

READ 180 in Seminole County, Florida

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Executive Summary

Seminole County Public Schools collaborated with researchers at Florida Center for Reading Research and Florida State University during school year 2005-2006 to compare the effects of reading interventions in high school, including *READ 180*. A total of 286 9th and 10th grade students in seven high schools were randomly assigned to twelve *READ 180* classrooms. The FCAT Reading assessment was used to measure the effectiveness of *READ 180* at six months of intervention (August 2005 to March 2006) while the SRI measured effectiveness of *READ 180* during the whole intervention (August 2005 to May 2006).

FCAT Reading results showed an increase of at least one Reading level for 25% of the *READ 180* students. For Level 1 students, 29% gained one Reading level or more, and 13% of all students (both Levels 1 and 2) reached Level 3 or above. Further, *READ 180* research study students averaged at least one year of reading growth on FCAT Reading, and tenth grade *READ 180* research study students averaged almost two years of reading growth — and three times the reading growth of all tenth graders in Seminole County. These improvements in tenth grade for *READ 180* students were particularly noteworthy given that overall district performance in tenth grade was not as good as district performance in ninth grade.

Further correlational analysis demonstrated that exposure to the *READ 180* software component was directly related to Seminole *READ 180* students' reading gains, as measured by the SRI.

The schools participating in the research study showed improvement in the reading performance measures used to calculate school grades. Six out of the seven high schools participating in the *READ 180* research study increased their school grade by one or more letter grades, or maintained a letter grade of "A." Further, the teacher retention rate for *READ 180* teachers was quite high, at 96%, compared to 50% and 75% for the other reading interventions involved in the research study.

Introduction

During the school year 2005-2006, Seminole County Public Schools collaborated with researchers at Florida Center for Reading Research (FCRR) and Florida State University to conduct the first year of a two-year, gold standard,¹ experimental research study to compare the effects of three reading interventions in high school: *READ 180*, a published reading intervention, and a thematic text-set approach. In addition, classrooms that incorporated “business as usual” practices were included as the control group.

Two hundred eighty-six 9th and 10th grade students in seven high schools were randomly assigned to twelve *READ 180* classrooms, and participated in the program from August 2005 to May 2006.² This report provides an analysis of the research data for the *READ 180* program only. An extensive report from FCRR and Florida State University that includes the research results of *READ 180* and the other reading interventions over two school years (2005-2006 and 2006-2007) will be available in late 2007.

The assessments used to measure program effectiveness were: 1) Florida’s Comprehensive Assessment Test (FCAT) Reading scores from March 2005 and March 2006, and 2) the Scholastic Reading Inventory (SRI), administered in August 2005 and May 2006. The FCAT measures the effectiveness of *READ 180* at only six months of intervention, while SRI measures the effectiveness of *READ 180* through the full school year.³

¹ Well-designed and implemented randomized controlled trials are considered the “gold standard” for evaluating an intervention’s effectiveness.

² Seminole *READ 180* students were neither English language learners (LEP) nor assigned to special education (ESE).

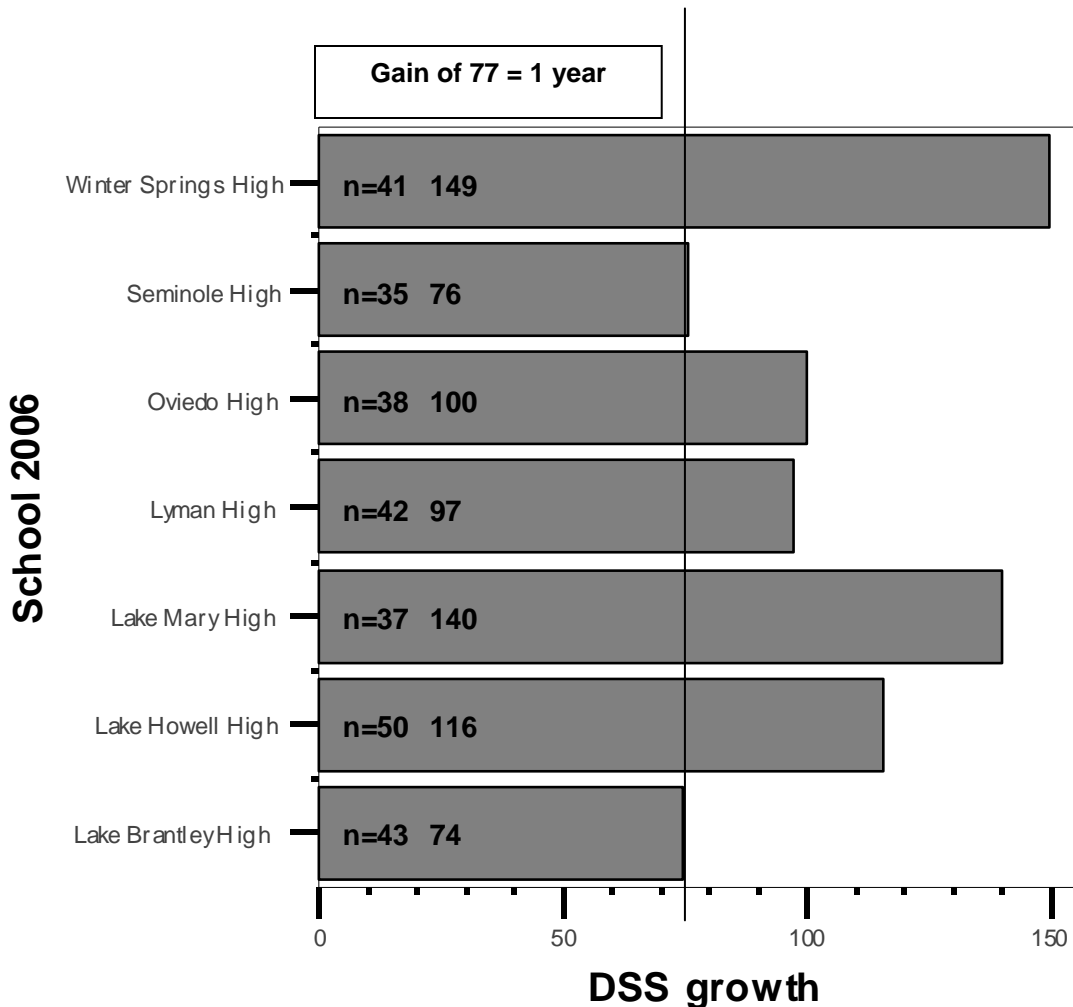
³ Excludes days when students were not in school (e.g., holidays).

