

Evaluation of Young Audiences of Maryland

2016 Summer Arts and Learning Academies Program Goals

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Evaluation of Young Audiences 2016 Summer Program Goals

Young Audiences of Maryland (YA) has been providing arts enrichment to summer learning academies over the last nine years. In the summer of 2016, YA operated four Baltimore City Public Schools (City Schools) early elementary summer program sites at the following elementary schools: Fort Worthington, Gardenville, Thomas Jefferson, and William Pinderhughes.

YA commissioned this evaluation to determine if the summer programs operated by YA met attendance, academic achievement, socio-emotional and satisfaction goals set by the organization. Specifically:

1. The program will be a highly engaging learning experience for students that will encourage high rates of attendance
2. Students will gain math knowledge and skills by the end of the program
3. Students will improve individual writing skills in both content and structure
4. Students will show growth in their social emotional development, specifically in the competencies of relationship skills, goal directed behavior and self-awareness at the conclusion of the program
5. The summer program will be a joyful learning experience that students will enjoy
6. Parents will be satisfied with their children's experience with the program

These goals were assessed through descriptive analyses of data that was generated by the program and provided to the evaluator. Analyses were conducted only on data generated from program participants and no attempt was made to create a comparison group of students who did not attend the program. While the lack of a comparison group limits the ability to provide strong evidence of program effects on student outcomes (attendance, growth in academic skills), the

analyses does provide an assessment of student enjoyment and performance that can be used by YA to plan and improve future implementation of the program.

Overall, this evaluation finds that YA was able to meet the majority of the goals that they set for the program in the summer of 2016. The program met or exceeded their stated goals in academics (math and writing), as well as in student social-emotional growth. The program was also able to engender high levels of parental satisfaction with their child's participation in the program. The program was less successful in reaching its attendance goals, as only 50% of students attended approximately 75% of the program. However, it should be noted that compared to other summer programs that have operated in Baltimore over recent years, this level of attendance is relatively strong. Additionally, the program faced facility challenges that may have impacted student attendance. The program's attainment of the student enjoyment of the program goal was less clear than other goals. While the program did not meet the stated goal of 80% student agreement that they would recommend the program to their friends (the program attained 58% agreement), only 11% of students stated that they would not recommend the program to their friends.

The report is structured in sections that address each of the program goals in turn. In each section, I provide a brief overview of the data and measures used for the analyses and my findings based on the analyses. Each section also provides a brief discussion of each goal based on the analyses.

The Summer Arts and Learning Academy will be a highly engaging learning experience for students and will encourage high rates of attendance.

Research has shown that consistent attendance in a summer program is crucial for student learning gains. In recognition of this, YA set as an attendance goal for the program that “at least 75% of all eligible enrolled students would attend 75% of the program.” An *eligible enrolled student* was defined as a student that attended at least one day of the program. The program operated for 23 days; two sites closed due to excessive temperatures and operated 22 days. Attendance was calculated for each student as the number of days present divided by the total number of days the student was on roll.

Across all sites, the mean attendance at the summer program was 66% (see Table 1; Total row). Given that the mean can be sensitive to outliers (e.g. students with few days of attendance), the median is a better measure of the “average” attendance. Overall, the median attendance was 74%, which means that 50% of students had attendance that was greater than 74%, while the remaining 50% had attendance below 74%. It is important to note that two of the sites faced persistent and sustained periods without air conditioning in the building. The average temperature in Baltimore during the five weeks of the program was 90 degrees. At William Pinderhughes there was no air conditioning in the building for the first 9 program days. At Fort Worthington the air conditioning was not operational until July 25th (14 program days).

Table 1: Mean and Median Attendance across Sites

Site	Mean	Median	N
Fort Worthington	59.9	63.6	194
Gardenville	69.7	78.3	245
Thomas Jefferson	69.8	78.3	205
William Pinderhughes	63.4	68.2	152
Total	66.1	73.8	796

To specifically address the program goal of 75% of students attending at least 75 percent of the program, I created four attendance categories (below 25%, between 25 and 49%, between 50 and 74%, 75% and above) shown in Table 2. Overall, the program had 47% of students attending at least 75% of the program. There was some variation across sites with respect to this category ranging from 38% at the Fort Worthington site, to 52% at the Gardenville site.

