
February, 2015

The Effect of Structured Silent Reading Practice
on ELL Students' Reading Proficiency
as Measured by the FCAT 2.0®



State

Florida

County

Miami-Dade

School District

Miami-Dade County School District

Schools

466

Pupils

355,268 students
(51% male, 49% female)

Students Enrolled in Reading Plus

- 157,974 students (total)
- 82,193 ELL students

Race & Ethnicity

- 67% Hispanic
- 23% Black Non-Hispanic
- 10% White & Other Non-Hispanic

Free/Reduced Priced Lunch

74% Received

Study Participants

- 46,171 ELL students
- Grades 4-10
- 51% male, 49% female
- 91.5% Hispanic
- 83% received free/reduced priced lunch

Study Inclusion Requirements

- Students were designated English Language Learners.
- Students had valid 2013 and 2014 FCAT scores
- Students did not receive special education services.

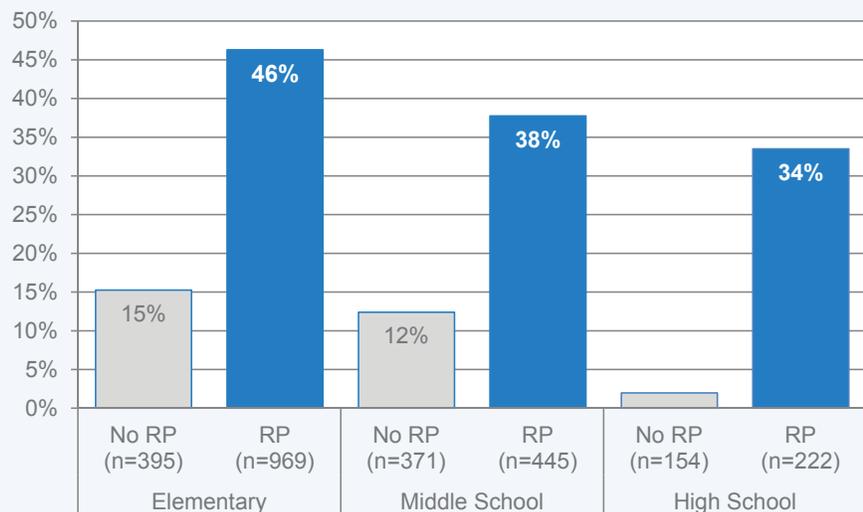
Purpose of Study

Reading Plus[®], a web-based structured silent reading program, was used widely in Florida's Miami-Dade County School District (MDCSD) during the 2013-2014 school year. Among the 157,974 students who used the program were 82,193 students who were designated as *English Language Learners (ELLs)*. Of these ELL students, 25,594 were receiving *English for Speakers of Other Languages (ESOL)* services. Another 56,644 ELL students had received ESOL services previously but no longer did so because they had attained English proficiency. The purpose of this study was to determine the effect of varying amounts of *Reading Plus* use on the scores of ELL students on the reading portion of the Florida Comprehensive Assessment Test 2.0 (FCAT), the standardized state test administered annually to all Florida public school students in grades three through ten.

Summary of Findings

Students who used *Reading Plus* achieved significantly larger scale score gains on the reading portion of the Florida Comprehensive Assessment Test 2.0 (FCAT). *Reading Plus* use also resulted in higher percentages of students advancing one or more levels on the FCAT, and achieving a satisfactory level or higher. FCAT gains among ELL students with lower levels of English proficiency were exceptionally large.

Percent of ELL Students Advancing from Below Satisfactory to Satisfactory or Higher on the FCAT 2.0



Of the students who scored below satisfactory (FCAT level 3) the previous year, a significantly larger percentage of students who engaged in *Reading Plus* practice (RP) achieved satisfactory levels in reading on the FCAT 2.0 (FCAT levels 3+) as compared to students who did not engage in *Reading Plus* practice (No RP) ($p < .001$).

