

2017-18 Program Evaluation Report

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Description of the Current Program

Through a grant, the PROGRAM serves students in grades K-3 in four regions in a Midwest state. Those regions primarily serve the metropolitan areas in four counties. Students who test below expected reading proficiency in fall, identified as economically disadvantaged and not eligible for other reading services in their district are eligible for PROGRAM.

This K-3 program began serving students in 2012. In the years 2012 through 2018, 9,055 students in grades K-3 have been served through one-on-one and small group tutoring sessions by trained PROGRAM tutors. In the six year period, 60% of the students served by PROGRAM have either met spring reading benchmarks and/or made more than one year of progress in reading.

Trained volunteers can serve up to 30 students at a time. Tutoring sessions range in time from 15-30 minutes. The current goal is twenty-four tutoring sessions per student per year. Project coordinators in each region manage the scheduling of tutors and data collection in fall and spring.

District site supervisor and parent satisfaction surveys done in 2017-18 indicate a very high level of agreement on the impact of the program ($M > 4.00$ on a 5.00 scale for each survey item).

The STATE Revised Code established a third grade-reading guarantee for all students with implementation in the 2013-14 academic year. Individual districts choose the reading test used to benchmark reading growth from a list of state approved reading tests. Although districts participating in the program provide data from one of the approved tests, the differences in the test design and in normed- or criterion-referenced results make analysis challenging. Planning for a quasi-experimental design began during the 2015-16 school year and comparison data was collected in the 2016-17 and 2017-18 school years. This change in data collection allowed for a comparison of the progress of students who participate in the program tutoring with students who did not. Comparison group students were not matched on demographic or achievement variables, and additional interventions received from the school were not indicated, limiting the practical utility of the statistical analysis.

Unlike the state of Minnesota that uses the same benchmark test for all students, methodology in STATE's quasi-experimental design includes data from multiple tests. Though comparison data for 2017-18 did not meet all requirements for a truly quasi-experimental design, the numbers of cases of comparison and treatment groups did allow for a repeated measures analysis. Analysis of the percentage of students meeting benchmark showed that the treatment group began the year with a lower proportion of students meeting benchmark than in the comparison group, but that the gap had closed by spring, when equal percentages of students in each group met the benchmark (Figure 1).

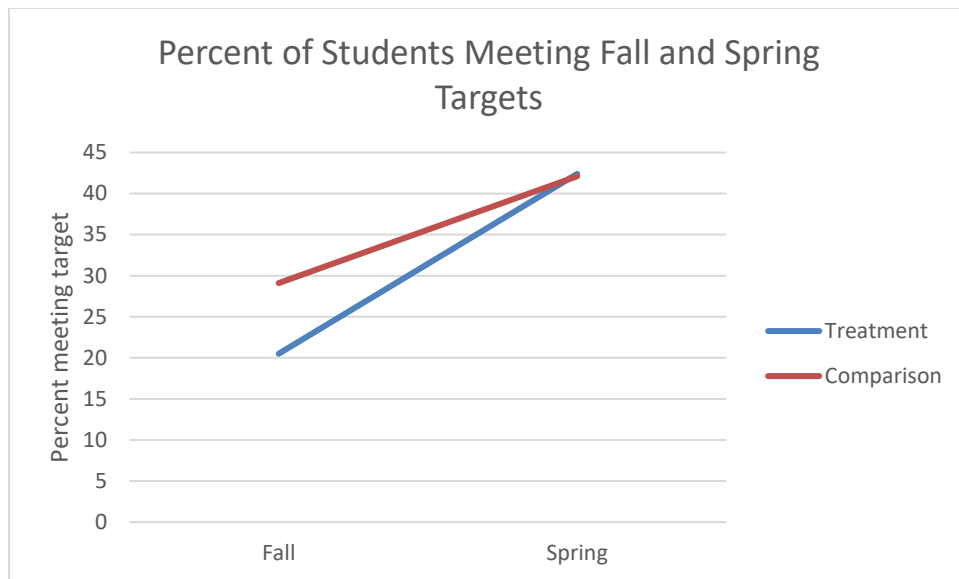


Figure 1. Percent of Students Meeting Fall and Spring Targets

A more robust quasi-experimental design was developed for data collection in the 2018-19 school year. The data collected during the 2018-19 school year will be used as a pilot quasi-experimental analysis. Recommendations from the analysis will be used to improve the quasi-experimental design moving forward.

Preparation for Analysis

Data analysis was conducted using data from students who had complete data for both fall and spring, and who were assessed with the same assessment on both measurement occasions. Students who were assessed using measures with no available benchmark (i.e., nonsense word fluency, Running Record, etc.) were not included in this analysis.

The final data set included data from students who had taken Fountas & Pinnell (F &P), Measuring Academic Progress (MAP), iReady, STAR Early Literacy and STAR Reading assessments. The number of students not included in the analysis and the reason for their exclusion are below:

- 88 cases were removed that had incomplete data or had moved from the school (0 in comparison sample)
- 75 cases from screener measures were removed (25 in comparison sample)
- 50 cases were removed from assessments with N<39 (4 in comparison sample)
- 54 cases were removed when fall and spring measures were inconsistent (5 in comparison sample)

Analysis Strategy

All analyses were done separately for each of the six assessments, since each assessment has its own scoring scheme and benchmarks. Hence, results are presented for each assessment. Results are presented for both treatment and comparison groups.