Table 2: Attendance Categories by Site

Attendance Band	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
< 25%	17.0 (33)	8.2 (20)	8.8 (18)	20.4 (31)	12.8 (102)
25% - 49%	18.0 (35)	12.7 (31)	12.7 (26)	9.2 (14)	13.2 (105)
50% - 74%	27.3 (53)	25.3 (62)	25.9 (53)	23.7 (36)	25.5 (203)
75%+	37.6 (73)	51.4 (126)	52.2 (107)	46.7 (71)	47.1 (375)
Total	100.0 (194)	100.0 (245)	100.0 (205)	100.0 (152)	100.0 (796)

Note: Percent of students in each attendance band. Number of students in parentheses. Individual student attendance calculated as *Days Enrolled/Days Present*.

While the program did not strictly meet the goal of 75% of participants attending at least 75% of the program, it is worth noting that attendance in summer programs in Baltimore City is

generally quite low and it is not uncommon for half of students to miss more than half of the days in a summer program¹. Given this, it is important to note that the median student attended approximately 75% of the YA program. A deeper examination of variation in attendance by site, or the collection of systematic data from families on reasons for absences in order to assess if there are specific reasons for absences that the program could address to increase attendance.

Students will gain math knowledge and skills by the end of the program

In order to assess student gains in math knowledge and skills, the program administered a curriculum-based assessment that utilized only questions from the curriculum (EngageNY) module assessments. The assessment for each grade level was based on the specific standards covered in the lessons taught during the program for that grade. Students were administered the same assessment as the pre- and posttest. The program operationalized this goal as, “75% of students who attended at least 75% of the program will show growth on the assessment from the first to the last week of the program.”

As seen in Table 3 (Positive row, Total column), 79% of students who attended 75% of the program, and for whom a pre- and posttest were administered, had a positive change in their math score from the first, to the last week of the program. Three of the four sites had over 75% of the students who attended at least 75% of the program exhibit positive change on this assessment. It is important to note that only 271 out of 781 total students (35%) met the attendance criteria and had both pre- and posttests. Care should be taken in generalizing to the group of students who did not meet the attendance criteria and who were not present for one or both of the tests in the first and last week of the program.

¹ This statement is based on evaluating numerous summer programs in Baltimore over the last 7 years.

Table 3: Math assessment score changes across sites for students who attended at least 75% of the program

Math Score Change Category	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
Negative	4.0 (2)	13.2 (14)	23.2 (13)	6.8 (4)	12.2 (33)
No Change	10.0 (5)	6.6 (7)	14.3 (8)	5.1 (3)	8.5 (23)
Positive	86.0 (43)	80.2 (85)	62.5 (35)	88.1 (52)	79.3 (215)
Percent Tested	26.6 (50)	44.4 (106)	27.5 (56)	39.3 (59)	34.7 (271)

Table 4 presents pre-post scores on the mathematics assessment by grade and site, and shows that pre- to posttest changes varied across sites. Across sites, changes in scores were generally stronger for younger students than for older students, with the largest gains evidenced among Kindergarten students.

Table 4: Pre-post test scores by grade and site regardless of attendance level

Grade	Fort Worthington				Gardenville			
	n	Pre	Post	Change	n	Pre	Post	Change
K	21	7.5	16.7	9.2	27	10.6	20.1	9.5
1	16	8.0	12.7	4.7	29	8.1	10.1	2.0
2	14	9.1	11.9	2.8	17	7.1	9.1	2.0
3	7	6.4	7.3	0.9	23	4.6	6.7	2.1
4	6	7.8	9.0	1.2	12	4.7	7.3	2.6
5	5	4.8	6.2	1.4	19	4.7	10.5	5.8

Grade	Thomas Jefferson				William Pinderhughes			
	n	Pre	Post	Change	n	Pre	Post	Change
K	20	10.3	13.9	3.6	19	13.7	20.9	7.2
1	16	6.7	12.9	6.2	13	5.2	10.4	5.2
2	8	8.8	9.6	0.8	17	5.8	11.6	5.8
3	9	5.6	8.9	3.3	6	5.0	11.7	6.7
4	19	2.5	4.7	2.2	10	4.0	6.8	2.8
5	8	6.5	5.4	-1.1	7	5.3	10.0	4.7

Across all sites (see Table 5), students who took both pre- and posttest mathematics assessments showed average gains that expressed as effect sizes were between .6 and 1.0 standard deviation units. An effect size is a way of standardizing scores so that they are more easily compared. This is important in this case as the assessments varied by grade and students gain mathematics skills at different rates at different ages. Effect sizes were calculated as the mean difference between the pre- and posttest for each grade divided by the pooled standard deviation (pre- and posttest) for each grade. These effect sizes are generally considered as large and are of a size that should be expected on a curriculum-based measure among a group of students who were exposed to the program through good attendance (assumed given the student had to be present during the first and last week of the program in order to have both pre- and posttests).

