Striving Readers Project
New York State Department of Education/New York City Department of Education
Intent to Treat Descriptive Variable Analyses

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June 2012

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EXECUTIVE SUMMARY

In October 2009, The New York State Education Department (NYSED), in partnership with the New York City Department of Education (NYCDOE), was granted funding as part of the *Striving Readers Project* to address the literacy needs of adolescent struggling readers early in middle school. The goal of the project was to implement and examine the impact of a one-year comprehensive supplemental literacy intervention that was provided to seventh grade students across 11 New York City middle schools. The supplemental literacy intervention used in this study was the REWARDS Program (REWARDS Secondary-Multisyllabic Word Reading Strategies; REWARDS Plus; REWARDS Writing). The REWARDS Program provides comprehensive instruction in word analysis, fluency, vocabulary, reading comprehension and writing, and uses content-related text and extended discussion of text meaning and interpretation to enhance student motivation and engagement in literacy learning. The three components in the REWARDS Program were taught in an integrated sequence, by specially trained teachers.

The focus of this report is to describe the characteristics of the study schools, teachers, and students to determine the comparability of treatment and control students prior to implementation of the REWARDS program.

Following is a summary of the key demographic findings from the evaluation of the treatment and control students for the *Striving Readers project*:

- The REWARDS program was implemented in 11 culturally and ethnically diverse schools in the New York City area. The schools varied in size, as well as student ethnicity. The participating schools had smaller percentages of students earning passing scores on the 2009-2010 New York State English Language Arts and Mathematics exams when compared to city-wide averages.

- REWARDS classes at each school were all similar in length and number of classes offered. Instead of receiving REWARDS, control students attended additional class sessions in the content subjects (i.e., Science or Social Studies) or talent/enrichment classes (e.g., Art, Music, Dance, Drama). No direct instruction in reading was provided in these classes.

- The majority of REWARDS teachers were reading teachers or special education teachers, prior to beginning the *Striving Readers program*, and had been teaching for at least 5 years.

- Higher attendance rates were observed at professional development trainings by the REWARDS teachers compared to their building administrators. Teacher attendance in the classroom was calculated based upon self-reported data by the teacher. Their absenteeism ranged from 1.6-6% of the school year from October through April.

- Direct comparison of treatment and control students indicated equivalence of the groups prior to the intervention on both demographic characteristics and the pre-test GMRT scores. In most schools, the numbers of treatment and control students were equal, or nearly equal, as were their attendance rates.

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INTRODUCTION

In October 2009, The New York State Education Department (NYSED), in partnership with the New York City Department of Education (NYCDOE), was granted funding as part of the *Striving Readers Project* to address the literacy needs of adolescent struggling readers in early middle school. The goal of the project was to implement and examine the impact of a one-year comprehensive supplemental literacy intervention that was provided to seventh grade students across eleven New York City middle schools.

The supplemental literacy intervention used in this study was the REWARDS Program (Reading Excellence: Word Attack & Rate Development Strategies; REWARDS Secondary-Multisyllabic Word Reading Strategies; REWARDS Plus; REWARDS Writing). The REWARDS Program provides comprehensive instruction in word analysis, fluency, vocabulary, reading comprehension, and writing, and uses content-related text and extended discussion of text meaning and interpretation to enhance student motivation and engagement in literacy learning. The three components in the REWARDS Program were taught in an integrated sequence with careful attention to fidelity, by specially trained teachers. Students were randomly assigned to the treatment and control groups. Treatment students received the REWARDS program, while control students received no additional reading instruction. Groups were monitored throughout the year; building, teacher, and student demographic information was gathered from multiple sources.

This report reflects a descriptive analysis of the basic demographic characteristics of the schools, teachers, classrooms, and students in the *Striving Readers Project*. For the purposes of this evaluation project, the following objectives will be addressed:

- Evaluation Objective One: To document the characteristics of the district and participating schools.

- Evaluation Objective Two: To document the characteristics of the REWARDS classrooms and Control group activities.

- Evaluation Objective Three: To document the characteristics of the teachers of the REWARDS classes.

- Evaluation Objective Four: To document the characteristics of the treatment and control students.

Evaluation Objective One: To document the characteristics of the district and participating schools.

