Table 10). Scholars largely expressed that they worked together to solve problems (82% indicated most of the time or always), that the activities in BTM classes felt relevant to their lives (64% indicated most of the time or always), and that they understood why they were doing the activities (66% indicated most of the time or always). Furthermore, over three-quarters of Scholars (78%) believed activities were either never boring or just sometimes boring.

More variability in responses was observed as to whether activities were challenging (Table 9) or whether they shared their thoughts during activities (

Table 10). While almost half of Scholars (48%) agreed or strongly agreed that activities were challenging, 38% responded neutrally. This may indicate that some activities may

not have been challenging enough. Regarding sharing thoughts, more Scholars indicated that they never (5%), only sometimes (19%), or about half the time (20%) did so during activities. More opportunities may be needed to allow scholars to participate in problem-solving activities and set them up to feel safe to do so.

Table 9. Scholar Attitudes Related to Learning

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
I have learned things at BTM that will help me in school.	3%	2%	7%	37%	49%	1%
I get feedback at BTM that helps me learn.	2%	1%	8%	44%	41%	3%
Project-based learning helped me grasp material more easily than traditional teaching methods.	1%	1%	22%	35%	40%	0%
BTM activities are challenging.	5%	7%	38%	27%	21%	1%
N = 102						

Table 10. Scholar Perceptions of the Learning Experience

	Never	Some-times	About half the time	Most of the time	Always	Don't Know/ NA
My teaching fellows check my understanding.	1%	8%	7%	25%	54%	4%
We work together to solve problems at BTM.	1%	7%	8%	34%	48%	2%
For each activity at BTM, I know why we're doing it.	2%	12%	16%	31%	35%	3%
Activities at BTM are relevant to my life.	5%	13%	12%	30%	34%	5%
During BTM activities, I share my thoughts.	5%	19%	20%	27%	27%	1%

BTM activities are boring.	39%	39%	11%	6%	4%	1%
N = 102						

Findings from the Scholar survey were well-aligned with findings from focus groups conducted with Scholars. While most focus group participants expressed that BTM activities were helping them learn and get a leg up for the following school year, a substantial proportion also expressed that activities were not particularly challenging.

A notable finding from qualitative work was that program implementation differed somewhat by site. As noted in the Evaluation Overview section above, site visits and corresponding focus groups were purposely planned to include sites where leaders had varying degrees of experience with the BTM model. Qualitative findings indicated that Scholars at the site where management had less experience with the BTM program implementation found that classes were less academically challenging and less tailored to their interests. Scholars at this site were also less likely to report project-based learning as a feature of their summer learning experience. This finding suggests that there is room for improvement in the area of uniform program implementation across sites.

The Parent survey also asked parents of scholars about their perceptions of the academic experience at BTM. Most parents agreed or strongly agreed that BTM offered a quality learning experience (88%), opportunities to explore interests (91%), quality instruction in academic subjects (87%), and quality mentoring (88%) for their children (Table 11). While almost two-thirds of parents (60%) agreed or strongly agreed that their child felt challenged at BTM, 19% neither agreed nor disagreed. Like the scholars themselves, some parents may see that their children are also not experiencing the level of challenge in their work that they anticipated.

Table 11. Parent Perceptions of the Learning Experience

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
BTM offers a quality learning experience.	6%	2%	5%	26%	62%	0%
BTM allows my child to explore their interests.	4%	1%	4%	31%	60%	0%
BTM provides quality instruction in academic subjects.	4%	2%	4%	31%	56%	2%
BTM provides quality mentoring.	4%	1%	6%	32%	56%	2%

My child feels challenged at BTM.	8%	7%	19%	32%	28%	6%
N = 250						

Findings from focus groups with parents again pointed to room for improvements in uniform implementation of the summer academic experience across program sites. Participants were overall very positive about the BTM experience and felt that the program was helping their child focus their academic interests and prepare for the upcoming school year. However, a handful of parents expressed that, while they think highly of BTM and would recommend participation to their personal network, they felt that attention to sites with less experience would be beneficial.

Social Environment
Another important aspect of academic success is the social environment in which students are learning. The BTM program aims to create a positive environment where Scholars feel welcome and have Teaching Fellows and mentors who are accessible and who inspire Scholars to succeed. Social and emotional learning is also a key component of the BTM experience.

Given the importance of the social environment and its central role in BTM programming, surveys probed attitudes and experiences in this area. Scholars, for example, were asked about their social connections with teachers and mentors as well as their peers. Overall, scholars reported being in a positive environment at BTM (

Table 12 and Table 13).

Over 80% of Scholars agreed or strongly agreed that they made new friends (85%), felt safe (89%), and had positive role models at BTM (85%). Additionally, 79% of scholars felt they could relate to at least one of their teaching fellows and were always or most of the time inspired by at least one BTM teacher. While these findings are largely positive, it is worth noting that nearly one in ten Scholars strongly disagreed or disagreed that at least one BTM teacher inspired them.

Despite these positive aspects, there was more variability in whether Scholars trusted

one another (

Table 12). While 63% of Scholars strongly agreed or agreed that they trusted their companions, 35% said they either strongly disagreed, disagreed, or neither agreed nor disagreed. More opportunities may be needed for scholars to build positive relationships and trust with one another. Additionally, this finding suggests that further development of the social and emotional development component of BTM programming may help the program meet its goal of ensuring a positive learning environment.

Table 12. Scholar Perceptions of the Social Environment at BTM

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't Know/ NA
I have made new friends at BTM.	3%	1%	6%	27%	61%	1%
I feel safe at BTM.	2%	0%	7%	35%	54%	1%
I trust other students at BTM.	3%	16%	16%	32%	31%	2%
N = 102						

Table 13. Scholar Relationships with Teaching Fellows and Adults at BTM

	Strongly disagree	Disagree	Neither agree nor	Agree	Strongly agree	Don't Know/ NA

						disagree
I have positive role models at BTM.	3%	1%	8%	40%	45%	3%
There is at least one BTM teacher who inspires me.	3%	7%	7%	18%	61%	4%
I can relate to at least one of my TFs.	2%	2%	11%	36%	43%	5%
BTM teachers don't expect much from me.	49%	11%	9%	7%	12%	12%
N = 102						

Findings from the Scholar focus groups were again well aligned with survey findings. Most participants reported having a solid social network at BTM, feeling safe and welcome, and having positive relationships with Teaching Fellows. Scholars also mentioned the value of having teachers closer to their age since they could more easily relate to them.

However, there was again some variation in student depictions of the social environment across sites. Particularly at the site where management was newer to BTM implementation, some Scholars expressed that there were fellow students who didn't get along. They particularly cited transportation by bus to the site as a context where social disruptions were likely to occur. A few also expressed that they had experienced collective punishment (e.g., a class being reprimanded or punished for one student's poor behavior) and that they felt this was unfair.

While Scholar perceptions of the social environment were largely positive, these observations point to some areas where continual improvement efforts may help ensure a welcoming, collaborative, and positive environment for some students. They also speak to the challenges related to equally implementing the BTM model across sites, particularly as new BTM leaders adapt to implementing the BTM model. Careful attention to the social and emotional learning component and how disruptions and discipline are handled may also help support the faithful implementation of the program.

The Teaching Fellow survey also explored the issue of social dynamics. Findings indicated that the Teaching Fellows helped foster a positive environment for Scholars (Table 14). Over 90% of teaching fellows felt they were able to connect with scholars (93%) and had a positive impact on them (97%) most of the time or always. They also felt that they were able to challenge scholars (87%) and could effectively deliver their lessons (89%) most of the time or always. Teaching Fellows felt able to create a safe environment for scholars, where 82% said they could do so most of the time or always effectively deal with disciplinary issues. However, about two-thirds of Teaching Fellows (63%) felt they sometimes had difficulty managing their class effectively, and a further quarter said that they experienced difficulties half the time or more. This points to opportunities to further

train and support Teaching Fellows in classroom management skills.

Feelings of stress were felt to varying degrees by teaching fellows (Table 14). About two-thirds of teaching fellows (63%) felt stressed sometimes or about half the time, while 36% felt stressed most of the time or always. Exploring ways to help alleviate stress for Teaching Fellows and effectively manage classes with scholars will be beneficial to maintaining high-quality activities and services.

Table 14. Teaching Fellow Perceptions of the Classroom Experience

	Never	Sometimes	About half the time	Most of the time	Always	Don't know/ NA
I was able to connect with my students.	0%	1%	5%	29%	64%	1%
I had a positive impact on my students.	0%	0%	2%	44%	53%	1%
I was able to challenge my students.	0%	3%	9%	41%	46%	1%
I was able to deliver effective lessons.	0%	3%	8%	49%	40%	1%
I was able to effectively deal with disciplinary issues.	0%	5%	12%	53%	29%	1%
I felt stressed.	3%	32%	31%	19%	15%	0%
I had difficulty managing the class effectively.	12%	63%	12%	7%	7%	1%
N = 54						

During focus groups with members serving as Teaching Fellows, several Teaching Fellows again noted that they found the summer program to be intense and, at times, stressful. They expressed that their participation required a strong commitment and substantial effort. Despite this, many found the experience to be gratifying and found that they were able to connect with Scholars. Several expressed that they were interested in becoming teachers before participating, and several others said that the experience led them to consider careers in education.