Table 5: Pre-post test scores by grade for all sites and regardless of attendance level

Grade	n	Pre	Post	Change	ES
K	87	10.5	18.0	7.5	1.0
1	74	7.3	11.3	4.0	0.8
2	56	7.4	10.6	3.2	0.9
3	45	5.1	7.9	2.8	1.0
4	47	4.1	6.3	2.2	0.6
5	39	5.2	8.8	3.6	1.1
Total	348	7.2	11.5	4.3	0.7

It is important to remember that it is not possible for this evaluation to say that the program *caused* student growth in mathematics knowledge and skills, as these analyses are unable to disentangle program effects from student natural growth or other non-program factors. Despite this, with the analyses presented above, it appears that YA was successful in reaching its goal of increasing students' mathematics knowledge and skills, as on average, students who took pre- and posttests during the first and last week of the program showed positive growth in mathematics on a program-developed, curriculum-based mathematics assessment. Across all sites, 79% of students who attended at least 75% of the program, and who took both a pre- and posttest, had a positive change in their score on the program's mathematics assessment that was adapted from EngageNY assessments.

Students will improve individual writing skills in both content and structure

Students were administered a writing prompt for each grade level during the first week of the program. Students were given additional writing prompts during the course of the program and were given feedback. During the last week, students completed a posttest writing prompt. Each student's teacher scored the pre- and posttest writing prompts on a four-point scale for both structure and content. The scoring rubric was differentiated for each grade level. For the purposes of this assessment, "structure" refers to the technical side of the writing process including, but not limited to punctuation, grade level appropriate spelling and grammar, as well as the use of topic sentences, supporting details and consistency in style. "Content" included using accurate vocabulary, making descriptions in detail, and clear communication.

Approximately 60% of students who were scored on the pre- and posttest writing prompts showed positive change in their structure (59.8%) and content (59.4). Approximately a

third of students showed no change on the scores from pre- to posttest, while approximately 10% showed declines in these scores (see Total Column, Tables 6 and 7).

Table 6: Change in writing structure scores by site for students attending at least 75% of the program

Writing Structure Change Category	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
Negative	9.1 (4)	13.6 (14)	18.4 (7)	5.6 (2)	12.2 (27)
No Change	27.3 (12)	31.1 (32)	23.7 (9)	16.7 (6)	26.7 (59)
Positive	63.6 (28)	55.3 (57)	57.9 (22)	77.8 (28)	61.1 (135)
Percent Tested	23.4 (44)	43.1 (103)	18.6 (38)	24.0 (36)	28.3 (221)

Table 7: Change in writing content scores by site for students attending at least 75% of the program

Writing Content Change Category	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
Negative	20.5 (9)	10.7 (11)	13.2 (5)	2.8 (1)	11.8 (26)
No Change	20.5 (9)	37.9 (39)	42.1 (16)	8.3 (3)	30.3 (67)
Positive	59.1 (26)	51.5 (53)	44.7 (17)	88.9 (32)	57.9 (128)
Percent Tested	23.4 (44)	43.1 (103)	18.6 (38)	24.0 (36)	28.3 (221)

There was variation across sites in both the changes in structure and content scores. Across sites and grades, all students who took both tests, regardless of attendance, gained between .4 and .9 points on their writing structure scores and between .7 and .9 points on their writing content scores pre- to posttest (see Table 9).

Table 8: Overall structure and content pre- and posttest writing scores by grade regardless of attendance level

Grade	Structure			Content				
	n	Pre	Post	Change	n	Pre	Post	Change
0	48	1.5	2.4	0.9	43	1.4	2.1	0.7
1	59	1.9	2.3	0.4	57	1.8	2.5	0.7
2	59	2	2.9	0.9	42	2.1	3	0.9
3	44	1.7	2.5	0.8	39	1.8	2.5	0.7
4	28	1.8	2.5	0.7	23	1.7	2.4	0.7
5	37	2.5	3	0.5	27	2.3	3.1	0.8
Total	275	1.9	2.6	0.7	231	1.8	2.6	0.8

The evidence presented above indicates that YA was able to meet the goal of improving student individual writing skills in both content and structure, as approximately 60% of students who took both a pre- and posttest writing assessments had a positive change in these scores. On average, students who took both pre- and posttests writing assessments gained .7 points in structure and .8 points in content on a four-point scale.