The district and building level demographic variables were gathered from multiple sources for examination. The REWARDS program was implemented in 11 school buildings, located in 4 of the 5 boroughs of New York City. For further information on how they were chosen refer to the Random Assignment Report and the Evaluation Design Summary. The analysis reflects data from the 2009-2010 school year, when sample students were in 6th grade prior to being assigned to treatment or control groups.

I. Building demographics

Finding: Demographic variables differed across school buildings.

Table 1
2009-2010 Building Demographics

Building	Total Enrolled	# 6th Graders	# of Teachers Working in Building	Building Structure	Borough
A	793	210	55	MS (6-8)	Manhattan
B	555	95	54	IS (6-8)	Manhattan
C	828	240	74	JHS (6-8)	Manhattan
D	1152	363	74	JHS (6-8)	Bronx
E	699	211	56	MS (6-8)	Bronx
F	2084	611	148	IS (6-8)	Queens
G	1923	595	109	MS (6-8)	Queens
H	2038	644	119	JHS (6-8)	Queens
I	625	227	45	(6-8)	Queens
J	887	300	65	IS (6-8)	Staten Island
K	1330	404	88	IS (6-8)	Staten Island

- Shown in Table 1, are the building demographics. The schools included in our program were diverse in size and location within the New York City limits. Student enrollment ranged from 555 students to 2084 students, and the number of teachers in each building ranged accordingly (45-148). Building-wide student: teacher ratios ranged from 10:1 (Building B) to 17:1 (Building G). All of the schools served grades 6-8, though some are referred to as middle schools, intermediate schools, or junior high schools.

Table 1a
2009-2010 Demographic Information by School Building

Building	Gender (%) *		Ethnicity (%)				
	Male	Female	American Indian or Alaska Native	African American	Hispanic/ Latino	Asian/Native Hawaiian/ Other Pacific Islander	Caucasian
A	55.7	44.3	0	6	12	81	1
B	53.7	46.3	0	48	48	1	2
C	54.0	46.0	0	3	96	0	1
D	47.0	53.0	0	24	64	10	2
E	54.3	45.7	0	27	70	2	1
F	54.5	45.5	0	6	81	12	2
G	52.6	47.4	0	8	35	54	2
H	50.2	49.8	0	7	61	28	4
I	54.1	45.9	1	20	56	15	8
J	52.0	48.0	1	41	34	11	13
K	44.4	55.6	0	39	34	5	21

*Note: * estimated based upon number of students completing state tests*

- Presented in Table 1a are the student demographic characteristics in the participating schools. The majority of the student population in the participating buildings was male, with the exception of schools D and K.

- Generally, the ethnicity of students differed across the school buildings. The majority of students were Hispanic/Latino in 6 of the 11 schools (Buildings C, D, E, F, H, & I). In the two schools (Buildings A & G), the majority of students were Asian/Native Hawaiian/Other Pacific Islander. Variability, from 3-48%, was noted in the proportion of students identified as African American across the buildings. Caucasian students comprised at most 21% of the school population (Building K), though in most schools they were represented to a limited extent (1-4%). American Indian or Alaska Natives made up only 1% of the population in two schools. For further demographic information (i.e., special education students, free and reduced lunch, English Language Learners) refer to the Fidelity of Classroom Implementation and Implementation Fidelity Score Report (pp.12-13).

II. State test scores by district/borough/building

The following data represent state test scores in English Language Arts and Mathematics for 6th grade students in the 2009-2010 school year (pre-intervention). Scores on these tests ranged from 1-4, with scores of 3 and above as passing (i.e., 1: Not Meeting Learning Standards; 2: Partially Meeting Learning Standards; 3: Meeting Learning Standards; 4: Meeting Learning Standards with Distinction). Students were chosen from the pool of students who scored at level 2 on the New York State English Language Arts (NYS-ELA) exam (for further information, refer to the Random

Assignment Report). Below are city-wide data by borough, ethnicity, and other demographic variables, as well as the data for the specific schools in the *Striving Readers project*.

Finding: Student scores on the state English Language Arts exam varied across different boroughs and student demographics.