Parents also perceived their children as having a positive social environment at BTM (Table 15). Over 90% of parents agreed or strongly agreed about various aspects of social support: safety (96%), making new friends (92%), looking forward to activities (90%), supportive social environment (91%), and positive peer network (92%).

Table 15. Parent Perceptions of the BTM Social Environment

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
My child feels safe at BTM programs.	2%	0%	2%	25%	71%	0%
My child has made new friends through BTM.	3%	0%	4%	28%	64%	1%
My child looks forward to BTM activities.	1%	1%	6%	28%	62%	2%
BTM provides a supportive social environment.	5%	0%	4%	29%	62%	1%
My child has a positive peer network at BTM.	2%	1%	3%	38%	54%	2%
N = 250						

Support from Adult BTM Staff

Ensuring support from the adult BTM staff to Scholars, Teaching Fellows, and parents is important for successfully implementing its activities and services. For Scholars, 85% agreed or strongly agreed that they could identify an adult they could talk to if they had a problem (Table 16). Also, 87% agreed or strongly agreed that BTM staff cared about their success. Most scholars (82%) never felt disrespected by BTM staff (Table 16).

When asked whether BTM teachers expected little from them, almost half of Scholars (49%) never felt that this was the case, 19% believed this to be the case most of the time or all the time. This finding again points to room for improvements in the challenge and rigor of summer classes.

Table 16. Scholar Perceptions of Relationships with BTM Adults

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
There are adults at BTM I could talk to if I had a problem.	2%	2%	9%	34%	51%	3%
The staff at BTM care about my success.	1%	0%	9%	38%	49%	2%
I feel disrespected by staff at BTM.	82%	7%	4%	1%	6%	0%
N = 102						

Members serving as Teaching Fellows also felt they were well supported by BTM staff (Table 17). Most teaching fellows knew that if they had questions about lesson planning or needed help with classroom behavior, they could get help most of the time or all the time, 96% and 87%, respectively. While a little over half of teaching fellows (53%) never felt they were on their own, 31% sometimes did, and 17% did about half the time, most of the time, or all the time. This may show that there are other areas of support teaching fellows need but do not know who to go to in order to get the help they need.

Table 17. Teaching Fellow Perceptions of Support from BTM Staff

	Never	Sometimes	About half the time	Most of the time	Always	Don't know/ NA
If I had a question about lesson planning, I was able to get help.	0%	3%	2%	27%	69%	0%
If I needed help with classroom behavior, I was able to talk with someone who could help.	0%	7%	6%	21%	66%	0%
I felt that I was on my own this summer.	53%	31%	7%	7%	3%	0%
N = 54						

Focus group participants were more optimistic about access to support in their role as Teaching Fellows. Most expressed that they felt supported and knew where to seek help when needed.

Table 18. Parent Attitudes Related to BTM Staff

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
BTM staff care about their students.	5%	0%	2%	22%	70%	0%
I know who to contact with any questions about BTM.	1%	1%	2%	26%	69%	0%
N = 250						

Focus groups with parents revealed similar attitudes. Parents expressed strong confidence in BTM leadership. They felt that program staff cared about their children and were actively engaged in ensuring their success. Parents also expressed that

communication with BTM leaders was strong and effective and that they felt welcome at BTM sites.

RQ #6. To what extent did the professional development build the capacity of members to deliver a rigorous curriculum preparing students for their next grade*?*

Through the survey, Teaching Fellows were asked about their experience with BTM training regarding lesson planning. As seen in Table 19, they were asked about whether training helped with creating well-structured and engaging lessons. Most teaching fellows (63%) either strongly agreed or agreed that their training helped them to plan well-structured lessons. However, 26% of participants noted that the training did not help in this sense.

Table 19. Teaching Fellow Perceptions of Training for Lesson Planning

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't Know/ NA
The training I received helped me plan well-structured lessons.	6%	20%	9%	33%	30%	2%
The training I received helped me plan engaging lessons.	7%	11%	10%	40%	30%	2%
N = 54						

Regarding creating engaging lessons, most participants (70%) strongly agreed or agreed that the training helped them do so. Furthermore, Teaching Fellows felt they were able to deliver lessons effectively, with 89% saying they could do so most of the time or always. Moreover, they felt they could always or most of the time challenge their students (87%) (Table 20). Overall, they believed they had all the materials necessary to make their classes interesting (85% saying most of the time or always) and challenging (81% saying most of the time or always).

Table 20. Teaching Fellow Perceptions of Ability to Deliver Courses Effectively

	Never	Some-times	About half the time	Most of the time	Always	Don't know/ NA
I was able to challenge my students.	0%	3%	9%	41%	46%	1%
I had the materials I needed to make classes interesting.	0%	8%	8%	40%	45%	0%

I was able to deliver effective lessons.	0%	3%	8%	49%	40%	1%
I had the materials I needed to make classes challenging.	1%	10%	8%	41%	40%	0%
N = 54						

BTM training generally gave Teaching Fellows the tools they needed to have positive relationships in the classroom (Table 21). Most agreed or strongly agreed that the training helped build positive relationships with Scholars (75%) and meet Scholars' emotional needs (72%). The training also gave Teaching Fellows insight into how children and youth learn, with 70% agreeing or strongly agreeing with this statement.

Teaching fellows had mixed feelings regarding whether the training helped them manage difficult classroom situations. Just over half (58%) of teaching fellows agreed or strongly agreed that the training helped them, but 20% disagreed or strongly disagreed, with another 19% remaining neutral. This suggests classroom management is a key area where training and orientation efforts may be improved. While it may be impossible to predict all the situations that may arise in a classroom, it may be helpful to include anecdotes and experiences from past Teaching Fellows in future training and orientation sessions.

Table 21. Teaching Fellow Perceptions of Interactions with Scholars

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
The training I received helped me build positive relationships with my students.	5%	5%	14%	37%	38%	2%
The training I received helped me meet the emotional needs of students.	3%	10%	13%	38%	34%	2%
The training I received gave me insight into how children and youth learn.	5%	10%	12%	38%	32%	3%

The training I received helped me manage difficult situations in the classroom.	6%	14%	19%	30%	28%	3%
N = 54						

RQ #7. To what extent were student participants and parents satisfied with the BTM program?

Scholars and parents largely agreed or strongly agreed that they would recommend BTM to other students or to other parents/caregivers (Table 22 and Table 23). In Table 22, 88% of scholars agreed or strongly agreed that they would recommend BTM to other students. As seen in Table 23, 83% of parents agreed or strongly agreed that they would recommend BTM to other parents/caregivers. Most parents agreed or strongly agreed that their experience had met their expectations (90%), and they felt welcomed by BTM staff (95%). Additionally, most parents disagreed or strongly disagreed that their child did not prefer being at BTM (83%), meaning they believed their child liked attending BTM. Despite this, nearly one in ten parents agreed or strongly agreed that their child would prefer not to be at BTM, suggesting that there is room for further developing an engaging and welcoming environment.

Table 22. Scholar Satisfaction with BTM

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ NA
I would recommend BTM to other students.	2%	1%	7%	31%	57%	2%
N = 102						

Table 23. Parent Satisfaction with BTM

	Strongly disagree	Disagree	Neither agree nor disagre	Agree	Strongly agree	Don't know/ NA

	e					
I would recommend BTM to other parents/caregivers.	4%	1%	2%	16%	77%	0%
I feel welcomed by BTM staff.	1%	0%	3%	22%	73%	0%
My experience with BTM has met my expectations.	4%	3%	3%	22%	68%	0%
My child would prefer not to be at BTM.	60%	23%	6%	2%	7%	2%
N = 250						

Focus groups with parents revealed largely positive feelings about the BTM experience. Parents universally felt that being part of the program was overall positive and that they would recommend the program to other parents. Several parents noted that the program was helpful in ensuring that their children were in a supervised environment and continuing to learn while they needed to work over the summer. Many also expressed that BTM helped their children better prepare for the upcoming school year. Some, however, expressed that they perceived variability in the programming quality depending on the site. They felt that some efforts to ensure uniform implementation across sites and attention to rigorous summer coursework and varied electives would help BTM adhere to its goals.

Conclusions and Recommendations

Evidence for Program Effects on Participant Outcomes
Findings from this evaluation indicated that participating in BTM positively benefited participating Scholars' academic achievement in the form of class grades while also increasing their school attendance to a small but significant degree. These results are in keeping with evaluation work at the Breakthrough Central Texas affiliate, which has also found positive effects of participation. These findings were based on a rigorous propensity matching methodology that included matching on sociodemographic characteristics and also prior academic achievement, conduct, and attendance. This approach minimized the role of selection bias in estimating program effects and ensured that participants were compared against an on-average similar comparison group.