For each assessment, student achievement at fall and spring measurement occasions was documented for each grade level and for the overall student sample. The percentage of students who met the benchmark at each measurement occasion was also calculated for each grade level and the overall student sample. Descriptive statistics are reported for how many students were included in the sample for each assessment at each grade level.

The overall proportion of students meeting the spring benchmark, across all assessments, was calculated for each year and is reported according to region. Because 3rd grade is the year at which students are expected to meet a minimum reading level in STATE, the percentage of 3rd graders who met the benchmark are also reported for each year. Finally, since students who begin tutoring with a considerable deficit may make substantial improvement over the course of a year and still not meet the benchmark, the number of students who made at least one year's worth of growth is reported for each year and grade level. The graphs in the report show data from 2016-17 and 2017-18, which are the two years of analysis for which comparison data is available. The data from 2013-2016 have been archived and is available upon request.

Analyses by Assessment

Fountas & Pinnell (F&P)—Key Findings

- Students in all grade levels improved
- Students improved approximately one grade level in one year
- Treatment group exceeded comparison group from fall to spring in meeting benchmarks in grade 3; no comparison group was available for grade K
- Average reading score from fall to spring showed similar gains for both treatment and comparison groups
- Comparison group regressed from fall to spring in meeting benchmarks in grades 1 and 2 and showed no change in grade 3. K had no comparison group

Table 1: Average Reading Scores and Percent Meeting Benchmark by Grade

2016						2017				
	N	Average Reading Score		Percent Meeting Benchmark		N	Average Reading Score		Percent Meeting Benchmark	
		Fall	Spring	Fall	Spring		Fall	Spring	Fall	Spring
Overall										
Treatment	267	5.22	9.31	29.20	47.20	185	6.49	10.11	21.60	29.20
Comparison	157	6.18	9.99	14.60	40.80	36	6.92	10.92	38.90	33.30
Kindergarten										
Treatment	51	.73	3.86	66.70	74.50	4	.50	6.75	50.00	100.00
Comparison	28	.07	2.79	7.10	57.10	N/A	N/A	N/A	N/A	N/A
1st grade										
Treatment	103	2.60	7.83	16.50	46.60	44	1.86	6.68	11.40	29.50
Comparison	43	2.12	7.23	2.30	30.20	15	3.40	8.33	46.70	40.0
2nd grade										
Treatment	44	6.32	10.18	18.20	20.50	76	5.21	8.71	18.40	21.10
Comparison	31	7.32	10.84	16.10	35.50	16	8.69	12.25	37.50	31.30
3rd grade										
Treatment	69	11.74	15.97	27.50	44.90	61	11.82	14.54	31.10	34.40
Comparison	55	11.84	15.33	27.30	43.60	5	11.80	14.40	20.00	20.00

Table 2: Fall and Spring Benchmarks with Expected Growth

Note: For analysis purposes, letters were converted to numbers, such that A=1, B=2, C=3, etc.

Grade	Fall Benchmark	Spring Benchmark	Expected Growth*
K	A	C	2 letters
1	D	I	5 letters
2	J	M	3 letters
3	N	P	2 letters

*Expected growth was calculated by finding the difference between fall and spring benchmarks

Measuring Academic Progress (MAP)— Key Findings

- Students in K, 1st, 2nd and 3rd grade levels improved
- Average Spring scores for each grade did not meet the benchmarks
- Comparison group showed a higher percentage of students meeting benchmark from fall to spring in all grade levels except 3rd grade
- Changes in average reading scores from fall to spring were similar for all grade levels in both treatment and comparison groups

Table 3: Average Reading Scores and Percent Meeting Benchmark by Grade

MAP	2016					2017				
	N	Average Reading Score		Percent Meeting Benchmark		N	Average Reading Score		Percent Meeting Benchmark	
		Fall	Spring	Fall	Spring		Fall	Spring	Fall	Spring
Overall										
Treatment	505	162.07	178.99	15.00	38.20	597	160.55	177.22	28.10	44.90
Comparison	294	155.89	175.05	11.60	35.70	270	160.08	175.89	42.60	48.50
Kindergarten										
Treatment	52	131.50	150.17	17.30	26.90	89	130.65	149.18	24.70	34.80
Comparison	54	126.06	144.72	0.00	20.40	55	133.25	150.84	36.40	43.60
1st grade										
Treatment	98	150.06	166.66	18.40	32.70	121	152.06	169.72	28.90	40.50
Comparison	49	147.45	167.98	8.20	30.06	62	152.94	168.74	45.20	43.50
2nd grade										
Treatment	128	160.33	177.91	7.80	35.90	172	162.30	180.46	24.40	46.50
Comparison	108	162.02	180.60	18.50	38.00	61	166.90	182.66	47.50	55.70
3rd grade										
Treatment	227	175.24	191.52	17.20	44.50	215	176.30	190.46	32.10	50.20
Comparison	83	172.30	191.73	12.00	45.80	92	176.41	191.20	41.30	50.00

Table 4: Fall and Spring Benchmarks with Expected Growth

Grade	Fall Benchmark	Spring Benchmark	Expected Growth*
K	136	153	17
1	156	172	16
2	169	183	14
3	182	193	11

*Expected growth was calculated by finding the difference between fall and spring benchmarks