Table 2
2009-2010 Sixth Grade NYS-ELA Performance

Category		Percent of Students Performing at Level:			
		1	2	3	4
City-Wide		17.2	42.6	36.6	3.6
English Proficiency	English Proficient	12.7	42.8	40.5	4.0
	English Language Learners	53.4	41.3	5.2	0.1
Special Education	General Education	10.4	42.5	42.8	4.3
	Special Education	47.2	43.4	9.2	0.2
Gender	Female	14.4	41.5	39.6	4.5
	Male	19.9	43.8	33.6	2.7
Ethnicity	Asian	8.0	28.2	54.2	9.7
	Black	20.4	49.4	28.7	1.6
	Hispanic	21.8	47.2	29.7	1.3
	White	7.0	30.0	55.0	8.0
Borough	Queens	12.6	37.9	43.8	5.7
	Manhattan	16.4	42.1	36.7	4.8
	Bronx	23.9	48.6	26.5	0.9
	Brooklyn	17.9	43.7	35.7	2.8
	Staten Island	13.5	38.9	43.2	4.4
School	A	31.0	40.0	28.0	1.0
	B	47.0	43.0	10.0	0.0
	C	28.0	47.0	25.0	0.0
	D	13.0	45.0	39.0	3.0
	E	39.0	50.0	11.0	0.0
	F	25.0	47.0	25.0	3.0
	G	10.0	40.0	45.0	5.0
	H	12.0	38.0	45.0	5.0
	I	26.0	47.0	27.0	0.0
	J	33.0	49.0	17.0	1.0
	K	20.0	44.0	33.0	3.0

- Illustrated in Table 2 are 6th grade 2010 New York State English Language Arts (NYS-ELA) scores for students throughout New York City, by borough and participating school. City-wide, 40.2% of students met or exceeded state standards (i.e., performance levels 3 and 4). Furthermore, the percentage of English Proficient students (44.5%) scoring at level 3 or 4 was higher than the percentage of English Language Learners (5.3%). Similarly, a higher proportion

of general education students (47.1%) scored at passing levels compared to the proportion of students enrolled in special education (9.4%).

- Meeting or exceeding state standards varied by gender. Specifically, the percentage of females (44%) meeting or exceeding standards was higher than the percentage of males (36.3%).

- Differences in test performance were also noted by ethnicity. Specifically, twice as many students identified as Asian (63.9%) and White (63%) scored at level 3 or 4 compared to students identified as Black (30.3%) and Hispanic/Latino (31%).

- Passing rates were noted to vary across the different boroughs. Queens and Staten Island had the highest percentage of students scoring at levels 3 and 4 (49.5% and 47.6%), and the Bronx was the district with the smallest percentage of students earning passing scores (27.4%).

- When compared to city-wide ELA results, 8 of the schools in this study had fewer students meeting or exceeding state standards. In all schools, except schools B, G and H, the largest percentage of students performed at level 2 on the NYS-ELA exam. Moreover, in all the schools in our study, 5% or less of the students scored at level 4.

Finding: Student test scores on the state math exam varied by borough and student characteristics.

Table 3
2009-2010 Sixth Grade Math Performance

Category		Percent of Students Performing at Level:			
		1	2	3	4
City-Wide		11.6	35.4	29.7	23.3
English Proficiency	English Proficient	9.1	33.5	31.4	26.0
	English Language Learners	27.8	48.1	18.0	6.1
Special Education	General Education	6.6	32.7	32.9	27.8
	Special Education	33.8	47.3	15.3	3.6
Gender	Female	10.2	35.2	30.3	24.4
	Male	13.0	35.6	29.1	22.3
Ethnicity	Asian	3.0	15.0	29.8	52.2
	Black	15.9	44.5	27.5	12.1
	Hispanic	13.9	41.2	29.6	15.2
	White	4.6	20.8	34.3	40.3

Category		Percent of Students Performing at Level:			
		1	**2**	**3**	**4**
Borough	Queens	8.1	30.0	31.4	30.5
	Manhattan	11.3	35.0	28.7	25.0
	Bronx	16.7	42.7	27.6	13.0
	Brooklyn	11.8	36.1	29.3	22.8
	Staten Island	8.8	31.6	33.1	26.5
School	A	8.0	34.0	31.0	27.0
	B	26.0	60.0	10.0	4.0
	C	15.0	45.0	30.0	10.0
	D	9.0	30.0	37.0	24.0
	E	29.0	51.0	17.0	3.0
	F	14.0	43.0	28.0	15.0
	G	5.0	29.0	38.0	28.0
	H	7.0	30.0	32.0	31.0
	I	15.0	50.0	26.0	9.0
	J	24.0	47.0	21.0	8.0
	K	15.0	43.0	26.0	16.0

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- Illustrated in Table 3 are 6th grade 2010 New York State Math (NYS-Math) scores for students across New York City, in each borough, as well as each school. City-wide, just over 50% of the sixth graders met or exceeded state standards. Similar rates of passing were observed for males and females (51.4% and 54.7%).