Importantly, these findings reflect the influence of participating in BTM for a one-year period and for students relatively early in their BTM experience. Since the program asks participants to make a multi-year commitment lasting into high school, and most Scholars do stay with the program, these positive effects may compound over time and result in more substantial effects by the time they graduate high school.

The finding that there was no effect on standardized test scores may indicate that it takes more time for BTM's programmatic features to influence those outcomes. The evidence that participating did improve grades and attendance points to improvements in areas such as academic engagement and motivation, and these improvements may be drive better outcomes in other achievement areas as time goes on.

The Academic Experience
Findings from surveys and focus groups with Scholars and parents found that, overall, BTM activities helped Scholars understand new material and helped them prepare for the upcoming school year. Scholars largely found activities during the summer program interesting and engaging, and parents also expressed that the learning experience at BTM was of overall high quality and helped their children explore interests.

Despite this, findings also suggested that BTM summer courses could be more challenging for some Scholars. Some expressed that summer content reviewed old content and didn't help them prepare for the coming school year. This discrepancy is in part due to variable program implementation from one site to another. Ongoing efforts to ensure all sites include challenging content that is targeted at learning goals for the upcoming school year will help BTM meet its goals of providing rigorous programming for academically promising students.

Scholars generally expressed positive views about project-based learning, finding that it helped them learn new material and concepts. During site visits, evaluators saw several examples of project-based learning in action, including during a robotics elective and a

math class. There was also evidence that students were engaged in these activities and enjoyed them. However, there was also evidence that the use of project-based learning varies somewhat from one class to another and from one site to another. Program staff may want to develop this aspect of Teaching Fellow training further and provide more examples and models.

The Social Environment and Organizational Culture

Scholars generally felt that they had made new friends at BTM and felt safe there. Findings also indicated that Scholars largely had positive role models at BTM and had positive relationships with Teaching Fellows. Most Scholars felt that they had at least one Teaching Fellow that they could relate to. They also expressed that there were adults at BTM they could talk to if they had a problem and that the staff cared about their success. Parents similarly found that the program offered a positive environment and that program staff were dedicated, communicative, and welcoming. During focus groups, parents expressed a strong connection to BTM.

Despite the overall positive sense of the BTM social environment and organizational culture, there was also evidence that this aspect again varied somewhat from one site to another. Most notably, at a site where management was relatively new to implementing the BTM model, there were more reports of disruptions and disciplinary issues among Scholars. The program has many features that are key to its success (e.g., social and emotional learning, project-based learning, positive relationships with Teaching Fellows, and rigorous coursework), and an adaptation period is to be expected for leaders who are new to the program. BTM will benefit from careful attention to this critical period and additional support for new leaders, particularly as the program seeks to grow over the coming years.

Training and Orientation for Teaching Fellows

Teaching Fellows generally felt able to deliver challenging, effective, and interesting classes. While most Teaching Fellows felt that the training they received helped them prepare engaging and well-structured classes, a substantial proportion felt that they needed more support in lesson planning. Although most Teaching Fellows expressed a connection with their Scholars, there was room for improvement, particularly in the area of handling classroom challenging situations and disruptions in the classroom. Some Teaching Fellows also expressed limited comfort with implementing project-based learning, pointing to this as an area for improved professional development.

Scholar and Parent Satisfaction

This evaluation indicated overall strong satisfaction with BTM for Scholars and parents alike. Scholars shared that they would recommend the program to other students, and parents said they would recommend it to their network. While opportunities for continual improvements exist, listed below, participants generally expressed a strong commitment to the program and found it beneficial for helping children and youth succeed academically and meet their goals.

Recommendations

Based on the work conducted, the evaluation team makes the following recommendations for continuous programmatic improvements:

- Findings point to room for further developing the rigor of summer coursework, particularly ensuring that material is preparing Scholars for the upcoming school year while spending less time reviewing concepts they already have had exposure to.
- The project-based learning aspect of the program was present in several classrooms observed. Still, there remain opportunities to develop this feature of the program further and train Teaching Fellows in its successful implementation.
- Incorporate a greater emphasis on lesson planning in training and orientation for Teaching Fellows.
- Further develop a system for supporting new site leaders in implementing the BTM model to ensure consistency of implementation, which will be particularly important as the program aims to expand to new sites.
- Further develop systems for ensuring that any disciplinary issues are addressed in a positive way and uniformly across sites.
- Explore novel ways of ensuring that a positive environment for Scholars starts from when they get on the morning bus. Some Scholars felt that this was the most likely place for disruptions to occur and that this impacted their day at the summer program.

Future Evaluation Opportunities

The BTM program asks participating Scholars and parents to make a multi-year commitment to the program that lasts through high school. Most who enroll stay with the program. Many of the outcomes that BTM seeks to influence through their work may naturally take time to become apparent. For example, it may take time for the BTM model to influence standardized test scores. Moreover, the program seeks to influence longer-term outcomes such as graduate rates, enrollment in higher education, and career aspirations. These longer-term outcomes were beyond the scope of this current evaluation.

A fruitful approach for further evaluation work would be to follow the cohort of students included in this report over time. This would help determine whether there are additional program effects that simply require more time to become apparent and allow for the inclusion of longer-term outcomes. The fact that participating Scholars tend to stay with

the program means that this work would have a substantial sample moving forward. In addition, evaluation work at the Breakthrough affiliate in Central Texas has taken this longitudinal approach and found positive effects on longer-term outcomes such as college enrollment and persistence in higher education.

Taking this longitudinal approach would help BTM better understand the impact of its program and how it unfolds over time. Importantly, this would also add to the larger evidence base regarding how to best support under-resourced students, narrow the opportunity gap, and ensure that all children have the tools needed to succeed.

Future evaluation work may also want to explore more deeply the areas found to be opportunities for improvement. For example, there was evidence that the training and orientation for Teaching Fellows could potentially better prepare them in areas such as classroom management and implementation of project-based learning. Further evaluation could narrow in on this area to probe more deeply into the training experience and seek recommendations for specific programmatic improvements.

Another key finding was that the program would benefit from additional supports for new leadership members who are less experienced with the BTM model. Successful implementation of the program requires the incorporation of key elements to ensure an academic and social experience that meets program objectives and best serves students. This is particularly crucial as the program seeks to expand and open new sites. Future evaluation work may want to explore more deeply the experience of new sites and how leaders can be best supported in uniformly implementing the BTM model.

Appendix A. Scholar Survey

Dear Breakthrough Miami Scholar,

Thank you for taking a few minutes to complete this survey. This survey was created by *Breakthrough Miami* and partners at *Q-Q Research Consultants*. We are asking you to take this survey because you are a *Breakthrough Miami* Scholar.

Purpose
The purpose of this survey is to better understand your experience as a *Breakthrough Miami* Scholar. We are interested in knowing what is going well for our Scholars and what can be improved. Your responses will help us understand the impact of our program and also provide valuable information to improve our program for future Scholars. *We encourage you to be open and honest in your answers!*

Confidentiality
Your responses to these questions will be used by *Breakthrough Miami* staff and researchers at *QQ Research Consultants*. Outside the research team, responses will be shared in a way that summarizes the experience of all scholars. Your answers will not be shared in a way that can be directly linked to you.

Voluntary participation
While we encourage you to share your experiences and perspectives, participation in this survey is voluntary. You are not required to complete this survey, and you can chose to stop the survey by closing the browser window at any time and for any reason.

Eligibility
All *current Breakthrough Miami* Scholars are invited to take this survey.

Time to complete
The survey should take about ten minutes to complete.

We thank you for your time! To start the survey, please click the button below.

PART 1: REASONS FOR PARTICIPATING

1) Select the **three** things that **most** contributed to your decision to participate in Breakthrough Miami.

You may use the "other" option to add reasons that are not listed here.
- o   To do better in school
- o   To make new friends
- o   To explore my interests
- o   To have positive role models
- o   To have something to do during free time
- o   To have a challenge
- o   To learn more than I learn in school
- o   My parents wanted me to join
- o   My friends were joining
- o   My teacher(s) suggested I join
- o   A current Breakthrough Miami student recommended it
- o   Other (please describe): _____

PART 2: EXPERCIES AT BTM

2) Please share your thoughts on your experience at Breakthrough Miami.

Think carefully about each statement, and indicate <u>how much you agree</u>.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know / Not applicable
I have learned things at Breakthrough Miami that will help me in school.	○	○	○	○	○	○
I have made new friends at Breakthrough Miami.	○	○	○	○	○	○
I have positive role models at Breakthrough Miami.	○	○	○	○	○	○
I feel safe at Breakthrough Miami.	○	○	○	○	○	○
I would recommend Breakthrough Miami to other students.	○	○	○	○	○	○
Breakthrough Miami activities are challenging.	○	○	○	○	○	○
I have opportunities to develop leadership skills at Breakthrough Miami.	○	○	○	○	○	○

3) Please share your thoughts on your experience at Breakthrough Miami.