FCAT Results – All READ 180 Students

Annual Reading Gains of One Year or More for All READ 180 Students

Overall, results showed that the *READ 180* program helped accelerate student reading achievement. For ninth and tenth grade, a gain of 77 FCAT DSS (Developmental Scale Score) points is equivalent to one year of reading growth. *READ 180* students in five schools gained well over one year of reading growth, while *READ 180* students in two schools gained nearly one year of reading growth (Graph 1).

Graph 1. FCAT Reading Developmental Scale Score Gains for *READ 180* Research Study Students, by High School, March 2005 to March 2006⁴



⁴ Florida gives 1 point for each percent of the lowest performing students (defined as the lowest quartile or 25%) making learning gains (either improve one or more achievement levels, maintain achievement levels within Levels 3, 4, or 5, or demonstrate more than one year's growth when remaining in achievement Level 1 or 2 for both years). In the event that there are not at least 30 eligible students, the school's percent of students making annual learning gains for all students is substituted. Percentile ranks for each student were not provided by the district; thus, an analysis of students scoring in the lowest quartile is unavailable.

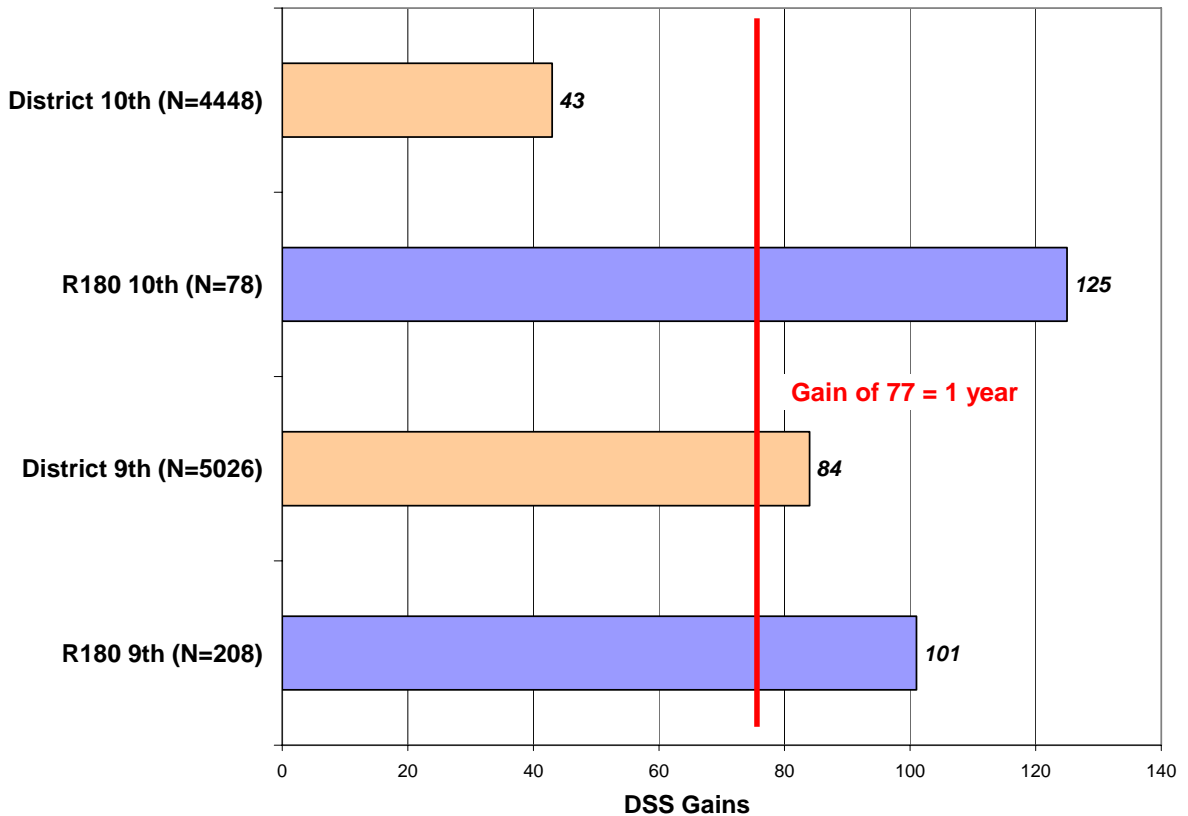
FCAT Results – Ninth and Tenth Grade

DSS Reading Gains Indicate READ 180 Students Outperformed District Students

READ 180 students averaged well over one year of mean reading growth, and tenth grade READ 180 students had significantly higher reading gains than ninth grade students (Graph 2). The mean gain for tenth grade was 125 DSS points, while the mean gain for ninth grade was 101 DSS points.

In comparison to overall district DSS gains in ninth and tenth grade, all READ 180 students scored significantly higher. Further, tenth grade READ 180 students averaged nearly triple the gains of those reported by the district in tenth grade.

