

Playbooks Reader's Theater
Summer Literacy Program 2014
Pre and Post-Test Data Analysis
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Executive Summary

In the Summer of 2014, CentroNia's Community Engagement and Education (CEE) department implemented a new literacy curriculum, Playbooks Reader's Theater (RT), to combat summer reading regression. The curriculum included multi-leveled "scripts" where students "acted" the parts of different characters to practice and perform a play. All plays included multiple reading stages and teachers assigned students their character roles based on the knowledge of their reading stages. Because all students read at their appropriate level, they could focus on their oral expression and comprehension skills, which in turn built their reading fluency as they continued to grow. Students were not aware that their different character parts corresponded to reading stages, so students of all reading levels interacted with each other in a fun environment without knowing who was a more or less advanced reader. RT was an excellent choice for CEE's Summer Enrichment Program because students attended the program for the entire day, ensuring that all regularly attending students participated in 1 hour of RT studio instruction Monday-Thursday for six weeks. (During the Year-Round Enrichment Program, many students will leave before the end of the day, rendering a consistent group-based program impossible.) The RT curriculum only contained books with multi-leveled reading, so students of all levels had to interact with each other on a daily basis. Upon a summer visit by OSSE, the funder remarked that when she entered classrooms during RT Studios, she could not differentiate between more and less advanced readers.

Of the 175 students for whom we have both pre and post-test data on the Playbooks Reader's Theater Summer Enrichment Program, 85% of them either maintained or increased their reading levels over the summer! Also, over 1/3 of these students actually INCREASED their reading levels! Once the 15% of students who decreased in their scores were further analyzed with regards to student attendance, the percentage of students who decreased actually drops to 6% when data of students who missed more than 5 days of class (20% of program) is removed from the sample size. Overall, the Playbooks Reader's Theater program was incredibly successful during its first implementation!

Program Breakdown

CEE provided 11 hours of professional development to all classroom teachers who would implement the new curriculum, including:

- Pre and Post Test Assessment Implementation
- Daily/Weekly Classroom Instruction (1 new story per week)
 - Monday: Choral Reading along with Classroom Teachers
 - Tuesday: Small Group Reading, with each group comprised of all character parts
 - Wednesday: Continued Small Group Reading with Character Exploration, including Talk and Turn activities to build listening/comprehension skills
 - Thursday: Story Rehearsal and Final Performance of Weekly Story
- Materials Usage

- Oral Expression Skills

CEE staff insisted that all classroom teachers refrain from using the following words to create a fun environment for the students: *reading, literacy, tests, assessment, reading levels, reading stages, teacher, tutors*, etc. Instead, CEE staff advised staff to consistently use the following words: *acting, rehearsing, performing, expressing yourself, your character, and director*. In classroom observations, CEE staff noted that students were very engaged in the program and it was clear that they were not aware that their character parts corresponded to different reading levels. CEE staff is confident that this active student engagement can be attributed to ample professional development, as well as careful word choice by teachers.

The curriculum included an identical pre and post-test to measure students’ Reading Stages, ranging from 0-6. These RT Reading Stages correlated to DCB students’ year-round Fountas and Pinnell reading levels, which made the program a good choice for the Summer Enrichment Program participants. CEE used the curriculum for 8 weeks: Weeks 1 and 8 included pre and post-assessments, while Weeks 2-7 included 6 full weeks of program implementation. Once CEE staff determined students’ reading levels from pre-tests, they created multi-stage and multi-grade classrooms of students. Students in the Summer Enrichment Program ranged from K-6 grades. The assessment tested their reading stage regardless of grade; i.e. a 1st grader could test at Reading Stage 4 while a 4th grader could test at Reading Stage 2. Because of the variability among students, CEE staff used the pre-test data to create multi-grade classrooms that contained even numbers of students with different reading stages.

Because all kindergarteners through 3rd graders were at the Columbia Road site, there were 4 classrooms per studio cycle (8 classrooms total). Each classroom contained 26 or less students ranging in grade from K-3. Studio 2 did not contain any RT classes.