Background

Students with limited English proficiency require supplemental educational support services to overcome language barriers and to ensure equal access to educational opportunities. With oversight from the Federal Office for Civil Rights, schools are obligated to implement, adequately support, and periodically evaluate educational support services for ELL students (U.S. Department of Education Office for Civil Rights, 2000). To meet this obligation, the MDSCD has developed and implemented a district ELL plan (Miami-Dade County Public Schools, 2009). The plan calls for the evaluation of ELL students' English oral and listening skills using an assessment developed by the district. The plan also calls for the documentation of growth in language proficiency using the Comprehensive English Language Learning Assessment (CELLA). Based on these assessments, students are assigned to one of five ELL English Proficiency Levels: (1) Beginning, (2) Low Intermediate, (3) High Intermediate, (4) Advanced, and (5) Fluent (students on Level 5 no longer require services and exit the ESOL program).

The MDSCD provides schools with access to a suite of *Links to Learning* applications that can be used by schools as part of the curriculum, as well as independently by students both during and outside of school. Each year, the district evaluates the extent to which students use these applications and the impact of such use on students' FCAT scores (Urdegare, 2014 and previous years). One of these applications, *Reading Plus*, has had consistently positive effects on the FCAT scores of students across all grades (Urdegare, 2013). *Reading Plus* offers a wide range of carefully leveled narrative and informational texts that engage students in critical and close reading tasks, encourage students to read with purpose and understanding, and develop the fluent reading habits needed to achieve year-end expectations as outlined in the Common Core State Standards (CCSS). Reading practice lessons are carefully scaffolded to address individual student needs and to facilitate the development of each student's silent reading proficiency. This report, with a focus on ELL students, is part of a larger

study evaluating the impact of varying amounts of *Reading Plus* use on the reading achievement of diverse student populations in the MDCSD as measured by the FCAT 2.0.

Population

Reported here are data from 46,171 fourth through tenth grade ELL students (51% female, 49% male) who had valid FCAT scores in 2013 and 2014 and were not receiving special education services. Of these students, 12,845 were on ELL Levels 1 through 4 and the remainder had exited the ESOL program (ELL Level 5). The majority of the ELL students were Hispanic (91.5%). About 83% of the students were classified as socioeconomically disadvantaged (i.e., receiving free or reduced price lunch).

Procedure

All data associated with student use of *Reading Plus* were stored on dedicated, secure servers. These data were provided to the MDCSD at the end of the 2013-2014 school year. Each student data record was then linked to demographic information, designated English Proficiency Level, and scale scores from the reading portion of the FCAT from both the April 2013 and April 2014 test administrations. The resulting data set was then de-identified and returned to *Reading Plus* for analysis.

This data set made it possible to measure changes in FCAT scores over 12 months for students in the fourth through tenth grades. For statistical analyses, students were divided into three grade bands: Elementary School (grades 4-5), Middle School (6-8), and High School (9-10). Each student's 2013 and 2014 FCAT scores were then used as a repeated measure in mixed design Analyses of Variance (ANOVA), with English Proficiency Level and the amount of *Reading Plus* use as between-subjects measures. The amount of program use was quantified in terms of the number of reading practice lessons completed, with students being divided into six groups using increments of 25 lessons. On average, each *Reading Plus* lesson lasted 15 minutes.

Results

Elementary School: In this grade band, students on all English Proficiency Levels achieved significant FCAT scale score gains during the school year. Figure 1 shows that students who completed more *Reading Plus* lessons achieved significantly larger scale score gains ($p < .001$). Figure 1 also shows that the gains among students with lower levels of English proficiency were exceptionally large. Average gains among Level 1 (Beginning) ELL students ranged up to 42 scale score points in the highest use group (>125 lessons), increasing from a mean of 167 to 209 ($p < .001$). Scale score gains among Beginning ELL students who did not engage in *Reading Plus* practice averaged less than 20 points. Average gains achieved by Level 5 students (who had exited ESOL services) ranged up to 13.7 scale score points in the highest use group, increasing from a mean of 215 to 229 ($p < .001$). While gains among these fluent ELL students were not as large as those seen in the less proficient students, they are nevertheless comparable to the gains measured in non-ELL elementary school students who used *Reading Plus*, which ranged up to an average of 13.2 scale score points in the highest use group. For the sake of comparison, yearly gains among Florida students in Grades 4 and 5 are typically in the range of 6-9 scale score points across achievement levels (Florida Department of Education, 2014).