- Student passing rates varied by student language proficiency status, and by educational placement. More than two times as many English proficient students (57.4%) scored at level 3 or 4 compared to students identified as English Language Learners (24.1%). A higher percentage of students in general education (60.7%) passed the math test than students receiving special education services (18.9%).

- Math test performance differed by student ethnicity. Greater than 75% of students classified as Asian and White scored at level 3 or 4, and less than 50% of students classified as Black and Hispanic scored at these levels.

- Meeting or exceeding state standards in math varied across the different boroughs. The majority of students in Queens, Manhattan, Brooklyn, and Staten Island scored in the passing range on the exam.

- When compared to city-wide statistics, 4 of the participating schools had a similar or higher percentage of students performing at level 3 or 4.

Evaluation Objective Two: To document the characteristics of the REWARDS classrooms and Control group activities.

Classroom demographics for treatment and control students were examined, including length and number of REWARDS classes, student: teacher ratios, class sizes, and control student class assignment. A number of different sources were reviewed to gather the necessary data (e.g., classroom observations, attendance records, school websites, teacher and student reports). These data were collected during the 2010-2011 school year during the implementation of the REWARDS program, when sample students were in seventh grade.

I. REWARDS Classroom Data

Finding: Class period length was similar across the different schools. The number of classes offered varied across the buildings.

Table 4
Length and Intensity of REWARDS Program Provided

Building	Average Length of REWARDS Classes (minutes)	# REWARDS Sections	Total Number of REWARDS Classes Offered
A	45	1	134[M]
B *	45	1	n/d
C *	46	1	136[A]
D *	42	2	128[J]
E	42	1	119[M]
F *	43	5	139[M]
G	42	1	129[J]
H *	41	1	n/d
I	41	1	138[A]
J *	41	3	135[M]
K	44	1	134[J]
MEAN	**43**		

*Note: * attendance data incomplete for this school*
n/d no data are available at this time
[M] attendance data calculated through the end of May, 2011
[A] attendance data calculated through the end of April, 2011
[J] attendance data calculated through the end of June, 2011
shaded area: average was not calculated due to lack of data received

- Shown in Table 4, are data reflecting the length and intensity at which the REWARDS program was provided. In general, the length of REWARDS classes was similar across the schools (41-46 minutes/class). Each building offered the REWARDS class 5 times a week, though not necessarily every day (e.g., two sessions on Wednesday, none on Tuesday). When the REWARDS class was scheduled during the school day varied across buildings as well (e.g., during optional extended school day hours). The number of REWARDS sections offered

differed (1-5 sections), largely due to the number of students in the building, and other administrative decisions.

- The total number of REWARDS classes offered was calculated based upon teacher reported attendance data. The actual number of days of instruction for the REWARDS program appears to have varied across the buildings (119-139 days); however, this conclusion is tentative because not all attendance data were received by the evaluation team. For further information, refer to the Fidelity of Classroom Implementation and Implementation Fidelity Score Report (pp. 15-16).

Finding: *Student:Teacher ratios in the REWARDS classes varied by school building.*

Table 5
Student:Teacher Ratios by School Building

Building	Student: Teacher Ratio
A	10:1
B	21:1*
C	15:1
D	19:1
E	19:1
F	11.2:1
G	16:1
H	19:1
I	12:1*
J	14.7:1
K	12:1

*Note: * Some students in class are not part of treatment group*

- Illustrated in Table 5 are student:teacher ratio data from REWARDS classes. Ratios ranged from 10:1 to 21:1; all schools with the exception of school B remained under the specified limit of 20:1 set by the REWARDS program developer. Two buildings, schools B & I, had students in the REWARDS classes that were not part of the study, but received the intervention due to administrative decisions (data from these students were NOT included in any data analyses).

