Boys and Girls Club of Greater Houston Texas Afterschool Centers on EducationTM Evaluation Analysis Report

Patrick S. Tennant, Ph.D., LMFT

July 2019

Contents

Program and Report Information	3
Descriptive Statistics	4
Number of Students	4
Students by BGCGH Site and Term	4
Student Records by Grade and School	5
BGCGH Texas ACE TM Program Days Attended	5
Academic Grades	6
School Days Absent	1
Criminal Referrals	1
Non-Criminal Referrals	1
Promotion to Subsequent Grade	1
Summer School Required	1
Analyses Based on Regular Attendance $\dots \dots \dots$	2
Defining Regular Attendance	2
Regular Attendance in the Spring	2
Regular Attendance by School and Term	2
Academic Grades by Regular Attendance	2
School Days Missed by Regular Attendance	2
Referrals by Regular Attendance	2
Conclusions and Implications	3
Future Recommendations - Contiuous Quality Improvement Language	3
Appendices	4
Appendix A: Data Cleaning Notes	4
Appendix B: Calculation of Program Days Attended Variable and Alternate Analyses 1	5

Program and Report Information

The Boys and Girls Club of Greater Houston (BGCGH) was awarded a Texas Afterschool Centers on Education (Texas ACETM) Grant to provide high-quality academic enrichment opportunities for children during non-school hours. BGCGH partnered with Spring Branch Independent School District (SBISD) to provide after school programming at five sites in SBISD - Spring Branch Elementary, Spring Oaks Middle, Woodview Elementary, The Womens' Home, Westwood Elementary - with The Womens' Home site serving students from Treasure Forest Elementary School.

The stated purpose of this evaluation analysis was to describe services provided and students served under the program and to understand the impact of BGCGH Texas ACETM programming on students' academic performance. This report details analyses designed to accomplish those goals with the data provided, but limitations to data availability and clarity significantly hinder the potential interpretations of the data. Analyses and statistics provided here are judged to be the most accurate interpretation of the data by author, but all reporting carries an implicit caveat of uncertainity due to issues of data collection and management that exist outside of the purview of the author. One additional explicit caveat must be mentioned and will be reiterated at the appropriate points in the report: number of days of BGCGH Texas ACETM programming attended by a given student could not be calculated to a reasonable level of certainity because of disparities in data collection and management procedures. As such, three sets of analyses are reported here but none can definitively claim to be the accurate set and all sharing of that information should carry an appropriate disclaimer.

Required Funding Statement: Funded by the 21st CCLC Program administered by the US Department of Education

Descriptive Statistics

Data was provided to the author in the form of 10 separate spreadsheet files. Each file contained the data for one of the five site's Fall or Spring terms for the 2018-2019 academic year, organized with each row as a single record for a given student who attended at least one day of BGCGH Texas ACETM programming at that site during that term. In each file, a given student has only one observation (i.e., a record), and that observation contains that student's grade, attendance, academic grades, referrals, and promotion.

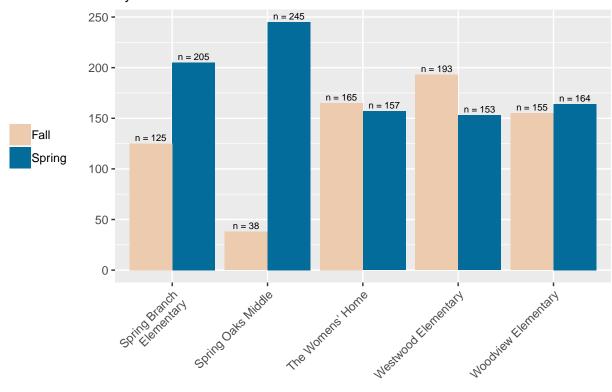
Number of Students

There are 1054 unique Membership IDs present in the dataset, each representing a single student who attended at least one day of BGCGH Texas ACETM programming in the 2018-2019 academic year. Of those, 508 appear once (i.e., in only one academic term) and 546 appear twice (i.e., in both the Fall and Spring academic terms), meaning there is a total of 1600 student records in the data. Please see Appendix A for details on data cleaning and data loss.