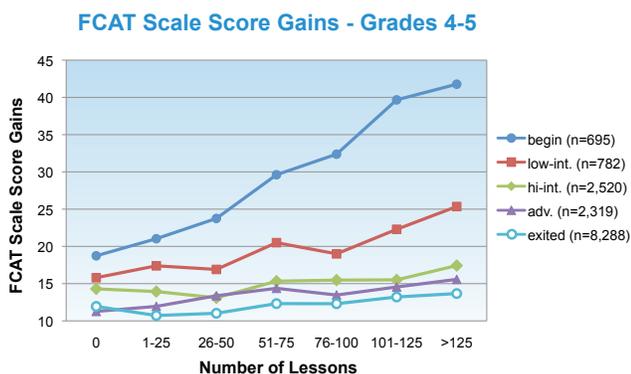


Figure 1. Elementary school students: FCAT 2.0 scale score gains by number of lessons and by English Proficiency Level.

Middle School: A similar pattern of results was seen among middle school students (grades 6-8) as shown in Figure 2. Students who completed more *Reading Plus* lessons achieved significantly larger FCAT scale score gains ($p < .001$), and gains among students with lower levels of English proficiency were especially large; ranging up to an average of 37 scale score points in the high use Beginning ELL students (increasing from 185 to 222; $p < .001$). Scale score gains among Beginning ELL students who did not engage in *Reading Plus* practice averaged less than 10 scale score points. Gains achieved by students who had exited ESOL services were also larger among students with more program use, increasing by an average of 10.6 scale score points (increasing from a mean of 229 to 239) in the high use group ($p < .001$). Yearly gains among Florida students in Grades 6 to 8 are typically in the range of 3-7 scale score points across achievement levels (Florida Department of Education, 2014).

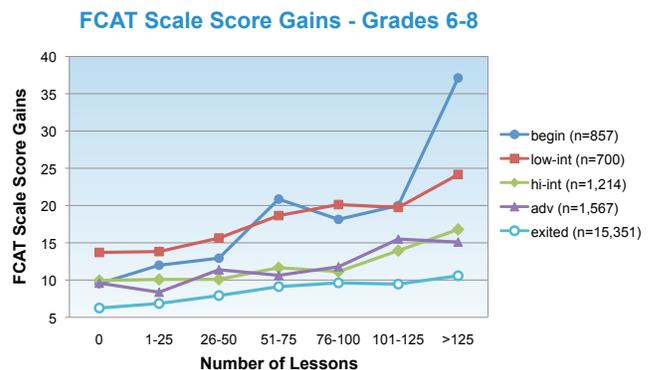


Figure 2. Middle school students: FCAT 2.0 scale score gains by number of lessons and by English Proficiency Level.

High School: FCAT scale score gains among high school students (grades 9-10) are shown in Figure 3. Consistent with the other grade bands, larger scale score gains were achieved by students who completed more *Reading Plus* lessons ($p < .001$), and gains among ELL students with lower levels of English proficiency were especially large; ranging up to an average of 22 scale score points in the high use Beginning ELL students (increasing from 207 to 229; $p = .009$). Scale score gains among Beginning ELL students who did not engage in *Reading Plus* practice averaged less than 6 scale score points. Students who had exited ESOL services also achieved significantly larger scale score gains with more program use, with scores increasing from a mean of 238 to 244 in the high use group ($p < .001$). This represents more than three times the yearly gains typically achieved by non-ELL high school students.

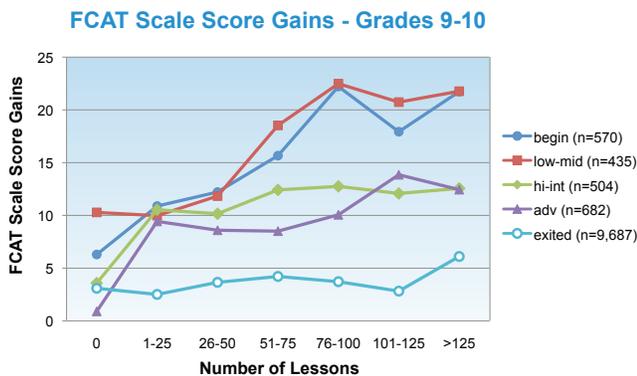


Figure 3. High school students: FCAT 2.0 scale score gains by number of lessons and by English Proficiency Level.