Graph 2. FCAT Reading Developmental Scale Score Gains for All Seminole County Students vs. READ 180 Research Study Students, March 2005 to March 2006



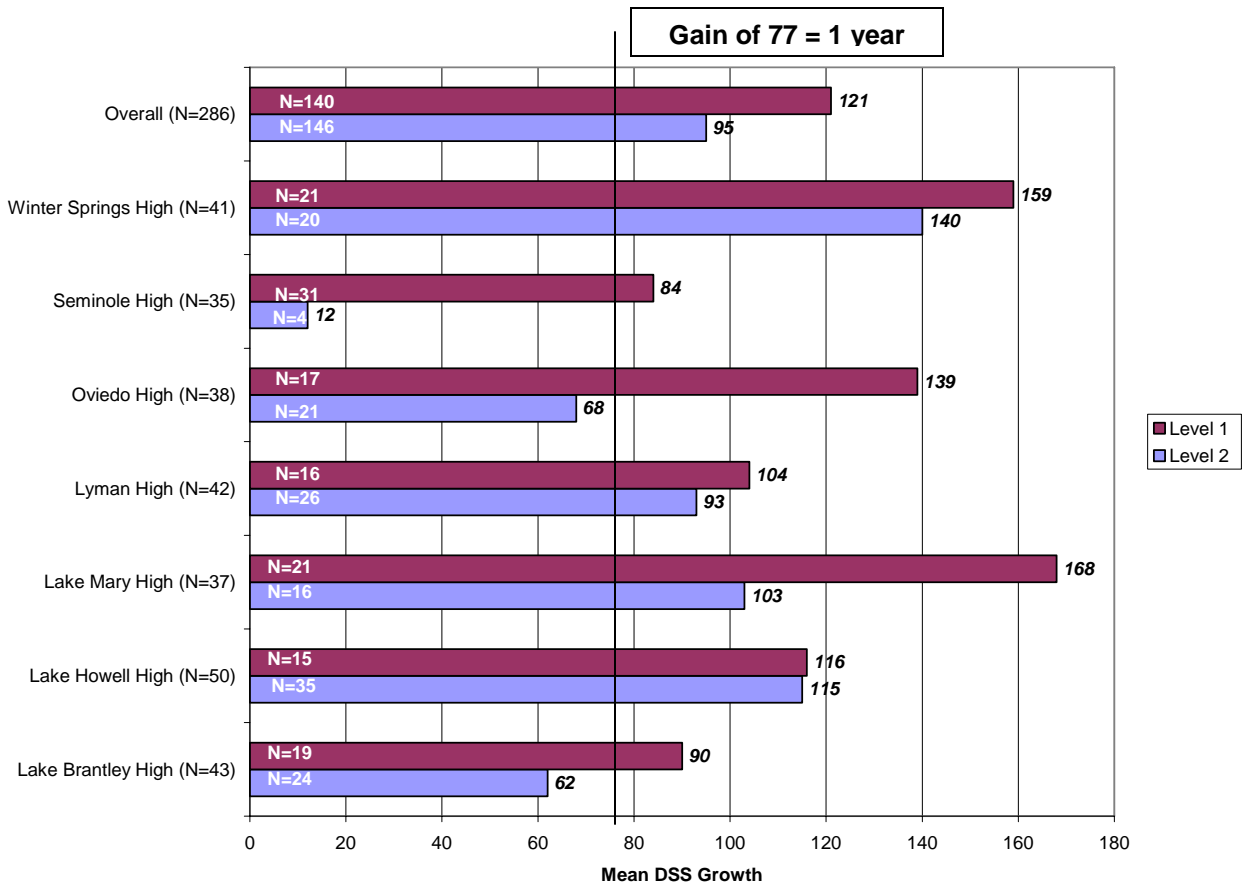
FCAT Results – Level 1 and Level 2 READ 180 Students

DSS Gains Indicate Annual Reading Gains of Over One Year for Level 1 Students

All students entering *READ 180* in Seminole were scoring at Level 1 or Level 2 on the FCAT in March 2005; for Level 1 students in particular, DSS scores dramatically increased. Students scoring in Level 1 before *READ 180* gained a mean of 121 DSS points, or well over one year of reading growth (Graph 3). A total of 29% of all Level 1 students had also gained at least one reading achievement level on the FCAT.

Overall, Level 2 students gained a mean of 95 DSS points. In five schools, Level 2 students gained over one year of reading growth, while in three schools, Level 2 students gained less than one year of reading growth. A total of 21% of all Level 2 students also gained at least one reading achievement level on the FCAT.

Graph 3. FCAT Reading Developmental Scale Score Gains for Level 1 vs. Level 2 *READ 180* Research Study Students, March 2005 to March 2006