Students will show growth in their competency in terms of relationship skills, goal directed behavior and/or self-awareness at the conclusion of the program.

Ten randomly selected students from each classroom were given the Devereux Student Strengths Assessment (DESSA) to assess their competency in relationship skills, goal directed behavior and self-awareness. The DESSA is a research-based, norm-referenced behavior rating scale that is used to assess student social-emotional competencies that are shown to be protective factors in children's development. These assessments were scored by artist/teacher pairs and were conducted on the fifth day of the program and again at the end of the last week of the program. Using these assessments, YA set the specific goal as, "Of students who attend at least 75% of the program, 70% will show improvement in at least one out of the three measured competencies."

Among students who attended 75% of the program and were administered pre- and posttest DESSA assessments (n = 96), 70.8% showed growth in at least one competency area over the course of the program (see Table 10; Second Panel). Among all students who took both assessments, regardless of attendance (n = 179), 69.8% showed growth in at least one competency area (Table 10; First Panel). Across grades, the percentages of students in both attendance groups showing growth in at least one area are relatively similar, with the notable exception of 5th grade. While not specifically a program goal, it is important to note that across both attendance samples and grades, roughly 30% of students made gains in 2 or 3 competency areas during the course of the program (see Table 11).

Table 9: Percent and Counts of Students Showing At Least One DESSA Competency Gain by Grade and Attendance Sample

Grade	Full Sample			Attended > 75% Sample		
	0	1+	Total	0	1+	Total
K	20.6 (7)	79.4 (27)	100.0 (34)	20.0 (3)	80.0 (12)	100.0 (15)
1	39.6 (19)	60.4 (29)	100.0 (48)	28.6 (8)	71.4 (20)	100.0 (28)
2	20.0 (6)	80.0 (24)	100.0 (30)	20.0 (4)	80.0 (16)	100.0 (20)
3	27.3 (6)	72.7 (16)	100.0 (22)	28.6 (2)	71.4 (5)	100.0 (7)
4	25.9 (7)	74.1 (20)	100.0 (27)	31.3 (5)	68.8 (11)	100.0 (16)
5	50.0 (9)	50.0 (9)	100.0 (18)	60.0 (6)	40.0 (4)	100.0 (10)
Total	30.2 (54)	69.8 (125)	100.0 (179)	29.2 (28)	70.8 (68)	100.0 (96)

Table 10: Percent and Counts of Students by Number of Competency Gains by Grade and Attendance Sample

Grade	Full Sample					Attended > 75% Sample				
	0	1	2	3	Total	0	1	2	3	Total
K	20.6 (7)	14.7 (5)	32.4 (11)	32.4 (11)	100.0 (34)	20.0 (3)	13.3 (2)	26.7 (4)	40.0 (6)	100.0 (15)
1	39.6 (19)	6.3 (3)	31.3 (15)	22.9 (11)	100.0 (48)	28.6 (8)	10.7 (3)	32.1 (9)	28.6 (8)	100.0 (28)
2	20.0 (6)	30.0 (9)	26.7 (8)	23.3 (7)	100.0 (30)	20.0 (4)	25.0 (5)	30.0 (6)	25.0 (5)	100.0 (20)
3	27.3 (6)	9.1 (2)	13.6 (3)	50.0 (11)	100.0 (22)	28.6 (2)	28.6 (2)	14.3 (1)	28.6 (2)	100.0 (7)
4	25.9 (7)	11.1 (3)	25.9 (7)	37.0 (10)	100.0 (27)	31.3 (5)	6.3 (1)	31.3 (5)	31.3 (5)	100.0 (16)
5	50.0 (9)	11.1 (2)	33.3 (6)	5.6 (1)	100.0 (18)	60.0 (6)	0.0	40.0 (4)	0.0	100.0 (10)
Total	30.2 (54)	13.4 (24)	27.9 (50)	28.5 (51)	100.0 (179)	29.2 (28)	13.5 (13)	30.2 (29)	27.1 (26)	100.0 (96)

Overall, more than 50% of students who attended 75% of the program and who were administered the DESSA pre and post assessments made gains in the Self-Awareness and Relationship Skills competencies, while less than half (45.8%) made gains in the Goal Directed Behavior competency (see Table 11).