FCAT Level Gains: Florida state law mandates an annual assessment of school performance using numerous criteria. Key Learning Gains criteria are met when students achieve and maintain scores in the range of FCAT Level 3 (satisfactory) or above, or increase their scores by one or more FCAT levels. Figure 4 shows that the percentage of ELL students achieving FCAT Level 3 in 2014 was larger among students who used *Reading Plus* more frequently, and this was true across all ELL levels and all grade bands. Differences in the percentage of students achieving Level 3 were particularly large on the lower ELL levels. In grades 4-8, for example, almost 40% of the Beginning ELL students who completed at least 100 *Reading Plus* lessons (~30 hours) achieved FCAT Level 3 as compared to only 3% of students who did not use the program.

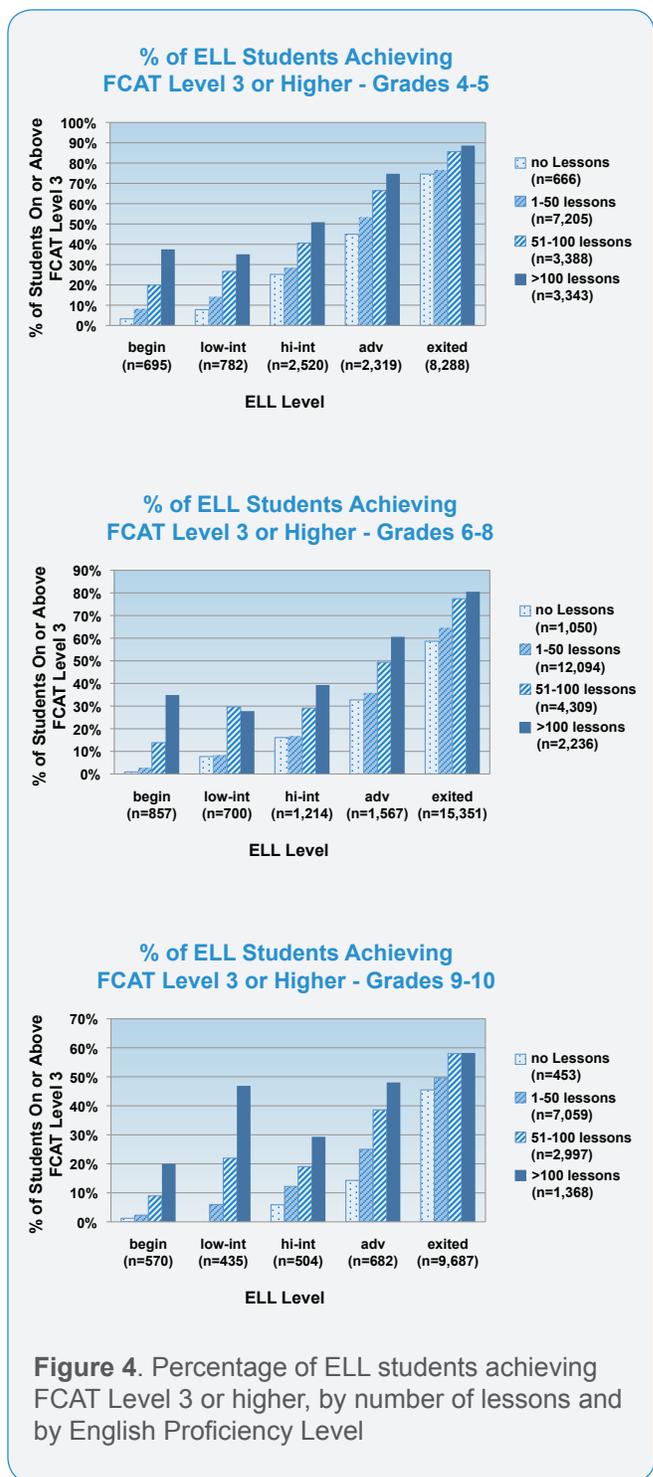


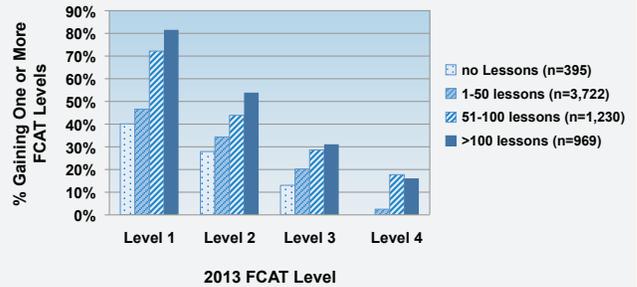
Figure 4. Percentage of ELL students achieving FCAT Level 3 or higher, by number of lessons and by English Proficiency Level

Achievement Level Policy Definitions that apply to FCAT 2.0 Reading (Next Generation Sunshine State Standards). Students demonstrate:

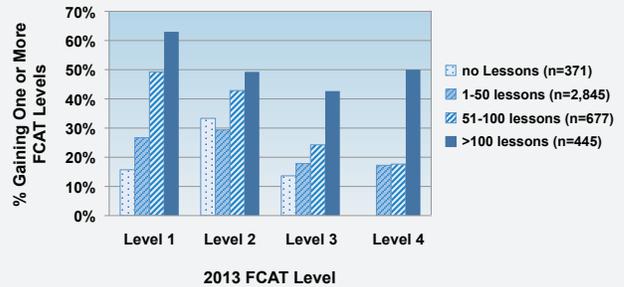
- Level 5** - mastery of the most challenging content
- Level 4** - an above satisfactory level of success with challenging content
- Level 3** - a satisfactory level of success with challenging content
- Level 2** - a below satisfactory level of success with challenging content
- Level 1** - an inadequate level of success with challenging content

Shown in Figure 5 are the percentages of students on ELL Levels 1-4 who gained one or more FCAT levels between 2013 and 2014. Since it becomes more difficult to advance when one is already at a higher FCAT level, data are shown separately by FCAT starting level. Again, more frequent use of *Reading Plus* resulted in an increased likelihood of advancing to a higher FCAT level, and this was true across all FCAT starting levels and all grade bands. For example, more than 60% of the middle school ELL students who started on FCAT Level 1 and completed at least 100 *Reading Plus* lessons (~30 hours) improved by one or more FCAT levels, while only 16% of students who did not use the program did so.