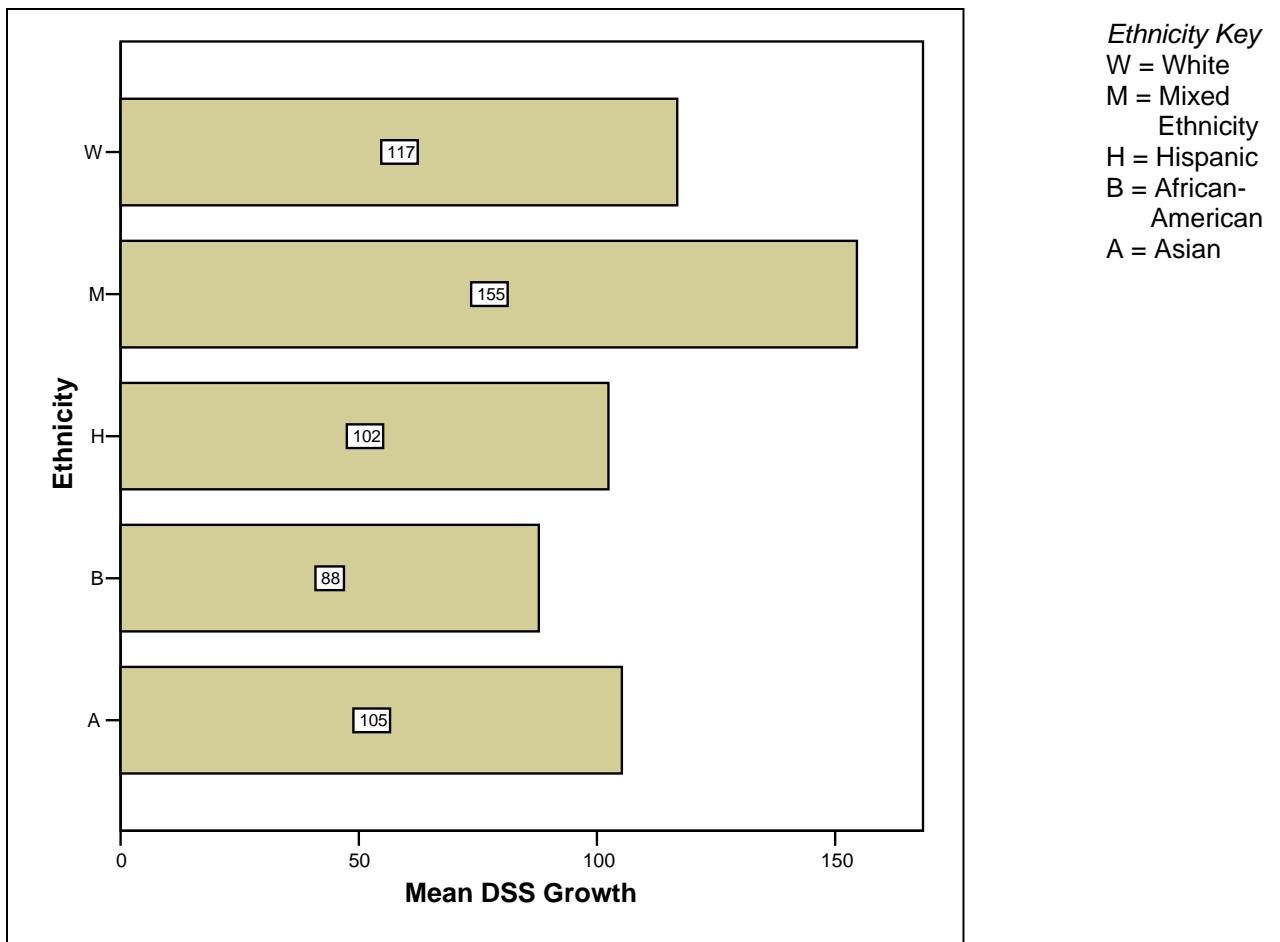


FCAT Results – READ 180 Students by Ethnicity

White READ 180 Students Averaged the Highest Gains at 117 DSS Points

Disaggregation of FCAT performance of *READ 180* students by ethnicity revealed significant differences in FCAT DSS gains between groups. A t-test analysis of mean DSS gains for *READ 180* students by ethnicity confirmed that White students achieved greater gains (117 points, n=141) than either Hispanic (102 points, n=48) or African-American students (88 points, n=80). With regard to the performance of Mixed ethnicity (n=12) and Asian students (n=5), sample sizes were too small to interpret with confidence.

Graph 4. FCAT Reading Developmental Scale Score Gains for *READ 180* Research Study Students By Ethnic Group, March 2005 to March 2006

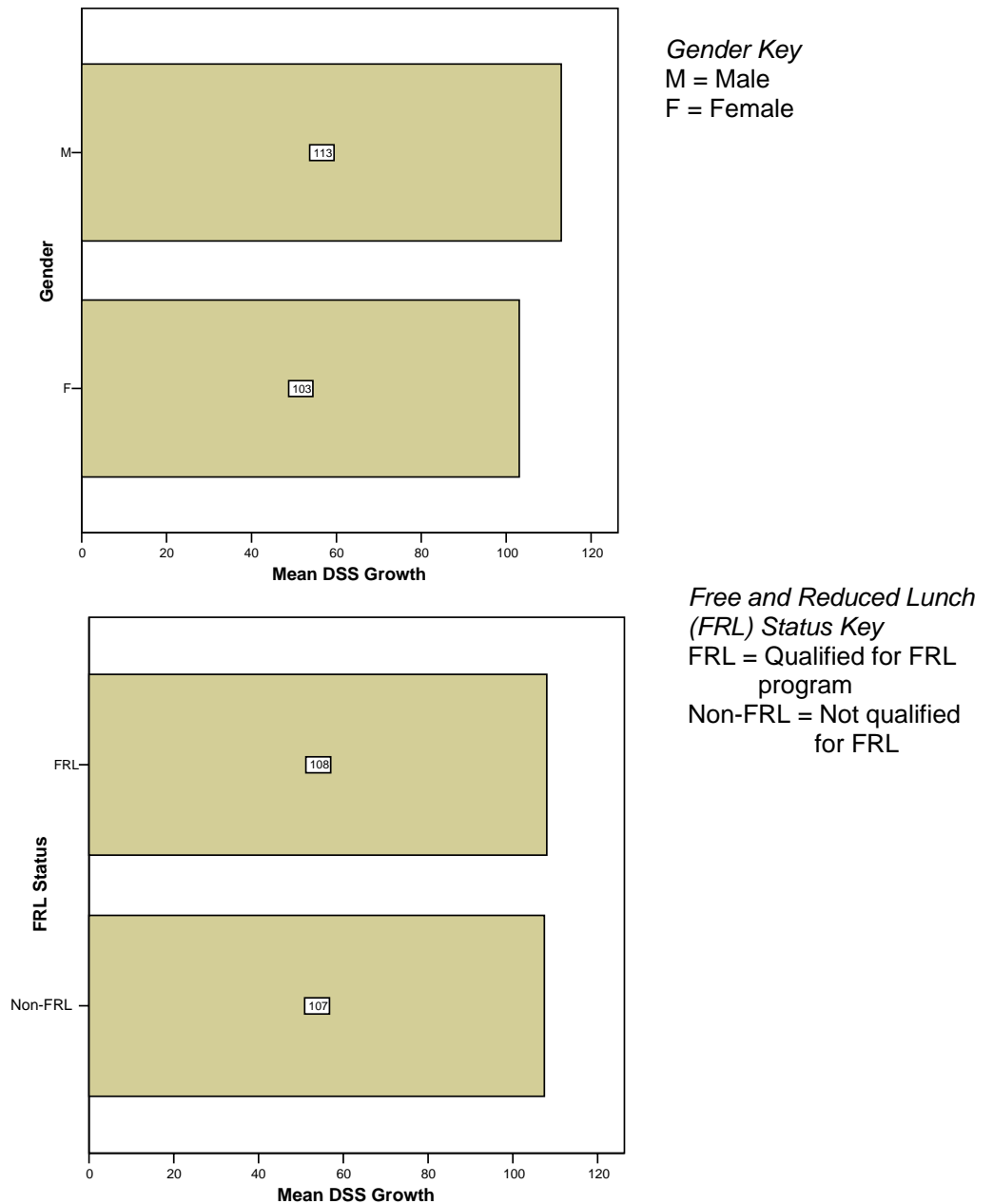


FCAT Results – READ 180 Students by Gender

Analyses of Male vs. Female Students and Free and Reduced Lunch vs. Non-Free and Reduced Lunch Students Reveal No Significant Differences in FCAT Gains

Disaggregation of FCAT performance by gender and free and reduced lunch status revealed little difference in FCAT DSS gains between groups. T-test analyses confirmed that there were no significant differences in performance between male and female students, and no significant differences in performance between students with free and reduced lunch status and mainstream students.