STAR Early Literacy—Key Findings

- Students in all grade levels improved
- Substantially more students met the benchmark in spring than in fall
- Treatment group meeting benchmark from fall to spring was higher in K and 1st than comparison group
- Comparison group average reading score changes from fall to spring were higher in K and 1st grade than treatment group
- Comparison group and treatment group were below fall benchmark for grades K and 1st and exceeded spring benchmark for both grade levels

Table 5: Average Reading Scores and Percent Meeting Benchmark by Grade

STAR EL	2016					2017				
	N	Average Reading Score		Percent Meeting Benchmark		N	Average Reading Score		Percent Meeting Benchmark	
		Fall	Spring	Fall	Spring		Fall	Spring	Fall	Spring
Overall										
Treatment	207	486.49	692.77	26.60	88.90	268	495.17	683.56	19.80	57.80
Comparison	124	494.63	692.98	26.60	83.90	96	480.32	689.03	13.50	54.20
Kindergarten										
Treatment	159	454.11	673.27	21.40	91.80	178	450.03	651.19	18.00	56.20
Comparison	92	469.72	673.79	25.00	88.00	58	434.72	643.74	8.60	51.70
1st grade										
Treatment	48	593.77	757.38	43.80	79.20	90	584.44	747.57	23.30	61.10
Comparison	32	566.25	748.16	31.30	71.90	38	549.92	758.16	21.10	57.90

Table 6: Fall and Spring Benchmarks with Expected Growth

Grade	Fall Benchmark	Spring Benchmark	Expected Growth*
K	499	643	144
1	611	742	131

*Expected growth was calculated by finding the difference between fall and spring benchmarks

STAR Reading—Key Findings

- Students in treatment group in all grade levels improved; students in comparison group improved in grades 2 and 3
- Substantially more students met the benchmark in Spring than in Fall in grades 2 and 3
- Treatment group showed higher changes in percent meeting benchmark from fall to spring in grades 1, 2 and 3
- Treatment group showed higher average reading score changes in 1st, 2nd and 3rd grade levels than the comparison group
- Average spring scores did not meet the benchmarks for grade 2 and 3 for treatment and comparison groups
- Expected growth was met for treatment and comparison group at all grades

Table 7: Average Reading Scores and Percent Meeting Benchmark by Grade

STAR reading	2016					2017				
	N	Average Reading Score		Percent Meeting Benchmark		N	Average Reading Score		Percent Meeting Benchmark	
		Fall	Spring	Fall	Spring		Fall	Spring	Fall	Spring
Overall										
Treatment	276	198.14	319.73	20.70	44.90	319	182.33	317.48	12.90	49.20
Comparison	209	176.90	291.82	12.40	40.70	118	163.76	274.81	13.50	54.20
1st grade										
Treatment	25	64.52	111.28	4.00	28.00	25	62.24	174.56	8.00	52.00
Comparison	12	65.00	110.08	0.00	3.30	7	68.43	115.14	28.60	14.30
2nd grade										
Treatment	107	131.77	257.84	17.80	33.60	143	122.38	268.15	11.20	51.70
Comparison	62	81.39	163.14	14.50	32.30	50	117.90	232.94	28.00	36.00
3rd grade										
Treatment	144	270.67	401.90	25.70	56.30	151	258.99	387.85	15.20	46.40
Comparison	135	230.70	367.07	12.60	45.20	61	212.30	326.77	8.20	27.90

Table 8: Fall and Spring Benchmarks with Expected Growth

Grade	Fall Benchmark	Spring Benchmark	Expected Growth*
K	N/A	N/A	N/A
1	71	105	34
2	182	279	97
3	323	392	69

*Expected growth was calculated by finding the difference between fall and spring benchmarks

iReady*—Key Findings

*This is the first year including the iReady assessment. No previous data is available.

- Data from iReady were inconsistent with data from other assessments. As this is the first year that iReady data have been included in the PROGRAM data set, it is possible that data were entered incorrectly by districts. All results should be interpreted with extreme caution.
- Treatment and comparison groups in all grades did not meet the benchmark in spring.
- Treatment group showed higher average reading score change in 2nd grade than the comparison group. There was no comparison group for K.
- Expected growth was met for treatment and comparison group in 1st grade.
- Percent meeting benchmark for fall and spring presented no discernable pattern

Table 9: Average Reading Scores and Percent Meeting Benchmark by Grade

<i>iReady</i>	2017				
	N	Average Reading Score		Percent Meeting Benchmark	
		Fall	Spring	Fall	Spring
<i>Overall</i>					
<i>Treatment</i>	132	405.45	448.72	3.80	1.50
<i>Comparison</i>	30	436.90	474.77	10.00	13.30
<i>Kindergarten</i>					
<i>Treatment</i>	28	343.64	376.61	0.00	0.00
<i>Comparison</i>	N/A	N/A	N/A	N/A	N/A
<i>1st grade</i>					
<i>Treatment</i>	44	378.39	430.93	0.00	2.30
<i>Comparison</i>	5	402.60	461.00	0.00	40.00
<i>2nd grade</i>					
<i>Treatment</i>	45	443.13	489.33	0.00	2.20
<i>Comparison</i>	15	439.00	475.00	20.00	13.30
<i>3rd grade</i>					
<i>Treatment</i>	15	487.13	513.67	33.30	0.00
<i>Comparison</i>	10	450.90	481.30	0.00	0.00

Table 10: Fall and Spring Benchmarks with Expected Growth

Grade	Fall Benchmark	Spring Benchmark	Expected Growth
K	362	424	62
1	434	480	46
2	489	537	48
3	511	561	50