COLUMBIA RD RT STUDENTS (ALL CLASSES GRADES K-3)	
A Group (Studio 1)	B Group (Studio 3)
Classroom 1: Reading Stages 0-3	Classroom 1: Reading Stages 0-3
Classroom 2: Reading Stages 0-3	Classroom 2: Reading Stages 0-3
Classroom 3: Reading Stages 2-5	Classroom 3: Reading Stages 2-5
Classroom 4: Reading Stages 3-6	Classroom 4: Reading Stages 3-6

Because all 4th-5th graders and Tweens were at the Irving Street site, there were 2 classrooms per studio cycle (5 classrooms total). Each classroom contained 15 or less students ranging in grade from 4-6.

IRVING STREET STUDENTS (GRADES 4-6)		
Studio 1 (Grades 4-5)	Studio 2 (Grade 6 – Tweens)	Studio 3 (Grades 4-5)
Classroom 1: Reading Stages 3-6	Classroom 1: Reading Stages 3-6	Classroom 1: Reading Stages 3-6
Classroom 2: Reading Stages 3-6		Classroom 2: Reading Stages 3-6

Demographic Information

There were 300 registered students for the Summer Enrichment Program, though only 268 students took a pre-test, post-test or both for the RT program. (32 students were absent for both pre and post-assessments due to summer vacation or overall poor attendance, so they are not included in this data analysis.

PARTICIPATING STUDENTS (AS A WHOLE)	
Total # registered Summer Enrichment Students	300
# Students with some RT assessment data (pre-test, post-test or both)	268
# Students with both pre-test and post-test data that allow for comparisons of data (regularly attending students)	175
% of total # registered students for whom we have either pre-test or post-test data	89%
% of total # registered students for whom we have both pre-test and post-test data	58%
% of regularly attending students for whom we have both pre-test and post-test data	65%

As noted in the above chart, CEE gathered both pre-test and post-test data on 175 out of 268 (65%) of regularly attending students. I was unable to compare the data on the 93 students for whom we have either pre or post-test data because they participated in our program only at the beginning or end of the summer due to family vacations, poor overall attendance, etc.

Of the 175 students for whom we have both pre and post-test data, below is a depiction of how many participated in the program per site and by grade. As 129 students were at Columbia Road and 45 students were at Irving, 74% of regularly attending students for whom we have both pre and post test data participated in the program at Columbia Road, while 26% participated at Irving Street.

REGULARLY ATTENDING SUMMER ENRICHMENT PROGRAM STUDENTS BY SITE/GRADE		
COLUMBIA RD	# students	% regularly participating students at site (129)
Kinder	27	21%
1 st Grade	38	29%
2 nd Grade	35	27%
3 rd Grade	29	22%
TOTAL	129	
IRVING STREET	# students	% regularly participating students at site (45)
4 th Grade	20	44%
5 th Grade	15	33%
6 th Grade (Tweens)	10	22%
TOTAL	45	

Because we do not have both pre and post-test results on 93 students, we cannot compare data with 35% of regularly attending students who were absent during pre or post-test weeks.

Data Comparisons (Pre and Post Tests)

Maintenance/Increase of Student Scores versus Decrease of Student Scores

Of the 175 students for whom we have both pre and post-test data, 149 (85%) of them either maintained or increased their reading stages over the summer. Of the 175 students for whom we have both pre and post-test data, 26 (15%) of them decreased their reading stages over the summer.

MAINTENANCE/INCREASE VERSUS DECREASE OF READING STAGES FROM PRE TO POST ASSESSMENTS
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	# Students with both pre and post test data	% Students with both pre and post test data
Students who maintained or increased reading levels from pre to post assessments	149	85%
Students who decreased reading levels from pre to post assessments	26	15%
TOTAL	175	

Impressively, of the 175 students for whom we have both pre and post-test data, 61 (35%) of them actually increased their reading stages over the summer. This means that over 1/3 of students for whom we have both pre and post test data increased their proficiency in reading fluency, oral expression and comprehension over the summer while they were not even in school.