Graph 5. FCAT Reading Developmental Scale Score Gains for *READ 180* Research Study Students By Gender and Free and Reduced Lunch Status, March 2005 to March 2006

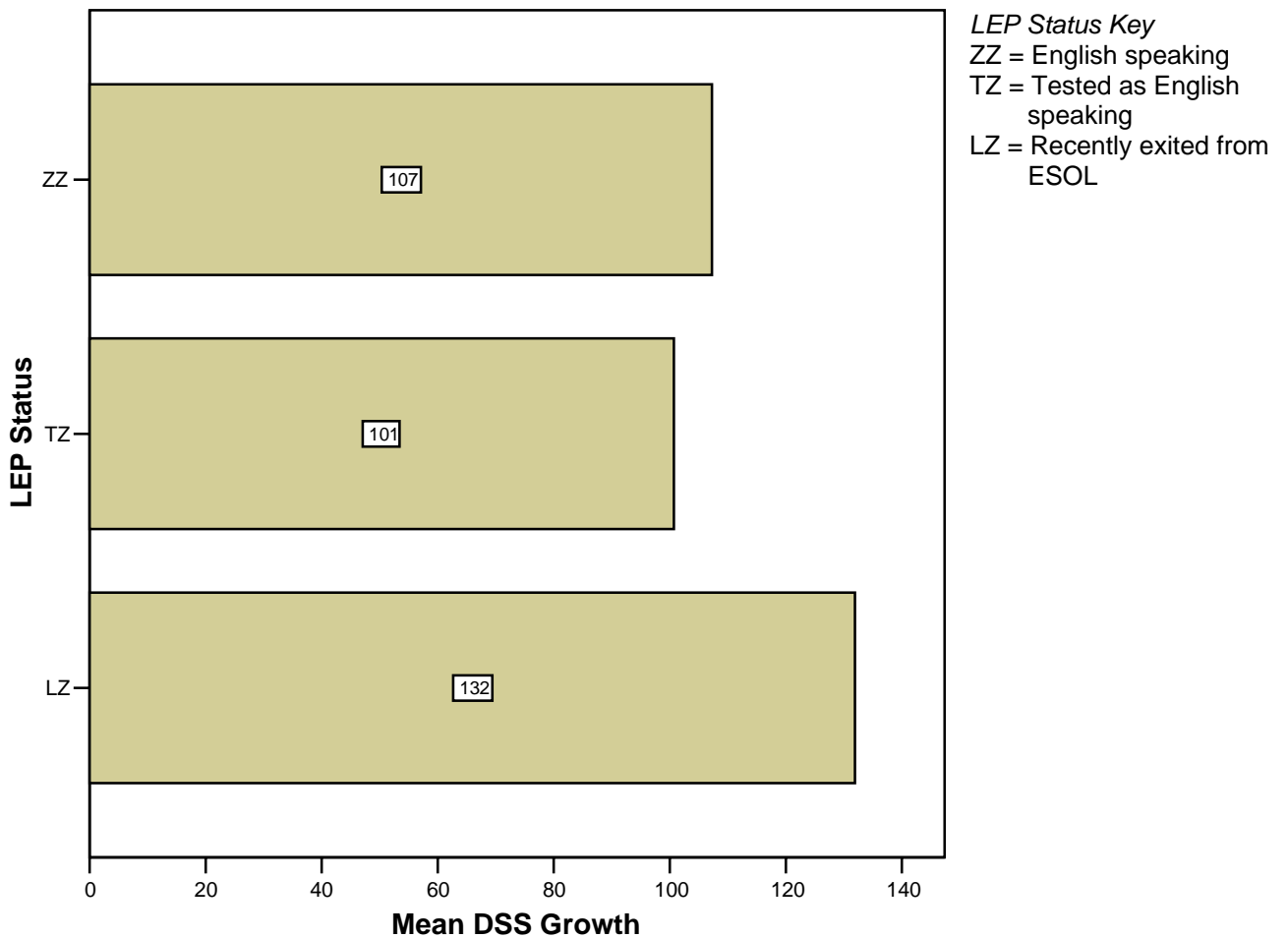


FCAT Results – READ 180 Students by LEP Status

READ 180 Students Recently Reclassified Out of ESOL Averaged Higher Gains Than English-Speaking READ 180 Students

Disaggregation of FCAT performance by LEP status revealed significant differences in FCAT DSS gains between students recently reclassified out of ESOL (LZ), fluent English-speaking students (ZZ), and students tested and classified as English-speaking students (TZ). T-test analyses confirmed that reclassified students averaged significantly higher DSS gains (132 points, n=11) than both English-speaking groups (ZZ: 107 points, n=251; TZ: 101 points, n=24).

Graph 6. FCAT Reading Developmental Scale Score Gains for *READ 180* Research Study Students By LEP Group, March 2005 to March 2006



FCAT Results – All READ 180 Students

Significant Reading Achievement Level Gains on the FCAT for All READ 180 Students, with 13% Moving to Level 3 or Above⁵

Six months of *READ 180* intervention in Seminole County resulted in FCAT growth of one or more reading achievement levels for 25% of the students (Graph 8). A total of 29% of Level 1 students (N = 41) moved up one or more reading levels, while 5% of Level 1 students (N = 7) grew to Level 3 by March 2006 (Table 1). The percentage of all students, both Levels 1 and 2, moving to reading Level 3 or above was 13% (N = 37).