Think carefully about each statement, and indicate <u>how much you agree</u>.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know / Not applicable
The staff at Breakthrough Miami care about my success.	○	○	○	○	○	○
I get feedback at Breakthrough Miami that helps me learn.	○	○	○	○	○	○
I'm often distracted at Breakthrough Miami.	○	○	○	○	○	○
There are adults at Breakthrough Miami I could talk to if I had a problem.	○	○	○	○	○	○
I can relate to at least one of my teaching fellows.	○	○	○	○	○	○
I make the most of my time at Breakthrough Miami.	○	○	○	○	○	○

4) Please share your thoughts on your experience at Breakthrough Miami.

Think carefully about each statement, and indicate __how often__ they are true for you.

	Never	Sometimes	About half the time	Most of the time	Always	Don't know / Not applicable
During Breakthrough Miami activities, I share my thoughts.	○	○	○	○	○	○
Breakthrough Miami activities are boring.	○	○	○	○	○	○
We work together to solve problems at Breakthrough Miami.	○	○	○	○	○	○
For each activity at Breakthrough Miami, I know why we're doing it.	○	○	○	○	○	○
I keep to myself at Breakthrough Miami.	○	○	○	○	○	○
Breakthrough Miami teachers don't expect much from me.	○	○	○	○	○	○

5) Please share your thoughts on your experience at Breakthrough Miami.

*Think carefully about each statement, and indicate **how often** they are true for you.*

	Never	Sometimes	About half the time	Most of the time	Aways (5)	Don't know / Not applicable
I trust the other students at Breakthrough Miami.	○	○	○	○	○	○
I feel disrespected by staff at Breakthrough Miami.	○	○	○	○	○	○
There is at least one Breakthrough Miami teacher who inspires me.	○	○	○	○	○	○
My teaching fellows check my understanding.	○	○	○	○	○	○
Activities at Breakthrough Miami are relevant to my life.	○	○	○	○	○	○
Breakthrough Miami helps me set goals for myself.	○	○	○	○	○	○

6) Which learning resources helped you stay involved and engaged this summer?

Select all that apply.
- o Class discussion
- o Videos
- o Articles
- o Hands-on activities
- o Field trips
- o Edmono
- o Nearpod
- o Kahoot!
- o Flipgrid
- o Poll Everywhere
- o Zoom
- o Other _____

7) Project-based learning helped me grasp material more easily than traditional teaching methods.
- o Strongly agree
- o Agree
- o Neither agree nor disagree
- o Disagree
- o Strongly disagree

8) What have been the most **positive** things about your experience at Breakthrough Miami, if any?

_____

9) What have been the most **negative** things about your experience at Breakthrough Miami, if any?

_____

10) Is there anything else you'd like to share about your experience at Breakthrough Miami?

_____

PART 3: SELF PERCEPTIONS

For these questions, think about **how you feel in general** (not only at Breakthrough Miami).

11) I feel good about my accomplishments.

- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

12) I have a hard time controlling my emotions.
- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

13) I know how to resolve conflicts with friends.
- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

14) I can concentrate when I think something is important.
- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

15) When I do something, I try my hardest.
- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

16) I try to understand other people's perspectives.

- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

17) I feel that I can do anything if I try hard.

- o Always
- o Most of the time
- o About half the time
- o Sometimes
- o Never

PART 4: DEMOGRAPHICS

18) How old are you?
- o 7
- o 8
- o 9
- o 10
- o 11
- o 12
- o 13
- o 14
- o 15
- o 16
- o 17
- o 18

19) How long have you been a Breakthrough Miami **<u>Scholar</u>**?
- o This is my FIRST summer at Breakthrough Miami.
- o This is my SECOND summer at Breakthrough Miami.
- o This is my THIRD summer at Breakthrough Miami.
- o This is my FOURTH summer at Breakthrough Miami.
- o This is my FIFTH summer at Breakthrough Miami.
- o This is my SIXTH summer at Breakthrough Miami.
- o This is my SEVENTH summer at Breakthrough Miami.

20) How would you describe yourself?
   o Male/boy
   o Female/girl
   o Nonbinary
   o Prefer to self-describe: _____
   o Prefer not to say

21) Which best describes your race?
   o Asian
   o American Indian or Alaskan Native
   o Black or African American
   o Native Hawaiian or other Pacific Islander
   o White
   o Other: _____
   o Prefer not to say

22) Which best describes your ethnicity?
   o Hispanic or Latino/a
   o Caribbean Islands
   o Not Hispanic, Latino/a or Caribbean

23) What language(s) do you speak at home?
   o English only
   o A combination of English and another language
   o We usually or always speak a language other than English

24) What was your primary Breakthrough Miami site this summer?

   o Miami Country Day School

   o Ransom Everglades School

   o Carrollton School of the Sacred Heart

   o Gulliver Preparatory School

   o Palmer Trinity School

   o Breakthrough U at University of Miami

Appendix B. Teaching Fellow Survey

Dear Breakthrough Miami Teaching Fellow,

Thank you for taking a few minutes to complete this survey. This survey was created by *Breakthrough Miami* and partners at *QQ Research Consultants*. We are asking you to take this survey because you are a *Breakthrough Miami* Teaching Fellow.

Purpose
The purpose of this survey is to better understand your experience as a *Breakthrough Miami* Teaching Fellow. We are interested in knowing what is going well for our Teaching Fellows and what can be improved. Your responses will help us understand the impact of our program and also provide valuable information to improve our program for future Teaching Fellows. *We encourage you to be open and honest in your answers!*

Confidentiality
Your responses to these questions will be used by *Breakthrough Miami* staff and researchers at *QQ Research Consultants*. Outside the research team, responses will be shared in a way that summarizes the experience of all teaching fellows. Your answers will not be shared in a way that can be directly linked to you.

Voluntary participation
While we encourage you to share your experiences and perspectives, participation in this survey is voluntary. You are not required to complete this survey, and you can chose to stop the survey by closing the browser window at any time and for any reason.

Eligibility
All *current Breakthrough Miami* Teaching Fellows are invited to take this survey.

Time to complete
The survey should take about ten minutes to complete.

We thank you for your time! To start the survey, please click the button below.

PART 1: EXPERIENCE WITH TRAINING PRIOR TO TEACHING

1) Please share your thoughts on the training you received before teaching.

Read each statement and indicate how strongly you agree.	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know / Not applicable
The training I received gave me insight into how children and youth learn.	○	○	○	○	○	○
The training I received helped me plan well-structured lessons.	○	○	○	○	○	○
The training I received helped me plan engaging lessons.	○	○	○	○	○	○
The training I received helped me manage difficult situations in the classroom.	○	○	○	○	○	○
The training I received helped me build positive relationships with my students.	○	○	○	○	○	○
The training I received helped me meet the emotional needs of students.	○	○	○	○	○	○

| The training I received was challenging. | ○ | ○ | ○ | ○ | ○ | ○ |
| The training I received was fun. | ○ | ○ | ○ | ○ | ○ | ○ |

2) What aspects of training did you find most helpful, if any?

_____

3) What aspects of training could be improved, if any?

_____

PART 2: TEACHING EXPERIENCES AT BTM

4) Please indicate **how often** the following statements were true for you this summer.

	Never	Sometimes	About half the time	Most of the time	Always	Don't know / Not applicable
I had a positive impact on my students.	○	○	○	○	○	○
I was able to challenge my students.	○	○	○	○	○	○
I felt stressed.	○	○	○	○	○	○
I was able to deliver effective lessons.	○	○	○	○	○	○
I was able to effectively deal with disciplinary issues.	○	○	○	○	○	○
I had fun teaching.	○	○	○	○	○	○
I was able to connect with my students.	○	○	○	○	○	○
I had difficulty managing the class effectively.	○	○	○	○	○	○

5) Is there anything that would help you be a more effective teacher at *Breakthrough Miami*? If so, please describe: _____

PART 3: SUPPORTS AVAILABLE

For these questions, please think about the supports that were available to you after you started

teaching.

6) Please indicate **how often** the following statements were true for you this summer.

	Never	Sometimes	About half the time	Most of the time	Always	Don't know / Not applicable
If I had a question about lesson planning, I was able to get help.	○	○	○	○	○	○
I felt that I was on my own this summer.	○	○	○	○	○	○
If I needed help with classroom behavior, I was able to talk with someone who could help.	○	○	○	○	○	○
I had the materials I needed to make classes challenging.	○	○	○	○	○	○
I had the materials I needed to make classes interesting.	○	○	○	○	○	○

7) Are there any additional supports that would have helped after you started teaching? If so, please describe.

_____

PART 4: ATTITUDES RELATED TO EDUCATION

For these questions, please think about how you feel in general (not specifically related to

Breakthrough Miami).