Finding: *REWARDS class sizes varied across school buildings.*

Table 6
Class Sizes by School Building

Building	Class Size	
	Starting Class Size (average)	Ending Class Size (average)
A	10	10
B	4	4
C	15	15
D	20	19
E	20	19
F	14.6	11.2
G	20	16
H	20	19
I	8	7
J	16	14.7
K	18	12

- Shown in Table 6 are REWARDS class size data, calculated from class lists. The class sizes range from 4-20 treatment students. Most schools lost students to attrition throughout the school year, with the exception of schools A, B and C. The overall attrition rate was low (*n*=14). For more information on attrition, refer to the Random Assignment Report (p.14).

II. Control Student Classroom Data

An important demographic variable is the activities of the students in the control group in place of intervention services. These students were to receive only the typical reading/language arts instruction allotted to pupils in grade 7. To determine control student class assignment, requests were made to building administrators to obtain copies of all student schedules in the *Striving Readers project*.

Finding: Students in the control group were assigned to a variety of non-language arts classes across the schools in the project.

Table 7
Control Student Class Assignment by School

Building	Type of Class				
	Content	Talent/Elective	Gym	Enrichment	Not Reported
A			Y	Y	
B			Y		
C	Y	Y			

Building	Type of Class				
	Content	**Talent/Elective**	**Gym**	**Enrichment**	**Not Reported**
D					X
E	Y	Y	Y		
F	Y	Y			
G	Y				
H					X
I		Y			
J					X
K					X

Content=extra Science or Social Studies Class; Talent/elective=e.g., Art, Music, Dance, Drama; Enrichment=e.g., Scientific Calculator, School Newspaper, Digital Portfolio

- Information regarding class assignments for control group students was provided by the administrators from seven of the schools (see Table 7). Most often, control students attended additional class sessions in the content subjects (i.e., Science or Social Studies) or talent/enrichment classes (e.g., Art, Music, Dance, Drama). No direct instruction in reading was provided in these classes.

Evaluation Objective Three: To document the characteristics of the teachers of the REWARDS classes.

A number of teacher demographic variables, based on information gathered from multiple sources, were examined (i.e., number of years teaching, prior positions, and attendance in classes and at professional development). The sources included post-professional development teacher surveys, professional development attendance sheets, and self-reported classroom attendance data. Results of the REWARDS classroom attendance data should be interpreted with caution as they were recorded by the teachers themselves.

Finding: The background of teachers implementing the REWARDS program varied.

Table 8
Teacher Demographics by School Building

Building	Gender	Position Prior to REWARDS	# Years Teaching	# Years Teaching at School
A	F	SE	7	5
B	F	Other	20	10
C	F	RT	8	1
D	F	N/A	6	6
E	F	Other	7	7
F	F	RT	8	8
G	F	RT	2	2
H	M	SE	5	4
I	F	RT	8	6
J	F	RT	8	7
K	F	Other	5	5
AVERAGE			7.64	5.55

Note: SE – Special Education Teacher; RT – Reading Teacher; Other – Data Specialist, Team Leader or Health teacher; N/A – that information was not provided on survey

- Shown in Table 8, are teacher backgrounds and experience data prior to the REWARDS program. The majority of teachers had backgrounds in reading or special education prior to beginning the REWARDS program. Other positions included team leader, health teacher and data specialist. Most of these teachers had been teaching for at least 5 years, with the totals ranging from 2-20 years (mean=7.6 years). Similarly, the total number of years teachers had been in their building ranged from 1-10 years, with the average of 5.6 years.

Finding: Teacher and administrator attendance at Professional Development differed across school buildings, as did teachers' classroom attendance.

Table 9
Teacher & Administrator Classroom and Professional Development Attendance Data

Building	% Days absent from REWARDS	% Teacher Attend PD*	% Administrator Attend PD
A	6.0	90.9	100.0
B	N/A	63.6	33.3
C	5.1	90.9	66.6
D	2.3	100.0	66.6
E	5.9	81.8	66.6
F	3.6	90.9	100.0
G	1.6	72.7	66.6
H	N/A	81.8	33.3
I	3.6	90.9	66.6
J	3.0	100.0	33.3
K	3.7	90.9	33.3
AVERAGE	3.87	86.8	60.6

*Note: N/A indicates not enough attendance records were received to make a reliable estimate; * attendance data are incomplete as September 2010 attendance was not received; thus scores represent 11 of 12 trainings.*

- Shown in Table 9 are classroom and professional development training attendance rates. Overall, at professional development, teachers had better attendance than administrators. For further details see Professional Development Fidelity report (pp. 17-18).