Graph 8. FCAT Reading Achievement Level Gains of *READ 180* Research Study Students, March 2005 to March 2006, by High School

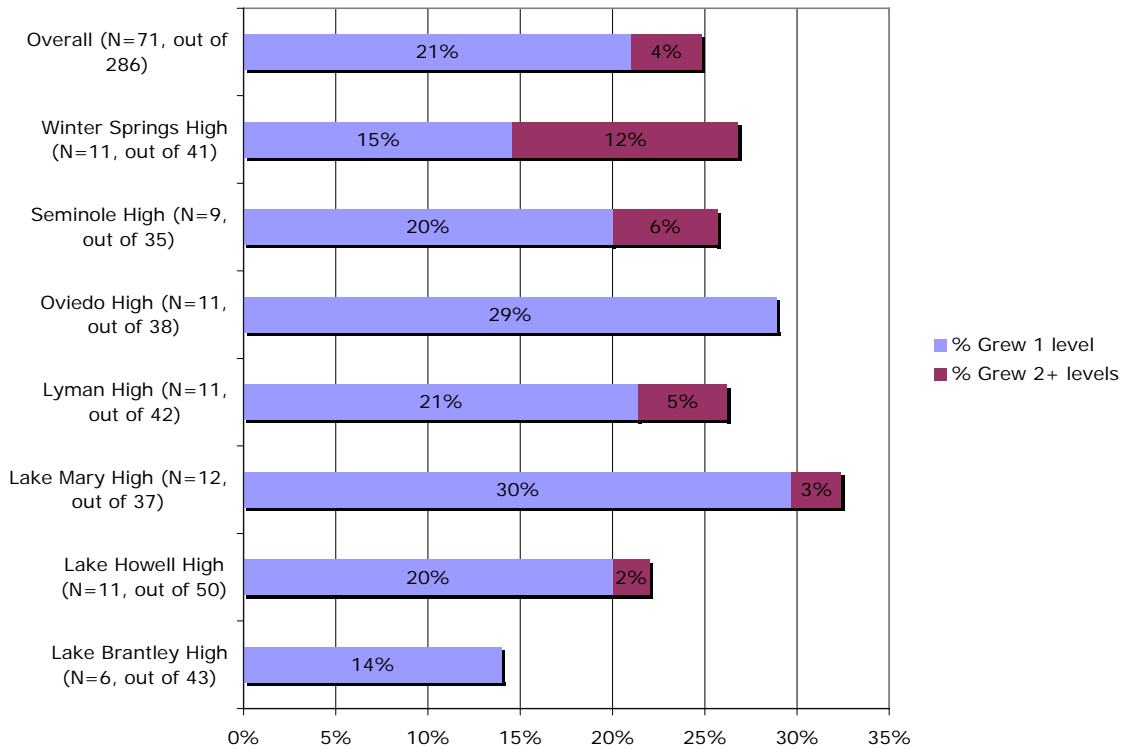


Table 1. FCAT Reading Achievement Level Gains of *READ 180* Research Study Students, by 2005 FCAT Reading Level, March 2005 to March 2006

FCAT Reading Level in March 2005	FCAT Reading Level in March 2006 (Gain)				Total N
	Level 1	Level 2	Level 3	Level 4	
Level 1 (49%)	99	34	7	0	140
	71%	24%	5%	0%	100%
Level 2 (51%)	34	82	26	4	146
	23%	56%	18%	3%	100%

⁵ On the FCAT, achievement levels range from 1 to 5, with Level 1 being the lowest, Level 3 being the middle, or proficiency, level, and Level 5 being the highest.

School Grades

School Grades Increased for Nearly All Schools with the READ 180 Program

According to the 2006 *Guide to Calculating School Grades* issued by the Florida Department of Education,⁶ there are three reading measures included in the six performance measures used to determine the overall grade (A, B, C, D, or F) for school performance. These reading measures are: 1) the percentage of students who meet high standards by scoring at or above FCAT Achievement Level 3 in reading, 2) the percentage of students making learning gains in reading, and 3) the percentage of the lowest performing students making learning gains in reading.

The FCAT results for Seminole *READ 180* students indicate growth in the three reading measures, and these results are reflected in grade letter increases for the high schools using *READ 180* in the research study. In 2006, all schools with *READ 180* during the 2005-2006 research study, with the exception of Oviedo HS, grew by at least one letter grade or maintained a letter grade of "A" (Table 2).

Table 2. School Grades Assigned to *READ 180* Research Study Schools, 2004-2005 and 2005-2006

School	School Grade 2004-2005	School Grade 2005-2006	Grade Letter Increase
Lake Brantley High	A	A	0
Lake Howell High*	C	A	2
Lake Mary High *	B	A	1
Lyman High *	C	B	1
Oviedo High	A	B	-1
Seminole High*	C	B	1
Winter Springs High	B	A	1

* Schools with all three reading interventions during the research study.