8) Please indicate your agreement with the following statements.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know / Not applicable
Education is a force for social change.	○	○	○	○	○	○
Some children and youth face challenges at school that others don't face.	○	○	○	○	○	○
Teachers should consider the experience of each student.	○	○	○	○	○	○
I would like to be a teacher.	○	○	○	○	○	○

PART 5: SELF PERCEPTIONS

9) Please indicate how often the following statements are true for you.

	Never	Sometimes	About half the time	Most of the time	Always	Don't know / Not applicable
I feel comfortable taking on new challenges.	○	○	○	○	○	○
I feel capable of taking a leadership role.	○	○	○	○	○	○
I have clear goals for the future.	○	○	○	○	○	○

PART 6: DEMOGRAPHICS

10) How old are you?

- o 15
- o 16
- o 17
- o 18
- o 19
- o 20
- o 21
- o 22
- o 23
- o 24
- o 25

11) How long have you been a **<u>teaching fellow</u>** at Breakthrough Miami?
- o This is my FIRST summer as a teaching fellow.
- o This is my SECOND summer as a teaching fellow.
- o This is my THIRD summer as a teaching fellow.
- o This is my FOURTH summer as a teaching fellow.
- o This is my FIFTH summer as a teaching fellow.
- o This is my SIXTH summer as a teaching fellow.

12) Have you previously been a part of Breakthrough Miami in any of the following capacities? *Select all that apply.*
- o Breakthrough Miami Scholar
- o Teaching Assistant
- o Volunteer
- o MDCPS Intern
- o Other program intern
- o Success Coach (AmeriCorps)
- o Returning Teaching Fellow
- o Host School Student (Gulliver, Ransom, Carrollton, Palmer, Miami Country Day, or University of Miami)
- o Other: _____

13) Which of the following was your primary Breakthrough Miami site this summer?
- o Miami Country Day School
- o Ransom Everglades School
- o Carrollton School of the Sacred Heart
- o Gulliver Preparatory School
- o Palmer Trinity School
- o Breakthrough U at University of Miami

14) How would you describe yourself?

- o Male
- o Female
- o Non-binary / third gender
- o Prefer to self-describe: _____
- o Prefer not to say

15) Which of the following best describes your race?

- o Asian
- o American Indian or Alaskan Native
- o Black or African American
- o Native Hawaiian or other Pacific Islander
- o White
- o Other: _____
- o Prefer not to say

16) Which best describes your ethnicity?

- o Hispanic or Latino/a
- o Caribbean Islands
- o Not Hispanic, Latino/a or Caribbean

17) What language do you speak at home (with your family)?

- o English
- o A combination of English and another language
- o Mostly a language other than English

Appendix C. Parent Survey

Dear Breakthrough Miami Parent or Caregiver,

We'd like to thank you for taking a few minutes to complete this survey, which is being conducted by *Breakthrough Miami* (BTM) in collaboration with *QQ Research Consultants*. You are asked to take this survey because you the parent or caregiver of a child who has been participating in BTM programming.

Purpose
The purpose of this survey is to better understand parent perspectives of BTM programs and how BTM's activities are affecting Scholars and their families. We are interested in knowing more about you and your child's experiences with BTM. Your responses will help in evaluating the impacts of BTM's work and also provide valuable information to continually improve programs and services.

Confidentiality
Your responses to these questions will be available only to *Breakthrough Miami* staff and researchers at QQ Research Consultants. Data will be maintained on a secure server that is only accessible by these parties. Survey results and findings will be presented in a way that summarizes parent perspectives without identifying any individual respondent.

Voluntary participation
While we encourage you to share your experiences and perspectives, participation in this survey is entirely voluntary. You may chose to stop the survey by closing the browser window at any time and for any reason.

Eligibility
You are eligible to complete this survey if 1) you are the parent or caregiver of a child who has been participating in Breakthrough Miami activities, 2) you are at least 18 years of age, and 3) you consent for your responses to be used as described above. If you do not meet these criteria, or if you do not consent, you may leave the survey by closing the browser window now.

Time to complete
The survey should take about ten minutes to complete.

We thank you for your time! To start the survey, please click the button below.

PART 1: REASONS FOR PARTICIPATING

1) How many children in your household are currently participating in Breakthrough Miami as

Scholars?

- o   0 *(routes to end of survey)*

- o   1

- o   2

- o   3

- o   4+

You have indicated that there is more than one Breakthrough Miami Scholar in your household. As you take this survey, please think about your **on-average experience** with Breakthrough Miami. *(Displayed if they indicated more than one participating child.)*

2) From the following list, please select your top **three** reasons for signing your child or children up for Breakthrough Miami.
You may use the "other" option to list reasons not listed here.

To promote their academic success (better grades, test results, etc.)

To encourage their personal interests.

To expand their positive peer network.

To give them positive role models.

To help them get into college.

To keep them busy during free time.

To help them explore different school options.

Other: _____

PART 2: PERCEPTIONS OF BTM

3) Please share your thoughts on quality of Breakthrough Miami programs.

Read each statement carefully and indicate how much you agree.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know / Not applicable
My experience with Breakthrough Miami has met my expectations.	○	○	○	○	○	○
Breakthrough Miami offers a quality learning experience.	○	○	○	○	○	○
Breakthrough Miami staff care about their students.	○	○	○	○	○	○
Breakthrough Miami provides a supportive social environment.	○	○	○	○	○	○
Breakthrough Miami provides quality instruction in academic subjects.	○	○	○	○	○	○
Breakthrough Miami provides quality mentoring.	○	○	○	○	○	○
Breakthrough Miami allows my child to explore their interests.	○	○	○	○	○	○
I would recommend Breakthrough Miami to other parents/ caregivers.	○	○	○	○	○	○

4) Please share your perspective on your child's experience at Breakthrough Miami.

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Read each statement carefully and indicate how much you agree.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ Not applicable
My child has a positive peer network at Breakthrough Miami.	○	○	○	○	○	○
My child feels safe at Breakthrough Miami programs.	○	○	○	○	○	○
My child has made new friends through Breakthrough Miami.	○	○	○	○	○	○
My child would prefer not to be at Breakthrough Miami.	○	○	○	○	○	○
My child feels challenged at Breakthrough Miami.	○	○	○	○	○	○
My child looks forward to Breakthrough Miami activities.	○	○	○	○	○	○

5) Since participating in Breakthrough Miami...

Read each statement carefully and indicate how much you agree.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ Not applicable
...my child is more confident.	○	○	○	○	○	○
...my child has new interests.	○	○	○	○	○	○
...my child is more academically motivated.	○	○	○	○	○	○
...my child is more socially connected.	○	○	○	○	○	○
...my child is better prepared for classes at school.	○	○	○	○	○	○

6) Please share your thoughts on how the Breakthrough Miami experience fits with your life.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know/ Not applicable
Breakthrough Miami activities fit with my schedule.	○	○	○	○	○	○
Breakthrough Miami transportation is convenient.	○	○	○	○	○	○
I know who to contact with any questions about Breakthrough Miami.	○	○	○	○	○	○
I feel welcomed by Breakthrough Miami staff.	○	○	○	○	○	○
Participating in Breakthrough Miami lessens financial burden on my family.	○	○	○	○	○	○

7) What have you found to be the most positive aspects of participating in Breakthrough Miami, if any?

_____

8) If any, what aspects of Breakthrough Miami might be improved to better serve children, youth, and their families?

_____

9) You may use this space to share any additional thoughts about your experience with Breakthrough Miami.

_____

10) How old are you?

- o Under 18
- o 18-24 years old
- o 25-34 years old
- o 35-44 years old
- o 45-54 years old
- o 55-64 years old
- o 65+ years old

11) How do you describe yourself?

- o Male
- o Female
- o Non-binary / third gender
- o Prefer to self-describe: _____
- o Prefer not to say

Q11 12) How would you describe your racial background? Please select all that apply.

- o Asian
- o American Indian or Alaskan Native
- o Black or African American
- o Native Hawaiian or other Pacific Islander
- o White
- o Other: _____
- o Prefer not to say

13) Which best describes your ethnicity?

- o Hispanic or Latino/a
- o Caribbean Islands
- o Not Hispanic, Latino/a or Caribbean

14) How many children under the age of 18 currently live in your household?

Include <u>all</u> children, regardless of whether they participate in Breakthrough Miami.
- o   1
- o   2
- o   3
- o   4
- o   5
- o   6
- o   7
- o   8+

15) What best describes your employment status over the last three months?
- o   Working full-time
- o   Working part-time
- o   Currently unemployed and looking for work
- o   A homemaker or stay-at-home parent
- o   Student
- o   Retired
- o   Other _____

16) What is your current household income?
Include income from all adults who live in your home.
- o   Less than $20,000
- o $20,000 - $34,999
- o $35,000 - $49,999
- o $50,000 - $64,999
- o $65,000 - $79,999
- o $80,000 - $94,999
- o $95,000 - $109,999
- o $110,000 - $149,999
- o $150,000 - $189,999
- o $190,000+

17) What is your current marital status?