Students Meeting Benchmark by Region and Year—Key Findings

***Due to the anomalous nature of the iReady findings, they are not included in analyses from this point forward. Tables of overall data including iReady are available in the Appendix. ***Students in all grade levels improved in both years for which data are available

- All regions showed positive gains in student reading scores for treatment and comparison groups
- Treatment group students meeting grade level benchmarks in all regions without iReady scores ranged from 42.0% to 53.3% in 2017
- Comparison group students meeting grade level benchmarks in all regions without including iReady scores ranged from 30.9 to 63.5

Table 11: Percentage of Students Meeting Benchmark by Year and Region

	2016			2017		
	N	Percent Meeting Benchmark		N	Percent Meeting Benchmark	
		Fall	Spring		Fall	Spring
<i>Cleveland</i>						
<i>Treatment</i>	382	14.10	36.40	325	14.20	36.60
<i>Comparison</i>	230	0.00	26.50	136	22.80	30.90
<i>Columbus</i>						
<i>Treatment</i>	510	18.60	54.50	690	24.80	53.3
<i>Comparison</i>	379	17.90	49.30	267	27.70	44.2
<i>Dayton</i>						
<i>Treatment</i>	213	23.00	56.80	180	21.70	41.10
<i>Comparison</i>	126	34.10	65.10	65	41.50	52.30
<i>Youngstown</i>						
<i>Treatment</i>	171	40.40	55.60	174	26.40	42.00
<i>Comparison</i>	64	7.80	45.30	52	48.10	63.50

Percentage of Students Meeting Benchmark Each Year of PROGRAM

Key Findings:

- Trend data over the six years of PROGRAM implementation shows increasing student participation and increasing percentages of students reaching benchmarks over time. **
- Treatment group outperformed comparison group in meeting spring benchmark each of the last two years.

** iReady data accounted for 722 students in PROGRAM making the total number of participants 2091 which was an increase from the previous year.

Table 12: Percentage of Students Meeting Benchmark Each Year of PROGRAM

	N=526	N=975	N=1622	N=1672	N=1276	N=799	N=1541	N=550
	2012	2013	2014	2015	2016 T	2016 C	2017 T	2017 C
Fall	23.2	18.5	21.1	15.3	20.9	14.5	20.4	29.1
Spring	39.4	32	47.3	41.5	49.6	44.9	42.6	42.1

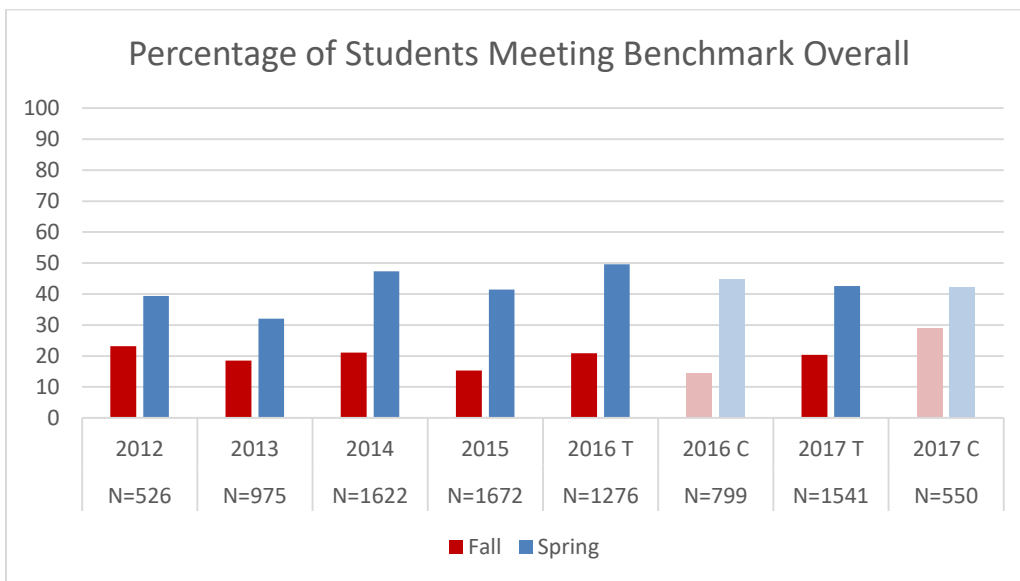


Figure 2. Percentage of Students Meeting Benchmark Overall

Overall Measures of Success

Students meeting grade level benchmark and/or making one year's growth

Success in the program is defined in two ways. Students are considered to have had a successful experience if they achieve the Spring Benchmark on the district-selected reading assessment, or if they achieve at least one year of growth in reading. The table below shows the number of students who met either or both of these criteria.

Of particular interest is the increase in the consistency in the percentage of students who improved across the three grade levels in the two project years. While the percent of students who improved varied widely across grade levels in earlier PROGRAM evaluations (2012-2014), more project years 2014-2017 showed more consistency across grade levels. Some possible explanations for this increased consistency include standardized training for tutors, consistent coordination across districts, increased accuracy in data reporting due to standardized reporting tools, and greater experience of program staff. Comparison data in 2016 and 2017 has provided a richer analysis that may be considered in the discussion of the effectiveness of the PROGRAM.

In 2017, results showed treatment students in grades 1 and 2 improved more than the comparison group of the same grades (5.2% and 4.5% respectively). Students in grades K and 3 improved more in the comparison group (3.6% and 4.3% respectively). In 2016, only the K treatment group outperformed the comparison group. Overall, both comparison and treatment groups improved at a similar rate in 2017.