% of Students on ELL Levels 1-4 Gaining One or More Levels on the FCAT - Grades 4-5



% of Students on ELL Levels 1-4 Gaining One or More Levels on the FCAT - Grades 6-8



% of Students on ELL Levels 1-4 Gaining One or More Levels on the FCAT - Grades 9-10

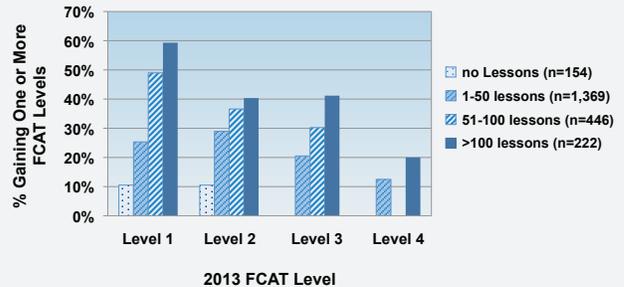


Figure 5. Percentage of ELL students gaining one or more FCAT levels, by number of lessons and starting FCAT level. Only students receiving ESOL services (ELL levels 1-4) are included here. Bars representing data from groups with <12 students were omitted.

Reading Rate: Each student's comprehension-based silent reading rate (CSR rate) was calibrated at the start of the school year. This was the rate at which a student could read leveled texts with at least 80% comprehension. The program then used a *guided window* text presentation format as a scaffold to model sequential and fluent left-to-right reading and to help students develop more efficient habits. If students' CSR rates were below grade-level goals, training initially focused on efficiency development. Once reading efficiency improved sufficiently (grade targets were met), the practice emphasis shifted toward helping students develop their ability to read increasingly complex texts with good comprehension (Capacity Building phase) while continuing to exercise their improved efficiency habits within the structured practice environment. In all grade bands, gains in practice CSR rates were significantly larger among students with higher levels of program use ($p < .001$). Table 1 reports mean CSR rates before, during, and after *Reading Plus* practice among students who completed 100 or more lessons.