INCREASE (ONLY) OF READING STAGES FROM PRE TO POST ASSESSMENTS		
	# Students with both pre and post test data	% Students with both pre and post test data
Students who ONLY increased reading levels from pre to post assessments	61	35%
TOTAL	175	

Maintenance/Increase of Student Scores By Site/Grade

Of the 149 students that either maintained or increased their reading stages over the summer, below is a depiction of how many were in each site and by grade. 76% of the students who either maintained or increased their reading levels over the summer were at the Columbia Road site, while 24% were at Irving Street. Thus, over ¾ of students who did maintain or increase their reading levels were in the younger grades of K-3. Of the 149 students who maintained/increased their reading levels over the summer, the grade that had the highest percentage of students to do so was 1st grade. However, it should be noted that the summer enrichment program contained more 1st graders than usual, and thus the pool of students was not equal across different grade levels.

STUDENTS WHO MAINTAINED/INCREASED READING STAGES BY SITE/GRADE		
COLUMBIA RD	# students who maintained/increased reading levels at site	% total students who maintained/increased reading levels (149)
Kinder	22	15%
1 st Grade	38	26%
2 nd Grade	29	19%
3 rd Grade	24	16%
TOTAL OF SITE	113	76%
IRVING STREET		
	# students who maintained/increased reading levels at site	% total students who maintained/increased reading levels (149)
4 th Grade	15	10%

5 th Grade	11	7%
6 th Grade (Tweens)	9	6%
TOTAL OF SITE	35	24%
TOTAL OF BOTH SITES	148*	

*Note: There is 1 student for whom we do not have a grade level recorded. Thus, she cannot be included in some of the tabulations. This is why the total # of students is recorded here as 148 instead of 149.

Of the 60 students that actually increased their reading stages over the summer, below is a depiction of how many were in each site and by grade. 83% of the students who increased their reading levels over the summer were at the Columbia Road site, while 17% were at Irving Street. Thus, over ¾ of students who increased their reading levels were again in the younger grades of K-3. Of the 60 students who maintained/increased their reading levels over the summer, the grade that had the highest percentage of students to do so was 1st grade. However, it should be noted that the summer enrichment program contained more 1st graders than usual, and thus the pool of students was not equal across different grade levels.

STUDENTS WHO INCREASED (ONLY) READING STAGES BY SITE/GRADE		
COLUMBIA RD	# students who increased reading levels at site	% total students who increased reading levels (60)
Kinder	10	17%
1 st Grade	23	38%
2 nd Grade	12	20%
3 rd Grade	5	8%
TOTAL OF SITE	50	83%
IRVING STREET	# students who increased reading levels at site	% total students who increased reading levels (60)
4 th Grade	5	8%
5 th Grade	1	2%
6 th Grade (Tweens)	4	7%
TOTAL OF SITE	10	17%
TOTAL OF BOTH SITES	60*	

*Note: There is 1 student for whom we do not have a grade level recorded. Thus, she cannot be included in some of the tabulations. This is why the total # of students is recorded here as 60 instead of 61.

Maintenance/Increase of Reading Stages by Teacher

Of the 149 students that either maintained or increased their reading stages over the summer, below is a depiction of how these students distributed across different classrooms by teacher.

For the K-3 cohort at the Columbia Road site, Ms. Nancy had the highest percentage of students who either maintained or increased their reading levels over the summer. This could be attributed to the following factors: 1) A greater percentage of younger children maintained/increased their reading levels over the summer as compared to older children and Nancy had half of the classrooms with the least advanced readers (Stages 0-3). 2) Ms. Nancy employed a little more creativity in her classroom instruction via homemade costumes, signs, masks, games, etc. than most of the other teachers which could have kept the students slightly more engaged. Ms. Lien had the lowest percentage of students who either maintained or increased their reading levels over the summer. This could be attributed to the following factors: 1) Ms. Lien had the classrooms with students who ranged from Reading Stages 2-5, which was a highly varied population of classroom readers. She employed great use of the curriculum with excellent classroom management skills, but the overall effect of having readers representing 4 different stages could have had a significant effect on the overall student progress. Even though another classroom represented Reading Stages 3-6 and thus the same number of different stages in one room, the difference of comparing a Stage 2 versus Stage 5 reader and a Stage 3 versus Stage 6 reader is starker.