- In the classroom, the percent of days the teacher was absent was calculated using attendance data reported by each teacher. The percent of days absent ranged from 1.6-6% of the school year from October through April. Evaluators observed teachers' notations indicating reasons for some of the absences, such as grading state exams or illness. It is important to note that teacher attendance was determined through the examination of archival student attendance records kept by participating teachers. Most teachers marked their own attendance along with the student attendance. Some, however, did not provide any data. Thus, the teacher absence data should be interpreted with caution.

Evaluation Objective Four: To document the characteristics of the treatment and control students.

Data regarding treatment and control student demographics were gathered from multiple sources. Basic demographic information was analyzed from original student data files used in the initial random assignment of students to treatment and control groups. Building attendance data were collected from schools on a monthly basis. The final data were received in May 2011, so percentages are approximate. To determine the equivalence between the treatment and control groups, baseline demographics and Gates-MacGinitie Reading Tests (GMRT) scores were compared.

Finding: The percentage of treatment and control students in each building was relatively stable.

Table 10
Treatment and Control Students by Building

Building	Total # Students in Study	Group	
		Treatment	Control
		% (*n*)	% (*n*)
A	20	50.0 (10)	50.0 (10)
B	8	50.0 (4)	50.0 (4)
C	30	50.0 (15)	50.0 (15)
D	78	48.7 (38)	51.3 (40)
E	36	50.0 (18)	50.0 (18)
F	128	44.5 (57)	55.5 (71)
G	35	45.7 (16)	54.3 (19)
H	40	50.0 (20)	50.0 (20)
I	15	53.3 (8)	46.7 (7)
J	91	49.5 (45)	50.5 (46)
K	26	46.2 (12)	53.8 (14)
TOTAL	507	47.9 (243)	52.1 (264)

- Illustrated in Table 10 are data about the number of treatment and control students in each building in the final sample after attrition. The total number of students in the study ranged from 8-128 across buildings. In most schools, the number of treatment and control students was equal, or nearly equal. The school with the largest difference was School F. For information about group attrition rates after Intent to Treat see the Random Assignment Report (pp.14, Table 5).

Finding: Student demographic characteristics were similar across the groups.

Table 11
Treatment and Control Student Demographics

Demographic Variable	Group	Treatment Students % (*n*)	Control Students % (*n*)	χ^2 (*df*)**
Gender	Male	47.7 (116)	54.9 (145)	2.62 (1)
	Female	52.3 (127)	45.1 (119)	
Ethnicity*	Asian	11.5 (28)	12.9 (34)	2.58 (4)
	Black	23.0 (56)	20.1 (53)	
	Hispanic	63.0 (153)	63.6 (168)	
	White	2.5 (6)	2.7 (7)	
Special Education	General Education	95.9 (233)	95.5 (252)	0.06 (1)
	Special Education	4.1 (10)	4.5 (12)	
English Proficient	Yes	90.9 (221)	88.3 (233)	0.98 (1)
	No	9.1 (22)	11.7 (31)	
Free and Reduced Lunch	No	5.3 (13)	5.3 (14)	0.00 (1)
	Yes	94.7 (230)	94.7 (250)	

Note: N=507
** indicates that two students were in the "Other" category, but removed because there was no comparable city-wide testing data as reported in Tables 2 & 3.*
*** all p > .05-not significant*

- Illustrated in Table 11 are treatment and control student demographic variables. Across all characteristics the groups were similar. The entire sample consisted of more males than females. In terms of ethnicity, the majority of the students represented diverse backgrounds, with the largest subgroup of students identified as Hispanic (63%). Less than 3% of the students were classified as white. Approximately 95% of the sample were eligible for free/reduced lunch (an indicator of lower socio-economic status). The vast majority of the sample were general education students (~96%). One of the exclusions for selecting the sample was that students with an IEP for reading were not eligible, thus the low percentage of students in the sample receiving special education. Finally, over 88% of the students were classified as proficient in English.

- Pearson's Chi-Square was used to test the hypotheses that students in the treatment and control groups were similar for each demographic characteristic. No significant differences were noted between the groups; the treatment and control students were similar on every characteristic examined.

Finding: Treatment and control student school attendance rates were similar.