Table 11: Percent and counts of students with 75% attendance who made gains on individual DESSA skills by grade

Grade	Goal Directed Behavior	Relationship Skills	Self Awareness
K	60.0 (9)	73.3 (11)	53.3 (8)
1	46.4 (13)	50.0 (14)	64.3 (18)
2	45.0 (9)	45.0 (9)	70.0 (14)
3	42.9 (3)	57.1 (4)	42.9 (3)
4	50.0 (8)	62.5 (10)	50.0 (8)
5	20.0 (2)	20.0 (2)	40.0 (4)
Total	45.8 (44)	52.1 (50)	57.3 (55)

Note. Cell percentages are calculated as the cell n (in parentheses) divided by the total number of students who attended 75% of the program who were given a pre- and pos-test DESSA assessment for the given grade. Total number of students by grade: K = 15; 1st = 28; 2nd = 20; 3rd = 7; 4th = 16; 5th = 10; Total = 96.

The summer program will be a joyful learning experience that students will enjoy

The program had a stated goal of 80% of students would recommend the program to a friend. Program developed surveys were administered to students at the beginning and end of the program. The main question of interest asked during the post survey was, “Would you recommend the Young Audiences Summer Learning Academy to other kids?”

The program was also interested in the extent to which participants enjoyed art, reading and mathematics, students’ perceptions of their ability to reflect on their work, as well as students’

perceptions of their ability to use art to express themselves. On the pre and post surveys, students were asked to respond to these prompts on a 4-point scale (1 = most negative; 4 = most positive).

A majority of students who took the post survey (58%) indicated that they would recommend the program to other kids (58%) while a small minority (11%) responded negatively to this prompt (31% said “Maybe”). It is important to note that the response rate to this question was low, only 33% of students who took a pre or post survey responded to this question.

The majority of students who took the pre and post surveys indicated strong positive agreement (score = 4) with the six main questions (see Table 12). Among students who had responses on both the pre and post survey, a majority of students either maintained or increased their level of enjoyment (art, reading, writing, math) or perception of ability (reflecting, using art to express) (see Table 13).

The evidence presented indicates that overall, students enjoyed participating in the summer program and would recommend the program to their friends. While the number of negative recommendation responses and the number of respondents who indicated a decrease in enjoyment were relative low, YA should consider exploring further potential reasons for these negative responses that could be lead to program improvement ideas.

Table 12: Tabulations of main student questions on pre and post surveys regardless of attendance

Score	Enjoy Art		Enjoy Reading		Enjoy Writing		Enjoy Math		Good at Reflecting		Good at Art Expressing	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	2.9 (15)	2.3 (9)	10.7 (56)	10.9 (43)	7.5 (39)	6.9 (27)	8.1 (42)	11.2 (43)	7.4 (38)	7.9 (30)	8.3 (42)	3.4 (13)
2	3.6 (19)	1.8 (7)	9.9 (52)	10.2 (40)	11.6 (60)	14.7 (57)	10.4 (54)	6.5 (25)	9.4 (48)	8.7 (33)	8.1 (41)	6.3 (24)
3	14.4 (76)	18.0 (69)	28.8 (151)	28.8 (113)	21.4 (111)	18.8 (73)	21.1 (109)	20.8 (80)	28.0 (143)	31.4 (119)	19.3 (98)	21.1 (81)
4	79.1 (416)	77.9 (299)	50.6 (265)	50.1 (197)	59.5 (308)	59.6 (232)	60.3 (312)	61.6 (237)	55.2 (282)	52.0 (197)	64.4 (328)	69.2 (265)

Table 13: Student changes in response to enjoyment and ability questions pre- to post survey regardless of attendance

	Enjoy Art		Enjoy Reading		Enjoy Writing		Enjoy Math		Reflecting		Expression	
	n	Pct.	n	Pct.	n	Pct.	n	Pct.	n	Pct.	n	Pct.
Decreased	48	15.3	74	23.2	75	23.9	59	18.9	87	28.5	55	18.2
Maintained	224	71.3	172	53.9	170	54.1	196	62.8	145	47.5	179	59.1
Increased	42	13.4	73	22.9	69	22.0	57	18.3	73	23.9	69	22.8
Total	314		319		314		312		305		303	

Parents will be Satisfied with their Children’s Experience with the Program

At the end of the program, an exit survey was administered to parents. Parent satisfaction was measured by parent responses to two survey items. First, parents were asked the following question: “Using a scale from 1 to 10, with 1 representing “very dissatisfied” and 10 representing “very satisfied”, please indicate your overall level of satisfaction with the Young Audiences Summer Arts & Learning Academy.” The second question asked parents to agree or disagree

with the following: “I would recommend the Young Audiences summer program to another parent.” A total of 187 parents completed the survey.