- o Married
- o Living with a partner
- o Widowed
- o Divorced/Separated
- o Never been married

18) Which has been your child or children's primary Breakthrough Miami site(s) this summer?

- o Miami Country Day School
- o Ransom Everglades School
- o Carrollton School of the Sacred Heart
- o Gulliver Preparatory School
- o Palmer Trinity School
- o Breakthrough U at University of Miami

Appendix D. Focus Group Guides

Breakthrough Miami 2022 Site Visit:
Scholar Focus Group Guide

FOCUS GROUP PREPARATION

CONSENT

Consent forms will be distributed as part of a packet of materials distributed electronically to Breakthrough Miami (BTM) Scholars, Teaching Fellows, teacher trainers, and parents. Minors (all Scholars and some Teaching Fellows) will receive a version of the consent form that requests caregiver assent as well. Before sending out consent forms, Breakthrough Miami staff will discuss the research activities happening over the summer with children, youth, and parents either during the orientation week or during the period of teacher training. As a result, they will already be familiar with these activities and what to expect when receiving consent forms. By starting the consent process early in the summer, BTM staff and the research team will have ample time to follow up with participants if needed and determine who is excluded from the pool of potential focus group participants.

SAMPLING

Scholar Focus Groups

Site Sampling: Focus groups with Scholars will be conducted at **three** BTM sites selected to capture a range of BTM contexts. One site, Carrollton School of the Sacred Heart, is excluded from the pool of potential sites to visit. This location is unique among BTM locations in that it enrolls girls only. Since gender segregation is a exception rather than a key feature of BTM programming, it was decided to exclude this location from Scholar focus groups. Later data analysis and reporting will want to make note of the fact that one unique site was excluded.

Of the remaining BTM sites, the following three sites were selected for Scholar focus groups:
- **Palmer Trinity School**: In the south of the region served by BTM, this is a smaller site with a relatively experienced site director.
- **Ransom Everglades School**: Located in Coconut Grove, just to the south of downtown Miami, this is one of the larger BTM sites with a relatively experienced site director.
- **Miami Country Day School**: Located to the north of downtown Miami, this site is currently overseen by a relatively new site director.

These three sites also vary in terms of demographic composition. Thus, the three locations cover a range of site sizes, levels of administrative experience, and Scholar demographics.

Participant Sampling: Each Scholar focus group will be comprised of **6-7 participants** who are selected from the pool of Scholars who provided consent to participate. There will be **two Scholar focus groups per site—one for each grade level in the analytic**

sample—totaling six Scholar focus groups across the three locations. Participants will be selected to include a range of perspectives while reflecting the overall composition of BTM's Scholars, using the following guidelines:

General
- As much as possible, participants should be selected from *different social groups* and should spend relatively little time together during BTM summer activities.
- As much as possible, students attend different schools during the regular academic year.
- Focus groups are to be conducted separately for each grade level within each site.

Race/ethnicity and gender
- At least half of the participants in each group will be from historically underrepresented communities in a way that approximates the composition of the given site.
- Roughly two participants per group will be from families that sometimes or always speak a language other than English at home. Again, the proportion should approximate the composition and home language of the given site.
- Each group will be as close to gender balanced as possible.

Socioeconomic background
- At least half are potential first-generation postsecondary students (i.e., Their parents or caregivers did not receive a postsecondary education.)
- Where possible, at least two participants per group have a parent or caregiver *with* a post-secondary secondary degree.

Teaching Fellow and Parent Focus Groups

Focus groups with teaching fellows and parents will be conducted virtually to facilitate scheduling and allow us to bring together participants who live in different parts of the city.

TIMELINE

May	• Discuss focus groups with Teaching Fellows during training period and send consent forms together with other orientation materials.
June	• Send consent forms out to Scholars and Scholar parents with other orientation materials.
	• Briefly discuss focus groups and surveys with Scholars and Teaching Fellows during orientation week. Let them know that 1) everyone will be asked to complete a survey, 2) some will be asked to participate in focus groups, 3) their experiences and thoughts will provide valuable information to help BTM understand the impact of their work, and 4) they may choose not to participate at any time.
	• Review consent forms and follow up with Scholars and parents as needed.

July	• Select focus group participants in accordance with the above guidelines two weeks before focus groups (week of July 4th to 8th).
	• Reach out to identified participants to verify that they are still willing to participate the week prior to focus groups (week of July 11th to 15th). Remind them that participation is voluntary and that they may withdraw consent at any time.
	• Remind participants of focus group time and location the day before and they day of the focus group. Teaching fellows will be provided with a list of participants so that they can guide them to the right location at the right time.
	• Conduct focus groups on **July 20th at Palmer Trinity**, on **July 21st at Ransom Everglades**, and on **July 22nd at Miami Country Day**.
August	• Identify and reach out to Teaching Fellows and parents to participate in focus groups.
	• Conduct focus groups via Zoom around the time of evaluation week. For parents, shortly after may be more appropriate.

SCHOLAR FOCUS GROUP GUIDE

PROGRAM OBJECTIVES: Increase academic performance, access to postsecondary education, and leadership potential for traditionally underrepresented students in the Miami area.

FOCUS GROUP OBJECTIVES: Gather perspectives related to:
1. Scholar experience during the summer program,
2. Scholar perceptions as to things that went well over the course of the summer program,
3. Scholar perceptions as to opportunities for improvement for the summer program,
4. Scholar relationships with Teaching Fellows and staff,
5. Opportunities to explore interests, develop academic identity, and develop leadership skills.

Opening Script:

Thank you for taking the time to participate in this conversation today. My name is _____, and I work with *Q-Q Research Consultants*. We are working with *Breakthrough Miami* to help them understand how their program is affecting Scholars and their families.

The reason we're conducting these conversations is to learn more about the experiences of *Breakthrough Miami* Scholars this summer. Your opinions, perceptions, and experiences are important to us and will help us explore what is going well at *Breakthrough Miami* and what can potentially be improved. Information that you share today can help us improve the Breakthrough Miami experience for current and future Scholars.

There are no "right answers" to any question we'll discuss today. We encourage you to be open and honest with your thoughts and experiences. Please share your thoughts even if they are different from what others

have said.

Before we get started, I would like to share a few important points:

- This conversation will be recorded so that we can refer back to the information that you share and summarize it as accurately as possible.
- Any information shared will not be connected to a specific participant.
- We can use first names during our conversation today, but any names mentioned during the focus group will not be reported.
- The data collected will be shared in as a whole, protecting the anonymity of the participants.
- Everyone's participation is voluntary. If you feel uncomfortable being recorded, with the conversation, or for any other reason – you may leave now or at any time.

Are there any questions?
I am going to begin recording the session now.

FOCUS GROUP PROMPTS FOR SCHOLARS
NOTE: _Second-level questions are optional prompts that can be used to expand conversation if needed._

Contextual and Engagement Questions:
1) How did you first learn about *Breakthrough Miami*?
2) You've told me a little about how you heard about Breakthrough Miami. Can you tell me why you decided to sign up and become a *Breakthrough Miami* Scholar?
   a) What were the most important factors?

Exploratory Questions:
3) Can you describe your first few weeks as a *Breakthrough Miami* Scholar?
   a) How did you feel during those first few weeks?
   b) What kinds of activities did you do?
   c) What was the transition like?
4) How is your experience at Breakthrough Miami different from your experience at school?
   a) How are the activities you do different?
   b) How is the social environment different?
5) Tell me a little about your teaching fellows this summer.
   a) What is it like to have a teacher that is closer to your age?
   b) What are some things your teaching fellows did well this summer?
   c) What are some things your teaching fellows could have done better this summer?
   d) Can you think of something you will remember about one of your teaching fellows five years from now?
6) Tell me about a time that you felt challenged this summer.
   a) What about that experience made you feel challenged?
   b) How did you handle that situation?
7) If you could change something about your experience at Breakthrough Miami, what would it be?

Exit Questions

8) Is there anything else you'd like to share about your experience with Breakthrough Miami?

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TEACHING FELLOW FOCUS GROUP GUIDE

PROGRAM OBJECTIVES: Increase academic performance, access to postsecondary education, and leadership potential for traditionally underrepresented students in the Miami area.

FOCUS GROUP OBJECTIVES: Gather perspectives related to:
1. Teaching Fellow experience during the teacher training component;
2. Teaching Fellow experience during the summer program, including materials and supports available to them;
3. Teaching Fellow perceptions as to things that went well over the course of the summer program;
4. Teaching Fellow perceptions as to opportunities for improvement for the summer program;
5. Teaching Fellow relationships with Scholars and staff,
6. Opportunities to explore interests, develop academic identity, and develop leadership skills.

Opening Script:

Thank you for taking the time to participate in this conversation today. My name is _____, and I work with *Q-Q Research Consultants*. We are working with *Breakthrough Miami* to help them understand how their work is affecting the youth and families who are participating in their programs.