Students by BGCGH Site and Term

These 1054 students were spread across five Boys and Girls Club of Greater Houston sites that provided services to students of five Spring Branch Independent School District schools¹ over two academic terms (Fall of 2018 and Spring of 2019):

Number of Students Who Attended At Least One Day of BGCGH By School and Term



¹The Womens' Home site served students from Treasure Forest Elementary School.

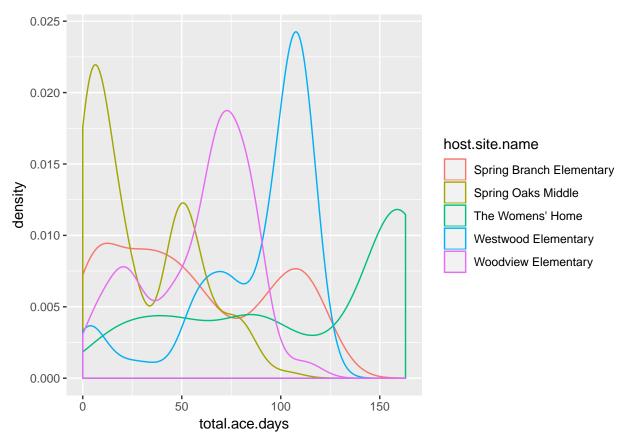
Student Records by Grade and School

Data provided included students from Pre-Kindergarden to 8th grade.

	Pre-K	Kindergarten	1st	2nd	3rd	4th	5th	6th	$7 \mathrm{th}$	8th	Total
Spring Branch Elementary	0	0	0	70	84	84	92	0	0	0	330
Spring Oaks Middle	0	0	0	0	0	0	0	144	58	81	283
The Womens' Home	2	2	53	76	51	63	75	0	0	0	322
Westwood Elementary	0	46	58	68	52	73	49	0	0	0	346
Woodview Elementary	0	0	0	0	132	101	86	0	0	0	319
Total	2	48	111	214	319	321	302	144	58	81	1600

BGCGH Texas $\mathbf{ACE}^{\mathrm{TM}}$ Program Days Attended

Again, it must be stated that the interpretation of this variable could not be confirmed by BGCGH.



BGCGH Site	Average Program Days Attended	IQR	Percent of Members Who Attended 45 or More Days
Spring Branch Elementary	54.82	21 - 93	55.15%
Spring Oaks Middle	29.07	5 - 50	38.87%
The Womens' Home	109.27	59 - 161	82.61%
Westwood Elementary	86.35	72 - 109	89.31%
Woodview Elementary	58.28	39 - 78	71.16%

Academic Grades

Five measures of academic grades were present in the data and are included in this report. These grades represent student performance in the core courses of reading, math, social studies, and science, as well as a measure of overall grades. The rating of overall grades was assigned at the discretion of BGCGH staff after reviewing both that student's core course grades and other grades not included in this report.

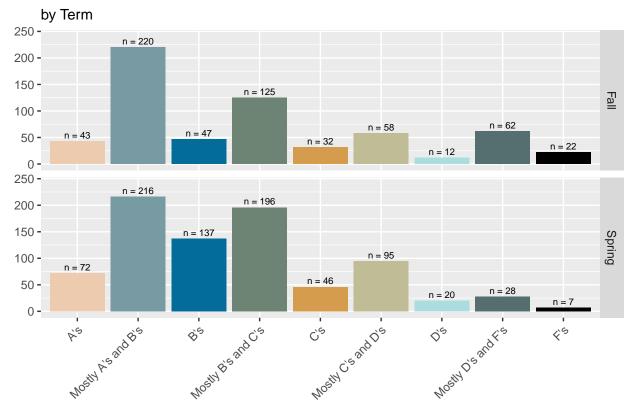
When reporting numeric values for grades, a traditional 0 to 4 grade point scale is utilized in which 0 represents a grade of 'F' and 4 represents a grade of 'A.' In the case of overall grades, which included reporting options of "Mostly A's and B's" and so forth, the middle point between the two grades is assigned where appropriate. For example "Mostly A's and B's" is scored as 3.5, or halfway between the 4.0 of 'A' and the 3.0 of 'B.'