STUDENTS WHO MAINTAINED/INCREASED READING STAGES BY SITE/TEACHER			
COLUMBIA RD	# students who maintained/increased reading levels in each classroom	% students who maintained/increased reading levels in each classroom as compared to the total (149)	% students who maintained/increased reading levels in each classroom as compared to the total at each site (113)
Brittany	28	19%	25%
Imani	29	19%	26%
Lien	24	16%	21%
Nancy	33	22%	29%
TOTAL OF SITE	113	76%	
IRVING STREET	# students who maintained/increased reading levels in each classroom	% students who maintained/increased reading levels in each classroom as compared to the total (149)	% students who maintained/increased reading levels in each classroom as compared to the total at each site (35)
Laura	10	7%	29%
Richard	14	9%	40%
Laura/Richard (Tweens)	9	6%	26%
TOTAL OF SITE	35	24%	
TOTAL OF BOTH SITES	148*		

*Note: There is 1 student for whom we do not have a grade level recorded. Thus, she cannot be included in some of the tabulations. This is why the total # of students is recorded here as 148 instead of 149.

Of the 60 students that actually increased their reading stages over the summer, below is a depiction of how these students distributed across different classrooms by teacher.

For the K-3 cohort at the Columbia Road site, Ms. Nancy again had the highest percentage of students who increased their reading levels over the summer. At Irving Street, Mr. Richard and Ms. Laura had around the same percentage of students increase with their reading stages with their Tweens having slightly more of increase when they co-taught that class.

STUDENTS INCREASED (ONLY) READING STAGES BY SITE/TEACHER			
COLUMBIA RD	# students who increased (only) reading levels in each classroom	% students who increased (only) reading levels in each classroom as compared to the total (60)	% students who increased (only) reading levels in each classroom as compared to the total at each site (51)
Brittany	13	22%	25%
Imani	7	12%	14%
Lien	10	17%	20%
Nancy	21	35%	41%
TOTAL OF SITE	51	85%	
IRVING STREET	# students who increased (only) reading levels in each classroom	% students who increased (only) reading levels in each classroom as compared to the total (60)	% students who increased (only) reading levels in each classroom as compared to the total at each site (9)
Laura	2	3%	22%
Richard	3	5%	33%
Laura/Richard (Tweens)	4	7%	44%
TOTAL OF SITE	9	15%	
TOTAL OF BOTH SITES	60*		

*Note: There is 1 student at Irving for whom we do not have a teacher recorded. Thus, he cannot be included in some of the tabulations. This is why the total # of students is recorded here as 60 instead of 61.

Decrease of Student Reading Stages

Of the 175 students for whom we gathered both pre and post-test data, 26 students decreased in their reading stages over the summer. This could be attributed to a wide variety of factors, but most notably including: 1) Poor regular attendance of students over the course of the program; 2) Change of teacher mid-program; 3) Different pre-post assessors due to two staff members either no longer working at CentroNia by the time of the post-assessment or being out on vacation during the week of post-assessments.

As demonstrated below, 62% of the students who decreased in their reading stages over the summer were in grades K-3, attending the program at Columbia Rd. 38% of them were in grades 4-6, attending the program at Irving Street.

STUDENTS WHO DECREASED READING STAGES BY SITE/GRADE (TOTAL 26)		
COLUMBIA RD	# students who decreased reading levels at site	% total students who decreased reading levels (26)
Kinder	5	19%
1 st Grade	0	0%
2 nd Grade	6	23%
3 rd Grade	5	19%
TOTAL OF SITE	16	62%
IRVING STREET		
	# students who decreased reading levels at site	% total students who decreased reading levels (26)
4 th Grade	5	19%
5 th Grade	4	15%
6 th Grade (Tweens)	1	4%
TOTAL OF SITE	10	38%
TOTAL OF BOTH SITES	148*	

STUDENTS WHO DECREASED READING STAGES BY SITE/TEACHER			
COLUMBIA RD	# students who decreased reading levels in each classroom	% students who decreased reading levels in each classroom as compared to the total (26)	% students who decreased reading levels in each classroom as compared to the total at each site (16)
Brittany	3	12%	19%
Imani	6	23%	38%
Lien	6	23%	38%
Nancy	1	4%	6%
TOTAL OF SITE	16	62%	
IRVING STREET			
	# students who decreased reading levels in each classroom	% students who decreased reading levels in each classroom as compared to the total (26)	% students who decreased reading levels in each classroom as compared to the total at each site (10)
Laura	5	19%	50%
Richard	4	15%	40%
Laura/Richard (Tweens)	1	4%	10%
TOTAL OF SITE	10	38%	%
TOTAL OF BOTH SITES	26		

Of the 26 students who decreased in their Reading Stages from pre to post tests, 15 of them missed more than 5 days of the summer program (20%). Thus, 42% of the students who decreased in their scores may not have attended enough of the program to have been able to maintain their reading stages over the summer. Taking these 15 students out of the data pool, the percentage of students for whom we have both pre and post data that decreased in their scores actually drops to only 6%.