The reason we're conducting these conversations is to learn more about the experiences of Breakthrough Miami Teaching Fellows this summer. Your opinions, perceptions, and experiences are important to us. Your experiences can help us understand what is going well at *Breakthrough Miami* and how the program can potentially be improved.

Information that you share today can help us improve the Breakthrough Miami experience for current and future Teaching Fellows and Scholars. There are no "right answers" to any question we'll discuss today. We encourage you to be open and honest with your thoughts and experiences. Please share your thoughts even if they are different from what others have said.

Before we get started, I would like to share some information:

- This conversation will be recorded and transcribed for data analysis purposes. We want to be sure that we can refer back to the information that you share and can represent it as accurately as possible.
- Any information shared will not be connected to a specific participant.
- Any names or other personally identifying information mentioned during the focus group will not be reported.
- The data collected will be shared in as a whole, protecting the anonymity of the participants.
- Everyone's participation is voluntary. If you feel uncomfortable being recorded, with the conversation, or for any other reason – you may leave now or at any time.
-

Are there any questions?

I am going to begin recording the session now.

FOCUS GROUP PROMPTS FOR TEACHING FELLOWS
NOTE: Second-level questions are optional prompts that can be used to expand conversation if needed.

Contextual and Engagement Questions:
1) How did you first learn about *Breakthrough Miami*?
2) What motivated you to become a Teaching Fellow with *Breakthrough Miami*?
   a) What experience did you have with *Breakthrough Miami*, if any, before this summer?

Exploratory Questions:
3) There was a period of training at the beginning of the summer to prepare you for teaching. What was that training experience like for you?
   a) Can you tell me about a memorable activity you did during the training?
   b) Can you tell me about something you learned in the training that helped you when you started teaching?
   c) As that training wrapped up, how were you feeling about starting to teach?
   d) What was the transition like during the first few weeks of teaching?
4) Imagine that a friend is interested in being a Teaching Fellow with *Breakthrough Miami*. How would you describe the experience to them?
5) Tell me about a time that you felt challenged this summer.
   a) What about that experience made you feel challenged?
   b) How did you handle that situation?
   c) What resources were available to help you manage that situation?
6) How do you think your beliefs about education and learning have changed this summer?
   a) What do you think is the role of education in society?
7) Where do you see yourself 10 years from now?
8) If you could change something about your experience at *Breakthrough Miami*, what would it be?

Exit Questions

9) Is there anything else you'd like to share about your experience with *Breakthrough Miami*?

PARENT FOCUS GROUP GUIDE

PROGRAM OBJECTIVES: Increase academic performance, access to postsecondary education, and leadership potential for traditionally underrepresented students in the Miami area.

FOCUS GROUP OBJECTIVES: Gather perspectives related to:
1. Parent experience during the summer program;
2. Parent perceptions as to things that went well over the course of the summer program;
3. Parent perceptions as to opportunities for improvement for the summer program;
4. Parent relationships with Breakthrough Miami staff (e.g., communications, sense of belonging);
5. Perceptions as to how participation has influenced Scholars (e.g., expanding interests, academic motivation, self-efficacy, social network)

Opening Script:
Thank you for taking the time to participate in this conversation today. My name is _____, and I work with Q-Q Research. We are working with Breakthrough Miami to help them understand how their work is affecting the youth and families who are participating in their programs.

The reason we're conducting these conversations is to learn more about the experiences of Breakthrough Miami parents and caregivers this summer. Your opinions, perceptions, and experiences are important to us. Information that you share today can help us improve the Breakthrough Miami experience for participating families and youth.

There are no "right answers" to any question we'll discuss today. We encourage you to be open and honest with your thoughts and experiences. Please share your thoughts even if they are different from what others have said.

Before we get started, I would like to share a few key points:

- This conversation will be recorded and transcribed for data analysis purposes. We want to be sure that we can refer back to the information that you share and can represent it as accurately as possible.
- Any information shared will not be connected to a specific participant.
- Any names or other personally identifying information mentioned during the focus group will not be reported.
- The data collected will be shared in as a whole, protecting the anonymity of the participants.
- Everyone's participation is voluntary. If you feel uncomfortable being recorded, with the conversation, or for any other reason – you may leave now or at any time.

Are there any questions?
I am going to begin recording the session now.

FOCUS GROUP PROMPTS FOR PARENTS
NOTE: <u>*Second-level questions are optional prompts that can be used to expand conversation if needed.*</u>

Contextual and Engagement Questions:
1) How did you first learn about *Breakthrough Miami*?
2) What influenced your decision to enroll your child in *Breakthrough Miami*?
   a) What factors were most important to you?

Exploratory Questions:
3) What is your perception of the learning experience at *Breakthrough Miami*?
   a) How does the learning experience seem different from at school?
   b) How does your child seem to relate to their teachers?
4) What is your perception of the social environment at *Breakthrough Miami*?
   a) Can you think of a time that your child had a hard time getting along with someone? How did they handle it?
   b) How is your child's social group different now as compared to the school year?
5) Can you tell me a bit about your interactions with Breakthrough Miami teachers and staff?
   a) How do you feel when you're at your Breakthrough Miami site?

6) If another parent was interested in *Breakthrough Miami*, how would you describe it to them?
7) What would you say are the most positive aspects of *Breakthrough Miami*?
8) If you could suggest an improvement for *Breakthrough Miami*, what would it be?
   a) How do you think that can be addressed?
   b) Is there anything that would make participating in *Breakthrough Miami* more convenient for you and your family?

Exit Questions

9) Is there anything else you'd like to share about your experience with *Breakthrough Miami*?

INSTRUCTIONAL COACH FOCUS GROUP GUIDE

PROGRAM OBJECTIVES: Increase academic performance, access to postsecondary education, and leadership potential for traditionally underrepresented students in the Miami area.

FOCUS GROUP OBJECTIVES: Gather perspectives related to:
   1. Experience of teacher trainers during the orientation and training period;
   2. Experience during the summer program (e.g., interactions with Teaching Fellows);
   3. Teacher trainer perceptions of materials and resources available to support instruction;
   4. Teacher trainer perceptions as to things that went well over the course of the summer program;
   5. Teacher trainer perceptions as to opportunities for improvement for the summer program;
   6. Perceptions as to how participation has influenced Teaching Fellows (e.g., leadership skills, self-efficacy, future plans)

Opening Script:
Thank you for taking the time to participate in this conversation today. My name is _____, and I work with Q-Q Research. We are working with Breakthrough Miami to help them understand how their work is affecting the youth and families who are participating in their programs.

The reason we're conducting these conversations is to learn more about the experiences of Breakthrough Miami parents and caregivers this summer. Your opinions, perceptions, and experiences are important to us. Information that you share today can help us improve the Breakthrough Miami experience for participating families and youth.

There are no "right answers" to any question we'll discuss today. We encourage you to be open and honest with your thoughts and experiences. Please share your thoughts even if they are different from what others have said.

Before we get started, I would like to share a few key points:

- This conversation will be recorded and transcribed for data analysis purposes. We want to be sure that we can refer back to the information that you share and can represent it as accurately as possible.
- Any information shared will not be connected to a specific participant.

- Any names or other personally identifying information mentioned during the focus group will not be reported.
- The data collected will be shared in as a whole, protecting the anonymity of the participants.
- Everyone's participation is voluntary. If you feel uncomfortable being recorded, with the conversation, or for any other reason – you may leave now or at any time.

Are there any questions?
I am going to begin recording the session now.

FOCUS GROUP PROMPTS FOR TEACHER TRAINERS
NOTE: <u>*Second-level questions are optional prompts that can be used to expand conversation if needed.*</u>

Contextual and Engagement Questions:
1) Can you tell me a little about how you first became involved in *Breakthrough Miami*?
2) What interested you in becoming part of *Breakthrough Miami*?
   a) What factor most influenced your decision to join?

Exploratory Questions:
3) What is your perception of the learning experience at *Breakthrough Miami*?
   a) How does the learning experience seem different from at school?
4) What is your perception of the learning materials and resources available at *Breakthrough Miami*?
5) In thinking about the Teaching Fellows you worked with this summer, how well do you think they adapted to teaching?
   a) What challenges did they face?
   b) Can you think of any way that they could be better supported?
6) What would you say are the most positive aspects of Breakthrough Miami?
7) If you could suggest an improvement for Breakthrough Miami, what would it be?

Exit Questions

8) Is there anything else you'd like to share about your experience with Breakthrough Miami?

Appendix E. Observation Protocols

Breakthrough Miami 2022 Site Visit:
Observation Protocol

Purpose: The purpose of the Breakthrough Miami (BTM) observation activities is to provide feedback related to the ways in which program instruction and activities are facilitating, or could better facilitate, the following main BTM goals:

- Promoting academic engagement and leadership among underrepresented students.
- Opening up new opportunities for post-secondary education and career pathways.
- Assisting students in locating education opportunities (e.g., charters and magnets) that are in line with their interests.