Pre-Kindergarten or Kindergarten students are not included in any analysis or reporting of grades here due to the small number of students in those grades and a different grading scale for those students.

All Grades by School

Overall Grades

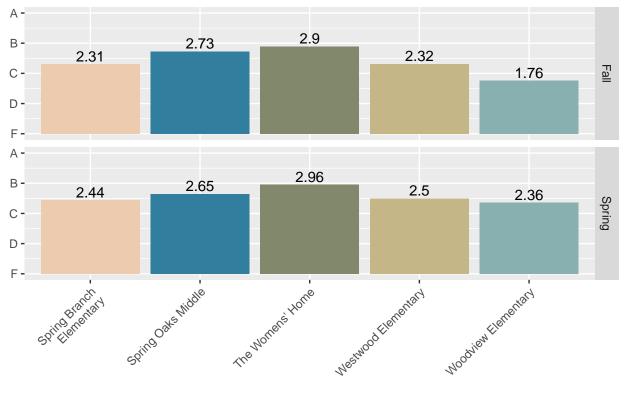
Distribution of Overall Student Grades



Reading

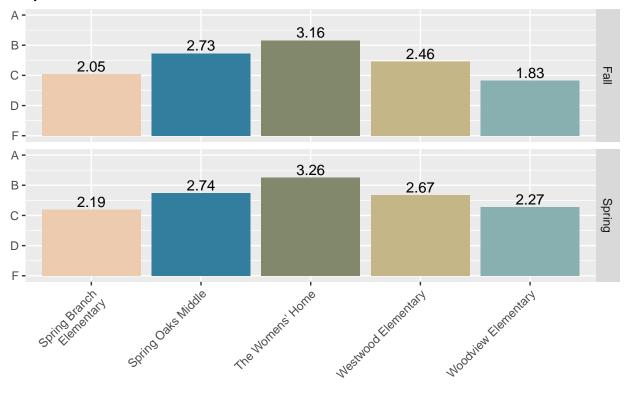
Reading text - analyses of reading grades indicates that

Average Reading Grade by BGCGH Site and Term



 $\label{eq:Math} \mbox{Math text - analyses of math grades.} \ . \ .$

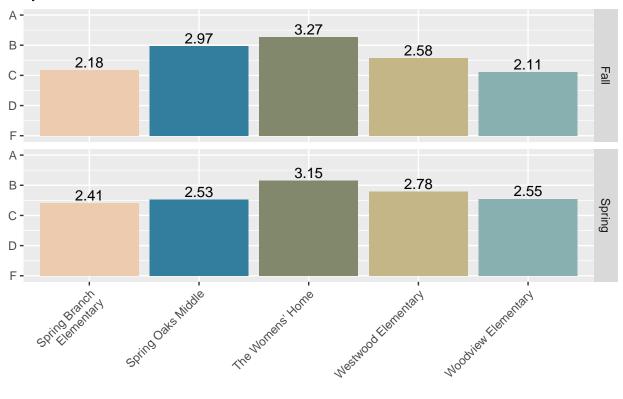
Average Math Grade by BGCGH Site and Term



Science

Science text - analyses of science grades

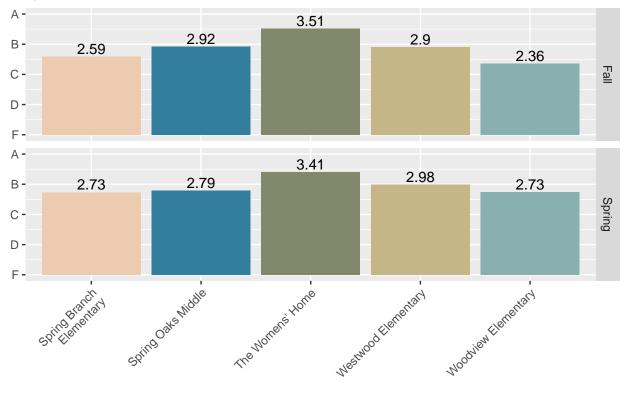
Average Science Grade by BGCGH Site and Term