Of the 26 students who decreased in their Reading Stages from pre to post tests, 6 of them were in a classroom where the teacher changed mid-way through the program. Thus, 23% of the students who decreased in their scores may have simply half as much “good” instruction or had some trouble adjusting to a new teacher. Taking these 6 students out of the data pool, the percentage of students for whom we have both pre and post data that decreased in their scores actually drops to 11%.

Of the 26 students who decreased in their Reading Stages from pre to post tests, 9 of them had different pre and post assessors due to 1 teacher no longer working at CentroNia and 1 teacher being out on vacation during the week of post-assessments. Thus, 35% of the students who decreased in their scores may have simply been assessed differently between their pre and post tests, resulting in post-test results that could be inaccurate.. Taking these 9 students out of the data pool, the percentage of students for whom we have both pre and post data that decreased in their scores actually drops to 10%.

I also compared Cohorts A versus B to see if there was any significant difference in score trends. Overall, there were almost equal numbers of students who decreased in their scores in Studios A versus B. Thus, the time of day that students participated in Reader’s Theater did not seem to be a significant factor in whether or not they decreased with their Reading Stages over the summer.

Other Notes

- 1) The following students at Irving Street had their pre-assessment with Laura but their post-assessment with Richard due to an administrative error. This was not reflected on the raw data sheet like “Cassandra/Jaine” and “Nancy/Evelyn” to indicate different pre and post assessors, but I did want to make a note of it below:

Belaniz Molina, 5A
Nancye Chavez, 5A
Samuel Benetiz, 5A
Brian Ramirez, 5B
Christian Feliz, 5B
Daniel Velasquez, 5B
Dimas Molina, 5B
Johan Quintanilla, 5B
Andy Benitez, Tween
Christopher Aguilar, Tween
Freddy Giron, Tween
Kessya Aguilar, Tween
Noelvin Martinez, Tween

- 2) The total # of students for whom we have both pre and post-test assessment data does not always equal the individual sum of the number of students who maintained/increased their scores plus the number of students who decreased with their scores. This is because we had

one student who participated in our summer program (or at least was present for pre and post tests) by the name of Stephanie Hernandez who Admissions kept insisting was not in our summer program at Columbia Road. Though I tried repeatedly to get this issue resolved, I was unable to do so. Therefore, we have both pre and post-test data on a student, but she is not on a classroom roster and I could never ascertain her grade level or classroom teacher. There was also 1 student at Irving for whom I could not ascertain the correct teacher from class rosters.

Recommendations

- 1) Prepare reports for each summer RT teacher on all of their students so that they may know how their students grew over the summer.
- 2) Collaborate with DCB to share RT program and data
- 3) Collaborate with DCB to compare students' RT data to their fall F&P scores (for students who participated in CEE's Summer Enrichment Program)
- 4) Collaborate with DCB to compare students' fall F&P scores to their previous spring F&P scores to analyze any summer reading regression or lack thereof (for students who participated in CEE's Summer Enrichment Program)
- 5) If DCB students maintained or increased their F&P levels over the summer, be careful not to claim causality until regression models can be run with future data taking statistical significance, standards of error, etc. into account.
- 6) Implement the RT Summer Program next summer
 - Now that staff is familiar with program, encourage them to take more creativity with their instruction (costumes, oral expression games, etc.)
 - Ensure that the MOST CREATIVE, ENERGETIC, THEATER-ORIENTED teachers are the ones serving as Lead Teachers for the RT program
 - Make every effort to ensure that the same Lead Teachers can assess the same students for pre and post assessments
 - Ensure that Admissions Lists, Homeroom Rosters and Studio Rosters are identical!