For those students who met one of the two benchmarks in 2017, treatment groups outperformed comparison groups in all grades except Grade 3. This was a change from 2016 where all comparison groups outperformed the treatment group.

In the 2017 tables of students who met both benchmarks (achievement and a year of growth), results showed treatment groups outperformed comparison groups in all grades. This is a change from 2016 in Grade 2, where the comparison group outperformed the treatment group.

Table 13: Percentage of Students Who Improved At Least One Grade Level between Fall and Spring

2016				
	Treatment		Comparison	
	Total N	% who improved	Total N	% who improved
Overall	1276	71.3	799	73.8
K	262	83.2	174	74.1
1	281	59.4	143	68.5
2	286	64.7	208	67.3
3	447	76.1	274	81.4

Table 14: Percentage of Students Who Improved At Least One Grade Level between Fall and Spring

	2017 (w/out iReady)			
	Treatment		Comparison	
	Total N	% who improved	Total N	% who improved
Overall	1368	57.3	520	56.9
K	271	66.8	113	68.1
1	279	57.3	122	53.3
2	391	50.4	126	46.8
3	427	57.6	158	60.1

Table 15: Percentage of Students Who Met The Year-End Benchmark OR Made At Least One Years' Worth of Progress

2016								
	Treatment				Comparison			
	N	Met neither benchmark	Met one benchmark	Met both benchmarks	N	Met neither benchmark	Met one benchmark	Met both benchmarks
Overall	1276	25.2	28.6	46.2	799	23.5	34.2	42.3
K	262	14.5	12.2	73.3	174	23.0	17.8	59.2
1	281	35.6	24.2	40.2	143	30.8	31.5	37.8
2	286	32.2	38.1	29.7	208	28.8	39.9	31.3
3	447	20.6	34.9	44.5	274	16.1	41.6	42.3

Table 16: Percentage of Students Who Met the Year-End Benchmark OR Made At Least One Years' Worth of Progress

2017 without iReady								
	Treatment				Comparison			
	N	Met neither benchmark	Met one benchmark	Met both benchmarks	N	Met neither benchmark	Met one benchmark	Met both benchmarks
Overall	1369	33.5%	29.5%	37.0%	520	35.2%	29.0%	35.8%
K	271	26.9%	29.5%	43.5%	113	27.4%	29.2%	43.4%
1	280	31.4%	33.6%	35.0%	122	34.4%	32.0%	33.6%
2	391	40.4%	25.3%	34.3%	127	44.9%	22.0%	33.1%
3	427	32.6%	30.7%	36.8%	158	33.5%	32.3%	34.2%

Comparing PROGRAM Students with Others

Comparisons were made between students who participated in the program and students who did not. Non-participant student samples were provided by participating school districts. Comparisons should be interpreted with caution, since the samples were not matched on potentially relevant demographic or academic variables. Reliable information on whether students received other reading intervention(s) was not available.

Comparisons were made using a one-way repeated measures ANOVA, which allows for comparison of two groups (PROGRAM vs. Comparison) on an outcome variable (reading score) across two time periods (fall and spring). Analyses were completed for assessments where a sufficient number of cases were present in the data. All analyses were completed across all grade levels. F statistics are reported for the interaction between time of measurement (fall and spring) and sample (treatment vs. comparison). Results indicate whether the amount of improvement from fall to spring differed between the treatment and comparison groups.

Table 17: Comparing PROGRAM Students with Others

2016	Treatment			Comparison			Wilks Lambda	F	p
	N	Fall	Spring	N	Fall	Spring			
DRA	21	13.86	23.05	15	6.93	17.20	.98	.59	.449
F&P	267	5.22	9.31	157	6.18	9.99	1.00	1.76	.185
MAP	505	162.07	178.99	294	155.89	175.05	.99	6.92	.009**
STAR Early Literacy	207	486.49	692.77	124	494.63	692.98	1.00	.64	.424
STAR Reading	276	198.14	319.73	209	176.90	291.82	1.00	.73	.393

*significant at the .05 level

**significant at the .01 level

Table 18: Comparing PROGRAM Students with Others

2017	Treatment			Comparison			Wilks Lambda	F	p
	N	Fall	Spring	N	Fall	Spring			
Overall	1541	221.99	293.58	549	221.82	292.22	1.00	.070	.791
F&P	185	6.49	10.11	36	6.92	10.92	.996	.916	.340
MAP	597	160.55	177.22	270	160.08	175.89	.998	1.36	.245
STAR Early Literacy	268	495.17	683.56	96	480.32	689.03	.991	3.44	.064
STAR Reading	319	182.33	317.48	117	163.17	274.81	.985	6.552	.011*
iReady	132	405.45	448.72	30	436.90	474.77	.993	1.085	.299

*significant at the .05 level

**significant at the .01 level

Discussion of Analyses

Initial inspection of results indicates that there was no pattern of significant differences between the PROGRAM group and the comparison group. One exception to this trend in 2016 is that MAP showed students in the comparison group improving more than the treatment group. Another exception occurred in 2017. STAR Reading, showed students in the treatment group improving more than students in comparison group.

No data were available to indicate what interventions students in the comparison group may have received. It is very likely that students struggling with reading, who were not placed in the PROGRAM, received some other type of intervention services from their school districts (i.e., Title I, IDEA, etc.). Thus, indications that students in PROGRAM and comparison groups who performed similarly could be interpreted as suggesting that PROGRAM delivers student outcomes comparable to interventions that are more expensive.