Table 12
Treatment and Control Student Building Attendance

Building	% of Days in Attendance		Difference
	Treatment Students *Mean* (*SD*)	Control Students *Mean* (*SD*)	
A	98.23 (1.38)	98.28 (1.47)	0.16
B	92.92 (4.36)	94.44 (4.82)	-1.52
C	97.67 (2.55)	97.04 (3.22)	0.63
D	94.39 (7.02)	94.01 (5.67)	0.38
E	93.07 (7.93)	94.17 (4.34)	-0.95
F	93.73 (8.24)	95.04 (5.29)	-1.11
G	92.81 (5.75)	96.20 (3.22)	-3.36
H	92.58 (5.37)	95.03 (5.71)	-2.45
I	96.88 (2.91)	96.27 (3.94)	0.61
J	93.37 (6.85)	92.17 (7.82)	1.20
K	93.80 (6.73)	93.53 (6.18)	-0.13
AVERAGE	**94.06 (6.80)**	**94.57 (5.69)**	**-0.51**

Note: Attendance rates were calculated using data received as of May 25, 2011

- The evaluation team examined the building attendance data for treatment and control students. The findings can be seen in Table 12. Overall, these data suggest that the sample students had a high rate of school attendance.

- More variability in attendance rates, as suggested by the larger standard deviations, was observed in schools D, E, & F for the treatment students compared to their control student counterparts.

Finding: Pre-test GMRT scores were comparable across the groups.

Table 13
Sixth Grade Treatment and Control Student GMRT Pre-Test Score Data

Test/Score Type	Group	*N*	*M*	*SD*	*t*	*df*
Gates Mac-Ginitie Reading Test (GMRT)- Normal Curve Equivalent	REWARDS	257	39.12	12.67	0.98	524
	Control	269	38.06	12.39		

Note: p > .05 – not significant

- Displayed in Table 13 are the results of the independent sample *t*-test comparing the group means on the pre-test GMRT. On a nationally-normed reading test (GMRT), the REWARDS and control groups earned comparable scores prior to entering the study; no significant differences were identified between the groups.

SUMMARY

The New York State Education Department, in partnership with the New York City Department of Education, developed a *Striving Readers project* to address the literacy needs of early adolescent struggling readers in middle school. The goal of the project was to implement and examine the impact of a one-year comprehensive supplemental literacy intervention offered in New York City middle schools.

This report reflects comparability of the treatment and control students prior to program implementation. Students were compared on the individual level as well as on building, teacher, and classroom levels. In review,

- The 11 schools included in the study were drawn from 4 of the 5 boroughs of New York City, and were relatively homogeneous. Most were primarily male, and Hispanic/Latino. Furthermore, the majority of the students represented diverse backgrounds. The schools served grades 6-8, though ranged in size as well as number of teachers. The sample students were chosen from the pool who had earned scores of 2 on the 2009-2010 New York State English Language Arts (NYS-ELA) exam. The 11 participating schools had smaller percentages of students receiving passing scores on the exam. Similarly, most of the schools had fewer students earning a passing score on the 2009-2010 New York State Math (NYS-Math) exam.

- Describing the classroom experiences of treatment and control students is crucial to the evaluating the integrity of the study design. REWARDS classes were all similar in length and number of classes offered. Instead of receiving REWARDS control students attended additional class sessions in the content subjects (i.e., Science or Social Studies) or talent/enrichment classes (e.g., Art, Music, Dance, Drama). No direct instruction in reading was provided in these classes.

- Teachers who taught the REWARDS classes came from diverse backgrounds and had different levels of experience prior to teaching REWARDS. The majority of teachers were reading teachers or special education teachers, prior to beginning the REWARDS program, and had been teaching for at least 5 years. Teachers and administrators received additional training specific to REWARDS. Higher attendance rates at professional development trainings by the REWARDS teachers compared to their building administrators were observed. Teacher attendance in the classroom was calculated based upon self-reported data by the teacher. Their absenteeism ranged from 1.6-6% of the school year from October through April. It is important to note that teacher attendance was determined through the examination of archival student attendance records kept by participating teachers. Thus, the teacher absence data should be interpreted with caution.

- Direct comparison of treatment and control students indicated equivalence of the groups prior to the intervention on both demographic characteristics and the pre-

test GMRT scores. The total number of students in the study ranged across buildings from 8-128. In most schools, the numbers of treatment and control students were equal, or nearly equal. School attendance rates were, on average, nearly equal for treatment and control students, with percentages ranging from 92-98% across schools.