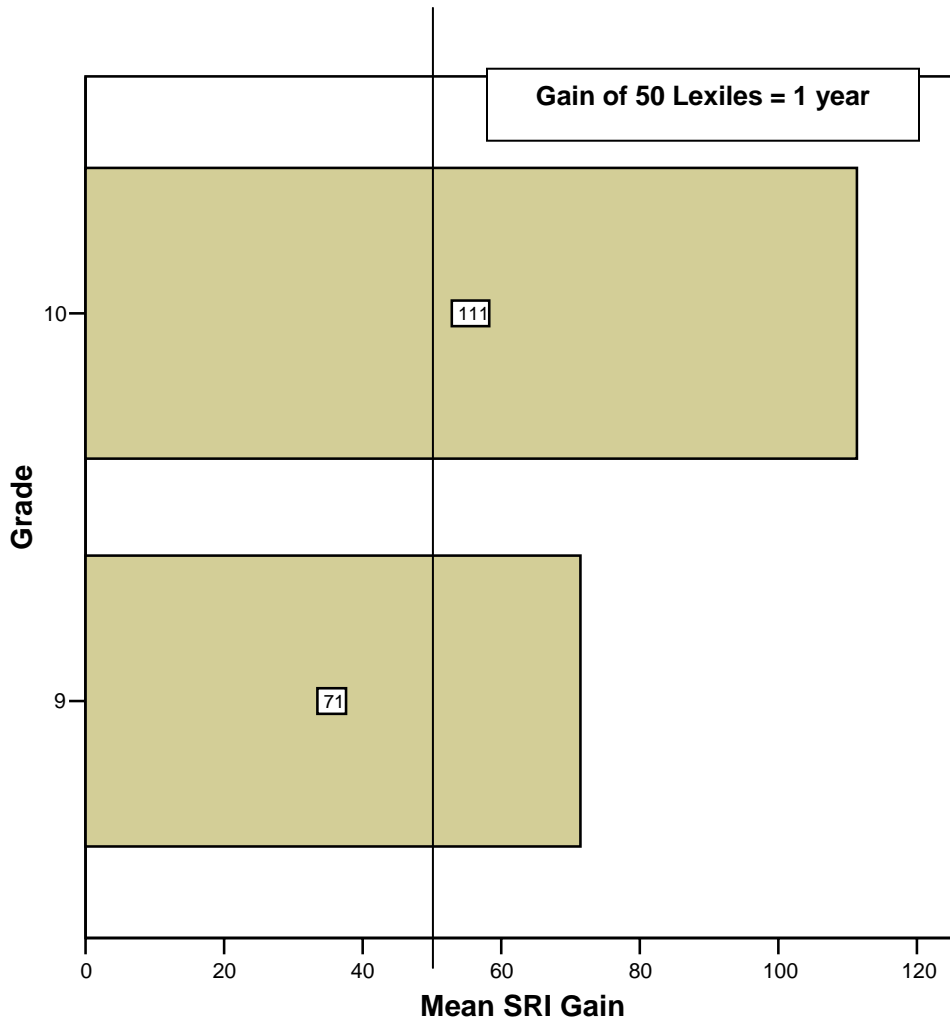
⁶ Evaluation and Reporting Office, Division of Accountability, Research and Measurement. (2005). *2006 guide to calculating school grades: Technical assistance paper 2005-06*. Tallahassee, FL: Florida Department of Education. Retrieved September 15, 2006 from <http://schoolgrades.fldoe.org/pdf/2006SchoolGradesTAP.pdf>

SRI Results – Ninth and Tenth Grade READ 180 Students

SRI Lexile Gains Indicate Reading Gains of One Year or More, with Higher Gains for Tenth Grade vs. Ninth Grade

Nine months of reading intervention, as measured by the SRI, also revealed at least one year's worth of reading growth in both ninth and tenth grades.⁷ Ninth and tenth grade *READ 180* students scored a mean score of 82 Lexiles on the SRI. Tenth grade *READ 180* students averaged 111 Lexiles or two years of reading growth, while ninth grade *READ 180* students averaged 71 Lexiles or over one year of reading growth (Graph 9).

Graph 9. Lexile Gains of Ninth and Tenth Grade *READ 180* Research Study Students, August 2005 to May 2006



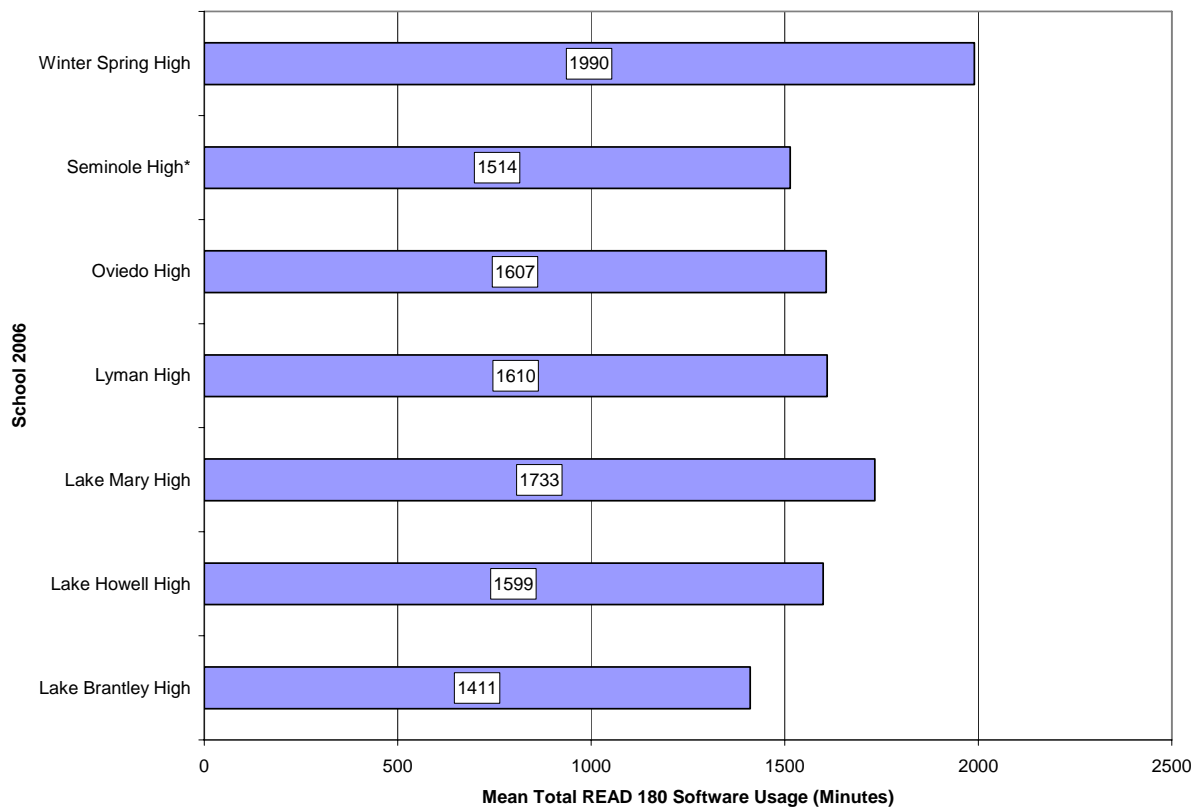
⁷ One year of growth on SRI is approximately 50 Lexiles in ninth and tenth grade for a reader performing at the 25th percentile.