In data provided to the evaluator by the PROGRAM project director, the grant has provided over a 10,000,000-dollar savings to participating districts during the 2012-2017 grant period. The savings were calculated by deriving the full cost of tutoring hours provided to a district and subtracting the cost of the district's contribution for the cost of the tutors. The total cost of a tutor per year was estimated at \$21,950. The participating districts contribute \$4,000 per tutor per year saving each district. PROGRAM provides the remaining \$17, 950 per tutor resulting in the savings for participating districts.

In future evaluations, it would be helpful to have basic demographic information, such as subgroup identification. This should include ethnicity, gender, economically disadvantaged, ELL, and Special Education designations as well as any Title I or other interventions the student received. Students in PROGRAM and comparison groups could then be matched to comparably situated peers. Accurate information on what types of other reading support students received would also add substantially to our ability to make meaningful comparisons between intervention strategies.

2015-17 PROGRAM Satisfaction Surveys

Program Site Supervisor Survey Results

A satisfaction survey was distributed to district personnel whose students received PROGRAM tutoring during each of the school years from 2015-2017. Fifty-three individual respondents in twenty-five different school districts responded in 2015-16 and thirty-three individual respondents in nineteen different school districts responded in 2016-17. Twenty-Nine individuals in twenty-three different school districts responded in 2017-18. A five-point scale was used for each item with five indicating the highest level of satisfaction.

Table 19: Site Supervisor Satisfaction Survey Items by year and Scale

Survey Item	2015 n=53	2016 n=34	2017 n=29
My students benefitted from this program	4.59	4.29	4.62
Teachers enjoyed having the program available to students	4.57	4.29	4.55
Teachers enjoyed working with our program member(s)	4.49	4.29	4.52
Our members acted in a professional manner	4.67	4.37	4.62
Students enjoyed working with our members	4.61	4.50	4.72
This program fits well with our instructional plan/method	4.53	4.29	4.62

The average score for each survey item was greater than 4.49 in 2015, 4.33 in 2016, and 4.52 in 2017. This suggests that participating districts perceive PROGRAM Reading tutoring to have improved their students' reading and increased their interest in the program in each of the last three years of the survey. District survey comments are consistently given high item ratings and offer insight into student and teacher enjoyment, benefits, and professionalism of tutoring witnessed by district personnel regarding the program. Over the 2015-17 period, among the many educator comments offered were the following:

- The students all made great progress in reading. Their self-esteem increased and they had a great relationship and role model in (tutor's name).*
- Students were excited to go with the tutor. Lessons were well thought out.*
- PROGRAM members allow us to provide interventions to some of our neediest and youngest students.*
- One on one and small group instruction is critical for struggling readers.*
- Our kids need as much extra help as they can get. This program allows us to get that for kids that we would not otherwise be able to provide.*
- The tutors were able to work with students that may not otherwise receive extra support. Tutors were also a positive influence and able to build relationships with the students they instructed.*
- The program enabled us to provide additional intervention to struggling students.*
- With the extra support we could give to our students, we have seen a lot of growth in the students who had a huge need for reading intervention.*
- The biggest benefit was the tutor was able to take small groups and focus on specific needs of students.*
- The students were very engaged and looked forward to meeting with the tutors.*

- Often times, only our lowest readers get intervention. This program allowed more of our "bubble" students to get assistance, too.*
- The greatest benefit of this program is it offers individualized reading instruction to our students. The students love the one-on-one attention with the Program team members.*
- The extra support for our struggling students was much appreciated.*
- The biggest benefit was the individualized attention our struggling students received.*
- The program allowed teachers to plan small group activities and confidently know the tutor would carry out the instruction.*
- The students looked forward to reading with someone each day.*
- Our students made great gains this year and the work of the Reading Corp has helped with this success.*
- Our faculty really appreciated the tutor's flexibility and willingness to "go with the flow". The program provided additional supports for those students who only needed the little extra push to get them to benchmark on summative assessments.*
- This program allowed students in need of intervention to get help on a more personalized level. The program helped to boost confidence and build independent readers.*

2017-2018 was the fourth year PROGRAM conducted the supervisor site survey. The latest three-year trend showed very similar mean scores on the seven questions. This suggests that district respondents have an overall high satisfaction rate in each year the survey has been administered. The

return rate (n) of surveys for 2017-18 was lower than the previous year ($n=29$). A continuation of improving methods of conducting surveys in PROGRAM districts may increase the rate of participation and completion. Increased response rates will provide more accurate and representative mean scores for analyses.

2015-17 Parent Survey Results

A satisfaction survey was distributed to parents whose children received PROGRAM* tutoring during the 2014-15, 2015-16, 2016-17 and 2017-18 school years. This report will focus on the trends of the latest three years of parent survey results. Two hundred thirty parents participated in the second year of the survey, one hundred and seventy-six parents responded in the third year and seventy-six parents responded this year. A five-point scale was used for each item with five indicating the highest level of satisfaction. Average responses to each of the five items are included in the table below.