Survey responses from parents indicate that YA met their goal of parents being satisfied with their children’s participation in the program. Parents overwhelmingly indicated that they were very satisfied with the program, as almost two-thirds answered, “10 – very satisfied” and fully 90% of parents rated their satisfaction between an 8 and a 10 (see Table 14).

Table 14: Parent Ratings of Satisfaction with Program

Rating	Coun t	Pct.	Cum. Pct.
10	111	59.4	59.4
9	25	13.4	72.7
8	27	14.4	87.2
7	4	2.1	89.3
6	11	5.9	95.2
5	1	0.5	95.7
4	0	0.0	95.7
3	1	0.5	96.3
2	1	0.5	96.8
1	1	0.5	97.3
No Response	5	2.7	100.0
Total	187	100.0	

Similarly, parents overwhelmingly indicated that they would recommend the program to another parent (95%; see Table 15). Only one parent indicated that they would not recommend the program to another parent.

Table 15: Count and Percentage of Parents Who Would Recommend the Program to another Parent

Response	Count	Pct.
Agree	173	95.1
Not Sure	8	4.4
Disagree	1	0.5
No Response	5	2.7
		100.
Total	187	0

Conclusions

Overall, this evaluation finds that YA was able to meet the majority of the goals that they set for the program in the summer of 2016. The program met or exceeded their stated goals in academics (math and writing), as well as in student social-emotional growth. The program was also able to engender high levels of parental satisfaction with their child’s participation in the program. The program was less successful in reaching its attendance goals, as only 50% of students attended approximately 75% of the program. However, it should be noted that compared to other summer programs that have operated in Baltimore over recent years, this level of attendance is relatively strong. Additionally, the program faced facility challenges that may have affected student attendance. The program’s attainment of the student enjoyment of the program goal was less clear than other goals. While the program did not meet the stated goal of 80% student agreement that they would recommend the program to their friends (the program attained 58% agreement), only 11% of students stated that they would not recommend the program to

their friends. While this evaluation was not designed to provide causal evidence of program impacts, YA can use this report for future program improvement and planning. Further, YA can use this report as a supplement to the final summer evaluation that is being conducted by City Schools that will look at program participants' summer learning gains in mathematics and literacy on district assessments.

Appendix:

Below are the Math and Writing Scores for all students with pre- and posttests regardless of attendance.

Table 16: Math score changes all students with pre and posttests

Math Score Change Category	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
Negative	5.8 (4)	13.0 (18)	22.2 (20)	8.0 (6)	12.9 (48)
No Change	11.6 (8)	10.1 (14)	11.1 (10)	5.3 (4)	9.7 (36)
Positive	82.6 (57)	76.8 (106)	66.7 (60)	86.7 (65)	77.4 (288)
Percent Tested	36.7 (69)	57.7 (138)	44.1 (90)	50.0 (75)	47.6 (372)

Table 17: Writing structure score changes all students with pre and posttests

Writing Structure Change Category	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
Negative	8.9 (5)	12.2 (18)	13.5 (7)	4.9 (2)	10.8 (32)
No Change	25.0 (14)	35.4 (52)	26.9 (14)	17.1 (7)	29.4 (87)
Positive	66.1 (37)	52.4 (77)	59.6 (31)	78.1 (32)	59.8 (177)
Percent Tested	29.8 (56)	61.5 (147)	25.5 (52)	27.3 (41)	37.9 (296)

Table 18: Writing content score changes all students with pre and posttests

Writing Content Change Category	Site				Total
	Fort Worthington	Gardenville	Thomas Jefferson	William Pinderhughes	
Negative	16.1 (9)	10.9 (16)	9.6 (5)	2.4 (1)	10.5 (31)
No Change	23.2 (13)	38.1 (56)	42.3 (22)	9.8 (4)	32.1 (95)
Positive	60.7 (34)	51.0 (75)	48.1 (25)	87.8 (36)	57.4 (170)
Percent Tested	29.8 (56)	61.5 (147)	25.5 (52)	27.3 (41)	37.9 (296)