Sampling: Sites for observations are selected to cover a range of Breakthrough Miami contexts. The research team will conduct observations at three Breakthrough Miami sites, which are selected to cover different geographic locations, site sizes, and site coordinator experience levels:

- **Palmer Trinity School**: In the south of the region served by BTM, this is a smaller site with a relatively experienced site director.
- **Ransom Everglades School**: Located in Coconut Grove, just to the south of downtown Miami, this is one of the larger BTM sites with a relatively experienced site director.
- **Miami Country Day School**: Located to the north of downtown Miami, this site is currently overseen by a relatively new site director.

There will be two or three observations at each of these locations during site visits occurring July 20th-22nd, 2022. Each observation will be about 45 minutes long and will sample two or three classrooms per site if available. As much as possible, classes will also be selected to cover a range of Breakthrough Miami contexts:

- Classes should be sampled to cover both of the grade levels in our target sample (rising 7th and 8th graders).
- Selection should also include classes of Teaching Fellows with varying degrees of experience.
- Attention should be given to including classes with varying degrees of engagement, if possible.

Preparation: Teaching Fellows should be notified early in the summer that classroom observations will be happening and that their class may be selected. Communications should emphasize that observations are low-stakes and will not be used to evaluate their performance in any way. It should be explained to Teaching Fellows that the purpose of observations to get a feel for Breakthrough Miami summer programming.

The *Q-Q* Researchers will discuss classroom selection with site coordinators prior to the site visit. Classes to visit will be finalized prior to the site visit so that Teaching Fellows know in advance whether they will be observed.

Instructions: During the observation, the observer will take detailed notes on classroom activities, interactions, environment, and behavior. After the observation, the observer reviews these notes and uses the following codes to categorize notes where possible. Notes should not be limited by these codes. Anything the observer finds relevant to exploring program implementation should also be included, and additional codes may emerge during the coding stage.

BTM Site:		Date:	
Number of Scholars		**Theme(s):**	
Researcher(s):			

CODE	Description
Engagement	
ENG	Student engagement / disengagement: Are students interested and focused during lesson?
AFF	Positive / negative affect: Are students feeling positive? Enjoying the lesson? Is there evidence that the connect positively with the instructor?
CHAL	Challenge: Are students experiencing an appropriate degree of challenge and cognitively engaged in the lesson?
Teaching and Learning	
S-CENT / T-CENT	Student centered / teacher centered instruction: Does the lesson incorporate student choice and interests? Does it speak to their lives and experience? Do they have opportunities to share their thoughts and perspectives? Do they put concepts into their own words? Is the focus of the class on the teacher or on the students?
PB	Project-based learning: Are students engaged in a project with a clear goal, product, or outcome?
LDR	Leadership opportunities: Do students have opportunities to take the lead? Volunteer to take charge? Give suggestions?
INT	Expanding interests: Do students have opportunities to explore new interests?
COLLAB / IND	Collaboration / independence: Are students working together to solve problems? Is there evidence for a sense of community? Are students working or thinking through a problem on their own?
CHECK	Checking learning / understanding: Does the instructor use techniques to see that students understand goals and material?

Appendix F. Covariate Balance for Matching on Sociodemographic Factors Only

Appendix A shows covariate balance with standardized mean differences as calculated in the R *matchit* package. The 'means treated' column shows the proportion of BTM participants for each variable, whereas the 'means control' column shows the proportion of matched non- participants. The variance ratio of nearly 1.0 indicates that the matching procedure achieved strong balance between the two groups. The research team also conducted statistical tests to ensure that the two groups were equivalent after matching, with no significant differences found.

	Means Treated	Means Control	Std. Mean Diff.	Var. Ratio
Distance	0.018451	0.01845	4.33E-06	0.999995
Race/Ethnicity				
Asian	0.015152	0.015152	0	
Black	0.401515	0.401515	0	
Hispanic	0.540404	0.537879	0.005067	
Native American	0	0	0	
Pacific Islander	0	0	0	
Multiple races	0.005051	0.005051	0	
White	0.037879	0.040404	-0.01323	
Gender				
Female	0.651515	0.65404	-0.0053	
Male	0.348485	0.34596	0.0053	
FRL status				
0 (non-FRL)	0.126263	0.128788	-0.0076	
1	0.027778	0.025253	0.015366	
2	0.739899	0.739899	0	
3	0.106061	0.106061	0	
ELL status				
Non-ELL	0.707071	0.704545	0.005549	
ELLstatusLF	0.280303	0.280303	0	
ELLstatusLN	0.002525	0.005051	-0.05032	
ELLstatusLY	0.010101	0.010101	0	
ESE status				
Non-ESE	0.583333	0.585859	-0.00512	
Orthopedically impaired	0	0	0	
Speech impaired	0.007576	0.005051	0.029123	
Language impaired	0.002525	0.002525	0	

	Means Treated	Means Control	Std. Mean Diff.	Var. Ratio
Deaf or hard of hearing	0.002525	0.002525	0	
Visually impaired	0	0	0	
Emotional or behavioral disability	0	0	0	
Specific learning-disabled	0.015152	0.015152	0	
Gifted	0.371212	0.371212	0	
Hospital or homebound	0	0	0	
Dual sensory impaired	0	0	0	
Autism spectrum disorder	0.007576	0.007576	0	
Traumatic brain injured	0	0	0	
Developmentally delayed	0	0	0	
Other health impaired	0.010101	0.010101	0	
Intellectual disabilities	0	0	0	
Grade level	6.474747	6.474747	0	1

Appendix G. Covariate Balance for Matching on Both Sociodemographic Factors and Baseline Outcome Measures

Appendix B shows covariate balance with standardized mean differences as calculated in the R *matchit* package. The 'means treated' column shows the proportion of BTM participants for each variable, whereas the 'means control' column shows the proportion of matched non- participants. The variance ratio close to 1.0 indicates that the matching procedure achieved strong balance between the two groups. The research team also conducted statistical tests to ensure that the two groups were equivalent after matching, with no significant differences found.

	Means Treated	Means Control	Std. Mean Diff.	Var. Ratio
Distance	0.020849	0.020844	0.000256	1.002276
Race/Ethnicity				
Asian	0.015152	0.017677	-0.020672	
Black	0.401515	0.411616	-0.020606	
Hispanic	0.540404	0.520202	0.040537	
Native American	0.000000	0.000000	0.000000	
Pacific Islander	0.000000	0.000000	0.000000	
Multiple	0.005051	0.007576	-0.035624	
White	0.037879	0.042929	-0.026456	
Gender				
Female	0.651515	0.636364	0.031798	
Male	0.348485	0.363636	-0.031798	
FRL Status				
Non-FRL	0.126263	0.143939	-0.053220	
1	0.027778	0.017677	0.061466	
2	0.739899	0.747475	-0.017269	
3	0.106061	0.090909	0.049207	
ELL Status				
Non-ELL	0.707071	0.704545	0.005549	
ELLstatusLF	0.280303	0.282828	-0.005622	
ELLstatusLN	0.002525	0.002525	0.000000	
ELLstatusLY	0.010101	0.010101	0.000000	
ESE Status				
Non-ESE	0.583333	0.555556	0.056344	
Orthopedically impaired	0.000000	0.000000	0.000000	
Speech impaired	0.007576	0.010101	-0.029123	
Language impaired	0.002525	0.007576	-0.100631	
Deaf or hard of hearing	0.002525	0.010101	-0.150946	
Visually impaired	0.000000	0.000000	0.000000	

	Means Treated	Means Control	Std. Mean Diff.	Var. Ratio
Emotional or behavioral disability	0.000000	0.000000	0.000000	
Specific learning-disabled	0.015152	0.017677	-0.020672	
Gifted	0.371212	0.378788	-0.015681	
Hospital or homebound	0.000000	0.000000	0.000000	
Dual sensory impaired	0.000000	0.000000	0.000000	
Autism spectrum disorder	0.007576	0.002525	0.058247	
Traumatic brain injured	0.000000	0.000000	0.000000	
Developmentally delayed	0.000000	0.000000	0.000000	
Other health impaired	0.010101	0.017677	-0.075761	
Intellectual disabilities	0.000000	0.000000	0.000000	
Academic Achievement				
GPA	3.235416	3.242229	-0.011984	0.768128
FSA ELA score	341.017677	340.194444	0.046900	0.701320
FSA MAT score	334.919192	333.762626	0.070263	0.639891
Attendance				
Total Absences	8.967172	8.712121	0.028473	1.129159
Unexcused Absences	6.441919	6.391414	0.006184	1.108249
Tardies	6.123737	5.898990	0.021041	0.904705
Behavior				
Indoor Suspensions	1.343434	1.297980	0.016296	1.635741
Outdoor Suspensions	1.121212	1.166667	-0.036044	0.726222
Grade Level	6.474747	6.474747	0.000000	1.000000

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