Table 1: Mean practice CSR rates (wpm) in students who completed at least 100 lessons.

ELL Level (n)	Initial Rate*	CB Start Rate**	End Rate
Elementary School Students (grades 4-5)			
Level 1-2 (113)	100	118	143
Level 3-4 (845)	116	149	167
Exited (2338)	138	181	197
Middle School Students (grades 6-8)			
Level 1-2 (96)	102	154	196
Level 3-4 (341)	136	194	215
Exited (1760)	165	218	243
High School Students (grades 9-10)			
Level 1-2 (56)	112	174	210
Level 3-4 (153)	133	223	242
Exited (1125)	170	240	270

* CSR rate calibrated during practice startup.

** CSR rate when the practice focus shifted to Capacity Building and there was no longer a focus on reading rate development. In this phase, any rate increases were entirely student driven.

Reading Level: The *Reading Plus* program includes an assessment (*InSight*) that is used to determine each student's most appropriate reading practice starting level and to ensure that students are provided with text selections within their zone of proximal development. Scaffolds are then provided so that students can focus on reading with good comprehension and gain confidence while engaging in reading tasks of increasing difficulty. In all grade bands, higher amounts of program use were associated with an improved ability to read and comprehend increasingly complex texts ($p < .001$). Table 2 reports the levels of text complexity at which students could demonstrate comprehension within the scaffolded practice environment, both before and after completing 100 or more *Reading Plus* lessons.

Table 2: Grade Level of Text Comprehended (with scaffolding) in students who completed at least 100 lessons.

ELL Level (n)	Initial Level*	CB Start Level**	End Level
Elementary School Students (grades 4-5)			
Level 1-2 (113)	1.0	2.3	5.1
Level 3-4 (845)	1.1	2.6	5.5
Exited (2338)	1.6	3.7	6.9
Middle School Students (grades 6-8)			
Level 1-2 (96)	1.1	2.6	6.2
Level 3-4 (341)	1.4	3.5	6.9
Exited (1760)	2.6	5.2	8.8
High School Students (grades 9-10)			
Level 1-2 (56)	1.2	3.3	7.0
Level 3-4 (153)	2.0	5.0	9.0
Exited (1125)	3.7	7.1	10.3

* Initial practice level as determined by the *InSight* assessment.

** Level at which the focus of practice shifted to Capacity Building.

Discussion

Practice is required to develop reading efficiency, comprehension, and stamina. While most ELL students are able to decode text, students who are learning a second language often must devote a disproportionate share of their cognitive resources to word recognition rather than to comprehension (cf. Hiebert & Fisher, 2007). Sustained reading practice with appropriately leveled text selections is needed to enhance the student's ability to instantly recognize and comprehend an expanding collection of words and phrases. In addition, ELL students must be held accountable for understanding what they read during reading practice. When students know that questions will follow a reading selection, they are more likely to engage in *comprehension monitoring*. That is, they are more likely to maintain an ongoing awareness of whether what is being read is actually understood and making sense (e.g., Fisher & Frey, 2012). This, in turn, is a prerequisite of *close reading* as defined in the CCSS (CCSSO/NGA, 2010). Further, the ability to engage in the sustained, focused attention required to maintain comprehension, particularly when encountering longer and more challenging text selections, depends on the development of reading stamina through frequent practice (Hiebert, 2014).

In this study, *Reading Plus* provided ELL students with access to highly structured reading experiences featuring carefully modulated vocabulary, selection length, syntactic and semantic complexity, and required background knowledge. The results were consistent across all grade bands and on all ability levels: Students using the program achieved an increase in reading rate (increased efficiency) and an improved ability to comprehend more complex text. There was also a generalization of the learning that resulted from increased practice time as evidenced by higher score gains on the Florida state reading assessment. These results suggest that the *Reading Plus* program is an effective tool for developing reading proficiency in ELL students.

References

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