READ 180 Software Exposure

Correlational Analysis Shows Higher Reading Gains for Schools with Higher Number of Minutes on READ 180 Software

READ 180 software usage directly contributed to, and accelerated, Seminole READ 180 students' reading gains. Correlational analysis demonstrated that exposure to the READ 180 software component was directly related to Seminole READ 180 students' reading gains as measured by the SRI.⁸ Thus, schools with higher average reading gains also had a higher average number of minutes on READ 180 software, and vice versa.

Graph 10. Number of Minutes on READ 180 Software by School (August 2005 to May 2006)⁹



*Usage data for Seminole HS was calculated by combining usage data from 1.6 and Enterprise versions, excluding students with a "Total Time" value of 0.

⁸ Correlation is statistically significant at the 0.05 level.

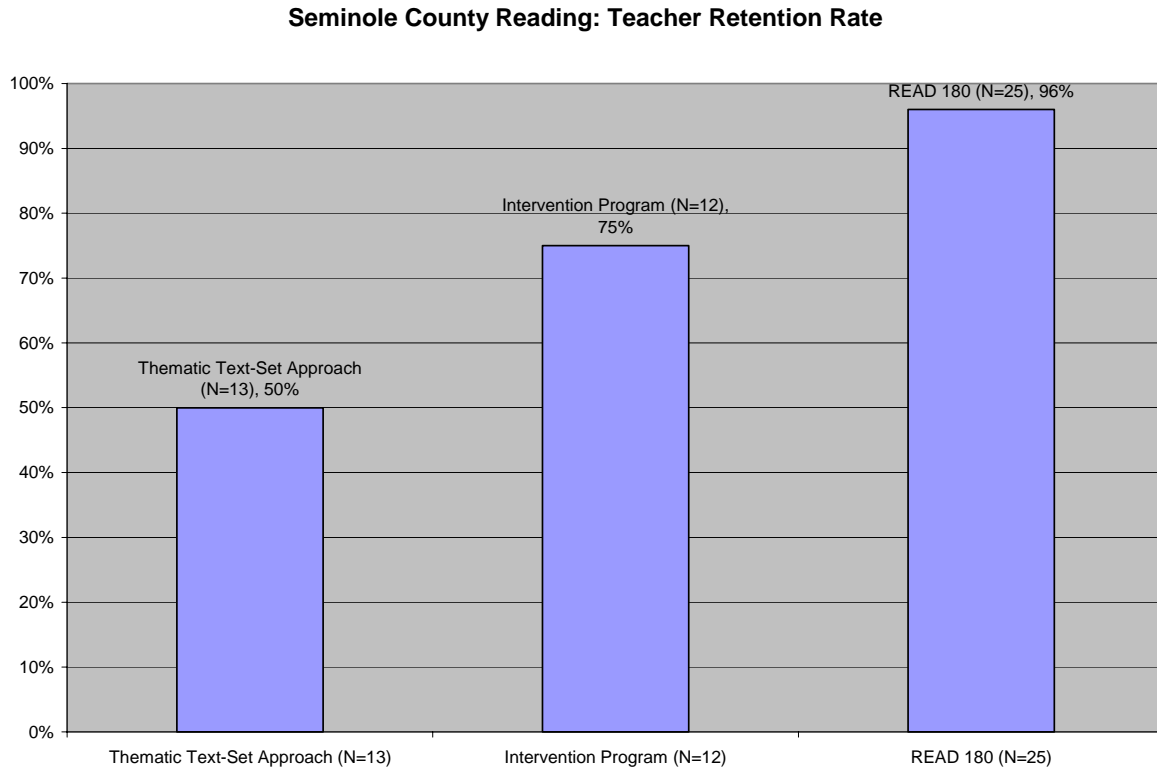
⁹ Optimal exposure to the software portion of READ 180 is 20 minutes per day, or 100 minutes per week. Taking into account the time for disruptions, an estimate of 75 minutes per week or 15 minutes per day is generally considered to be a good implementation. This averages to 300 minutes per month.

Teacher Retention

96% READ 180 Teacher Retention Rate by End of 2005-2006 School Year

The retention rate (i.e., teachers who remained in the teaching profession) for *READ 180* teachers participating in the research study was higher than the retention rate of teachers in the other reading programs after one year. Only one *READ 180* teacher left, resulting in a retention rate of 96% for all the *READ 180* teachers, compared to 75% for the other published reading intervention program and 50% for the thematic text-set approach (Graph 11).

Graph 11.



Anecdotal Evidence

Teachers Express Positive Opinions with Regard to Professional Growth while Teaching READ 180

Teacher comments reported by the local *READ 180* trainer expressed the range of teacher opinions regarding their professional growth while teaching *READ 180*:

1. Appreciation for the 20-minute rotations and close contact with students in small group.
"I truly appreciated the 20-minute rotations and the contact I had with the students. It was nice to really get to know them in small group and to develop grading systems to keep the students accountable."
2. Positive reception to the professional development opportunities, especially with regard to learning useful new strategies and networking.
*"The professional development opportunities have given me several strategies that have been useful. I've also had the chance to network and swap ideas with other teachers."
"Sharing with other READ 180 teachers was a great experience. It helped me implement and experience other teachers' strategies."*
3. Greater confidence in teaching abilities.
"As a professional, I feel more confident in my ability as a teacher." "As an educator, I learned that I can motivate the most reluctant reader to excel in class as long as I can convey to them that I truly believe in their effort." "I have grown with my students. With their success, I felt success."
4. Increased response to the challenges of teaching.
"I have found myself trying and stretching professionally more than ever."