Table 20: Parent Satisfaction Survey Items by Year and Scale

Survey Item	2015 n=230	2016 n=176	2017 n=76
My Child Benefitted from the Reading Program	4.49	4.55	4.61
My child enjoyed working with their program tutor	4.64	4.67	4.67
My child's reading improved as a result of the program tutoring	4.44	4.49	4.50
My child enjoys reading more as a result of the program tutoring	4.27	4.31	4.33
I would recommend other children work with a program tutor	4.59	4.63	4.62

The average score for each survey item was greater than 4.27 in 2015-16, greater than 4.31 in 2016-17 and greater than 4.55 in 2017-18. This suggests that parents perceive PROGRAM tutoring to have improved their students reading and increased student interest in reading. Parent survey comments are consistent with the high item ratings.

A sample of the comments follows:

- *My daughter really likes to read and is now confident when reading aloud.*
- *The program has improved her ability and confidence. She isn't scared to pick up a book now, in fact, she loves to.*
- *She loves sight words now! She has such fun spotting them.*
- *He enjoyed the small learning groups. He is very shy and I think it helped him come out of his shell.*
- *He actually enjoys reading now and will read on his own for fun!*
- *The impact it had on my daughter was that the instruction showed her how to slow down and how to sound out a word she did not previously know.*
- *My child has learned to read in the program. The tutoring was awesome. I believe that without the program my child would still be far behind his peers.*
- *The program reinforced skills he was learning in the classroom and gave him the extra practice he needed.*
- *He had something to read each day. He was able to tell stories from his readings. He can answer questions based on stories read.*
- *My kid loves reading a lot more. The tutor helped her with spelling and confidence.*
- *This program got my child to love to read. She always wants to read.*

-This program helped build my child's confidence in reading and helped her learn to enjoy reading more.

-He is able to concentrate and sound out the words more effectively...His reading grade has come up... Thanks for your hard work.

-She wants to read more...It motivated her... Thank you!

-She is remembering letter sounds better... she is putting more effort in trying to read words by herself... she wants to write stories. Good thing!

-My son was reading something every night!

-My daughter is more confident in her reading. Now she loves to read aloud and before she didn't.

-She likes to help her brother and sister with their reading homework now.

-When my son is reading at home, he takes his time and tries to sound out the words he doesn't know.

-my child has moved up a reading level and has become more fluent at reading

-his reading has greatly improved

The three-year survey trend showed almost identical mean scores on the five questions, suggesting that parents had an overall high satisfaction rate each year. As with the district and school surveys, the return rate (n) of surveys for 2017-18 was lower than the previous year ($n=76$). With continued teacher support and alternative ways to distribute and return the parent surveys, continued increases in response rates may occur. Higher parent survey response rates will provide a more accurate analysis of parent satisfaction.

PROGRAM Alumni Survey

Alumni Survey Data

2016-17 was the first year for an PROGRAM alumni survey. This survey was sent to all former and current PROGRAM tutors. Respondents were asked to respond to questions reflecting the impact of their PROGRAM experience. Seventy-six percent of those responding to the survey served in the PROGRAM prior to this year. Twenty-four percent of survey respondents are currently serving PROGRAM as tutors.

Respondents reported that service in PROGRAM:

- Helped volunteers grow professionally and personally (94%)
- Service gave volunteers a sense of purpose in the community (94%)
- Students benefitted from volunteer service (100%)
- Volunteers built strong relationships with students and staff (94%)

Ninety-two percent of survey respondents would recommend others to serve with PROGRAM. Demographic data showed PROGRAM Alumni are either now employed (58%), currently serve in PROGRAM (24%) or are continuing in school (17%). Sixty-five percent of respondents who are now employed work in education or another non-profit field.

The 2017-18 version included many of the same people who responded to the survey in the previous year. In order to gain additional information from PROGRAM alumni, the questions were changed to reflect an update on what PROGRAM alumni were currently doing, where they were working, and the capacity of their employment.

- 77 PROGRAM alumni responded to the follow-up survey
- 44 or 58% of the respondents are working in some capacity in the field of education
- 4 respondents currently attending are graduate school in counselor education, social work, speech-language pathology and mental health counseling

PROGRAM Alumni data will continue to be updated in the 2019-20 school year.

Limitations and Program Recommendations

Limitations

- 1) The available data set includes students who received services from PROGRAM as well as a comparison group of students who did not receive PROGRAM services. The students in the comparison group may have received other district interventions, but the type and scope of intervention was not provided. Therefore, it is difficult to say whether students improved more than similar students who did not receive tutoring when some of the comparison group members may have received special education, Title reading, or other reading interventions from their districts.
- 2) Data was only available for students during a single academic year. The overall impact of the program would best be assessed by following students over several years and recording whether they have met the third-grade reading requirement. Educational data suggests that intervening with at-risk students early and then maintaining instructional support provides most sustained results.
- 3) Providing self-assessment surveys for tutors may help identify improvement in content and frequency of training sessions.
- 4) Demographic data for the participating districts and schools is assumed but not verified. Therefore, this data is not considered in the analysis of PROGRAM impact. Subsequent year evaluation should ideally include basic demographic data on participating students. This data should include ethnicity, gender, economically disadvantaged, ELL, and Special Education designations as well as any Title I or other interventions the student received.
- 5) The state allows districts to choose from an approved list of reading assessments for grades K-3. Therefore, it was not possible to complete an overall analysis of all students. This resulted in a loss of statistical power.
- 6) The number of students in the treatment group and the number of students in the comparison group were not equal.