Social Studies

Social studies text - analyses of social studies grades indicates that

Average Social Studies Grade by BGCGH Site and Term



School Days Absent

The average number of school days absent per term was 4.1. As detailed in the table to the right, students at Spring Oaks Middle School had a slightly higher average number of absences per term than any of the other campuses. That may be explained by the fact that Spring Oaks was the only middle school in the sample, while all four others are elementary schools. It is also worth noting that

BGCGH Site	Average	Median	IQR	Max
Spring Branch Elementary	3.6	2	0 - 6	25
Spring Oaks Middle	6.6	3	2 - 9	59
The Womens' Home	3.6	2	0 - 5	49
Westwood Elementary	4.1	3	0 - 6	28
Woodview Elementary	3.2	2	0 - 5	20

Spring Oaks Middle School had a higher percentage of students with 20 or more days absent both in the Fall and Spring terms than any other site, with 9% absent 20 or more days in the Spring term and 5% in the Fall term, while no other site had a rate higher than 3% in a given term.

Criminal Referrals

There was 1 criminal referral reported in the entire dataset and so additional analyses of that variable would not be appropriate and were not conducted.

Non-Criminal Referrrals

There were a total of 73 non-criminal referrals reported in the dataset, with 46 students reported to have at least one non-criminal referral. A disparity exists between terms in the number of non-criminal referrals reported, with a higher number of such referrals being reported in the Fall term than in the Spring term. This dispairity between terms is consistent in each site that reported non-criminal referrals, but an explanation for the pattern could not be immediately identified. It must also be noted that Spring Oaks Middle School did not report any non-criminal referrals in the entire dataset.

BGCGH Site	Percentage of Students with a Non-Criminal Referal
Spring Branch Elementary	2%
Spring Oaks Middle	0%
The Womens' Home	8%
Westwood Elementary	3%
Woodview Elementary	1%

Promotion to Subsequent Grade

Promotion data is incorrect - awaiting instruction from Dexter, but may need to drop this variable

Summer School Required

Comment data (i.e., summer school required data) is incorrect - awaiting instruction from Dexter, but may need to drop this variable

Analyses Based on Regular Attendance

Defining Regular Attendance

Texas ACE^{TM} defines regular participation as attending the program 45 days or more during the annual grant period, which includes fall, spring, and summer academic terms. Only students with 45 days of documented program attendance in accordance with program documentation and attendance policies, will be counted toward Texas ACE^{TM} student service goals.

For this report, ACE program participants with 45 or more days of attendance are defined as *regular*; those with 1-44 days of attendance as *non-regular*.

Again, it must be emphasized that attendance data collection and management procedures do not allow for a confident assignment of regular or non-regular attendance and so three different, but all potentially valid, methods of understanding the data are presented.

Regular Attendance in the Spring

Var1	Freq
FALSE	342
TRUE	579

Regular Attendance by School and Term

Academic Grades by Regular Attendance

School Days Missed by Regular Attendance

Referrals by Regular Attendance

Conclusions and Implications

Future Recommendations - Contiuous Quality Improvement Language

Appendices

Appendix A: Data Cleaning Notes

There were 1622 records in the complete dataset after combining the 10 separate data files (5 campuses x 2 terms each).

Have dropped 2 member.ids entirely because they had multiple records in a single term and for whom it is unclear which to keep.

Dropped 1 record of a member.id with a different grade than the same member.id for both fall and spring terms.

Dropped 1 record that was entirely missing data except for a single variable (from the Woodview Spring File).

0 had no Membership ID listed 3 contained descriptions of the student (e.g., "Transfer"), but not a Membership ID number.

Appendix B: Calculation of Program Days Attended Variable and Alternate Analyses

The Program Days Attended variable was included to capture the number of days that a given student (represented by a unique Membership ID) attedned Texas ACE^{TM} programming at one the five BGCGH sites. It was calculated by...

Calculated in this manner, no Membership ID had more than the maximum number of possible days (i.e., 165) or fewer than 0 in a given term.