Recommendations for 2017-18

- 1) Districts are encouraged to provide reading data for their students from current and past years (up to 3 years if possible), including results of the state third grade reading test. The data will help establish the impact of the PROGRAM project by providing a larger overall picture of a student's development.
- 2) Reported data from districts should include all students who were eligible for reading assistance including those not actually selected for the program. Comparison group data needs to include information on what (if any) district services were provided to comparison group students.
- 3) PROGRAM needs to work with participating districts to ensure that educators realize the importance of testing protocols when using the formative/benchmarking assessments the district has chosen for math and reading. One of the strategies to achieve consistent and valid data is to eliminate as many

differences as possible in the collection of data. Following the stated protocols stated by the assessment publisher (throughout the school year) will yield more reliable and valid data in determining better-informed decisions for students

4) PROGRAM needs to provide reading state testing results from student participants in PROGRAM. The evaluator could then better determine if district selected assessments are accurately predicting reading passage rates on state testing. Data on whether students are meeting state benchmarks is critical to determining the practical utility of the program.

5) Currently, each tutor is observed three times during the year. Monitoring the quality of the tutoring sessions in a standardized way is not part of the project design. Development of a rubric aligned to the literacy standards or a standardized observation technique will support data collection that can be used to track tutoring activities. This data can be used to correlate tutoring practices that may increase reading proficiency. An outside evaluator should complete observations in order to reduce the possibility of bias.

6) Continue to improve procedures and expectations for conducting the Supervisor Site, Parent and Alumni Surveys. This should include developing internal and external protocols for increasing the response rate for all surveys.

Appendix

Tables and graphics from 2017-18 analysis with iReady data included

Students Meeting Benchmark by Region and District

Table 21: Percentage of Students Meeting Benchmark by Year and Region

	2017		
	N	Percent Meeting Benchmark	
		Fall	Spring
<i>Cleveland</i>			
<i>Treatment</i>	325	14.20	36.60
<i>Control</i>	136	22.80	30.90
<i>Columbus</i>			
<i>Treatment</i>	754	24.30	51.50
<i>Control</i>	277	26.70	42.60
<i>Dayton</i>			
<i>Treatment</i>	180	21.70	41.10
<i>Control</i>	65	41.50	52.30
<i>Youngstown</i>			
<i>Treatment</i>	282	16.30	26.60
<i>Control</i>	71	39.40	52.90

Percentage of Students Meeting Benchmark Each Year of PROGRAM

Table 22: Percentage of Students Meeting Benchmark Each Year of PROGRAM

	N=526	N=975	N=1622	N=1672	N=2075	N=2091
	2012	2013	2014	2015	2016	2017
Fall	23.2	18.5	21.1	15.3	18.5	22.7
Spring	39.4	32	47.3	41.5	47.8	42.4

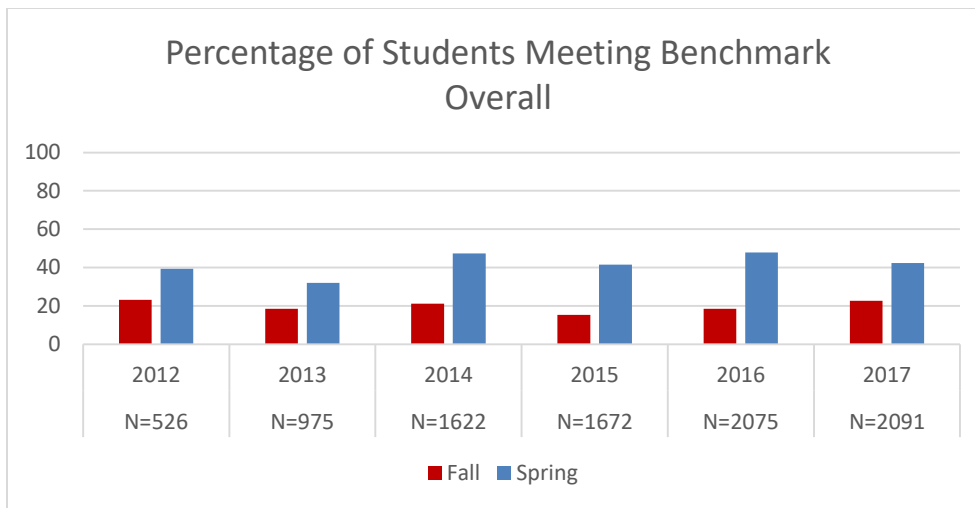


Figure 3. Percentage of Students Meeting Benchmark Overall

Overall Measures of Success

Table 23: Percentage of Students Who Improved At Least One Grade Level between Fall and Spring

2017				
	Treatment		Comparison	
	Total N	% who improved	Total N	% who improved
Overall	1540	56.3	549	56.5
K	299	63.5	113	68.1
1	333	58.0	127	52.8
2	450	51.3	141	46.8
3	458	55.2	168	59.5

Table 24: Percentage of Students Who Met the Year-End Benchmark OR Made At Least One Years' Worth of Progress

2017								
	Treatment				Comparison			
	N	Met neither benchmark	Met one benchmark	Met both benchmarks	N	Met neither benchmark	Met one benchmark	Met both benchmarks
Overall	1541	35.1	31.0	33.9	550	35.8	30.0	34.2
K	299	30.8	29.3	39.5	113	27.4	29.2	43.4
1	334	32.6	35.6	31.7	127	35.4	30.7	33.9
2	450	40.4	28.2	31.3	142	44.4	26.1	29.6
3	458	34.5	31.0	34.5	168	34.5	33.3	32.1