

**Performance of Read 180 Students
2006-2007 School Year**

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For

Research & Accountability
Pinellas County Schools
August 2007

Read 180 is a computer-assisted literacy program that facilitates the targeted instruction of struggling students. The Pinellas County school district conducted an evaluation of the implementation and effectiveness of the program during the 2005-2006 school year. One component of their evaluation compared the FCAT Reading performance of Read 180 students to that of an academically-matched sample on what the state has identified as one year's growth on the FCAT. Results were promising in that a higher percentage of students enrolled in fully implemented Read 180 classrooms achieved at least one year's growth in reading as defined by the FDOE relative to the matched control group. Results also indicated that a lower percentage of students enrolled in partially or poorly implemented Read 180 classrooms achieved at least one year's growth in reading relative to the control group. These findings supported the effectiveness of the Read 180 program, but only for students enrolled in fully implemented classrooms.

Results of the March 2006 evaluation indicated that only a small number of Read 180 classrooms were fully implemented within the Pinellas County school district. Consequently, the benefits of improved FCAT Reading performance relative to academically-matched controls in fully implemented classrooms were only experienced by a relatively small number of students. Improvements to the Read 180 program, including installment of the new Enterprise system during the 2006-2007 school year were expected to increase the number of classrooms in which the Read 180 program was fully implemented.

A recently completed follow-up evaluation of Read 180 implementation indicated that delays in installment of the Enterprise system during the Fall of 2006 were associated with teacher reports of continued difficulty with technology and technical support that prohibited full implementation of the Read 180 program in most classrooms until installment of Enterprise, which occurred at some point midway through the Fall semester for almost all classrooms in the district. Given that implementation levels may have been shifting within classrooms during the 2006-2007 school year as program improvements were gradually being implemented, it would be difficult to present a valid analysis of reading gains among Read 180 students relative to controls based upon implementation level for the 2006-2007 school year. However, once Enterprise was installed in Read 180 classrooms it became possible to track the exact number of computer sessions completed by Read 180 students. These data provide valuable information concerning the degree to which each individual student was exposed to the Read 180 curriculum. This, in turn, allowed examination of gains in FCAT reading scores in relation to students' level of participation in the Read 180 program. This analysis forms the basis of this year's evaluation.

DESIGN

The present evaluation included 3759 4th- through 10th-grade students enrolled in Read 180 during the 2006-2007 school year. All students who had taken the FCAT in both 2006 and 2007 and had a reading achievement level of 1 or 2 in 2006 were included. These students were compared to a matched control group of 14877 4th- through 10th-grade students who had a reading achievement level of 1 or 2 in 2006, but were not enrolled in Read 180.

The outcome measure for this year's analysis was identical to that presented in last year's evaluation of the Read 180 program. Read 180 students were compared to controls in terms of the percentage of students whose FCAT Developmental Scale Scores indicated one year's growth or more from 2006 to 2007 (see Table 1).

TABLE 1: FDOE's definition of one year's growth in Developmental Scale Score change by grade level

Developmental Scale Score Change	Grade in which Change is seen
230	Grade 4
166	Grade 5
133	Grade 6
110	Grade 7
92	Grade 8
77	Grade 9
77	Grade 10

Availability of data tracking the number of computer sessions completed by each Read 180 student within the Enterprise system permitted comparison between Read 180 and control students as a function of the number of Read 180 sessions completed during the 2006-2007 school year. Read 180 students in the present study participated in a mean of 71 sessions (SD = 26.7), as recorded by Enterprise. Groups were separated into Low, Average, and High participation. The Low group participated in less than 44 sessions, which is more than one standard deviation below the mean. The Average group participated in 44 to 98 sessions, which encompasses the mean plus or minus one standard deviation. The High group included the remaining students who participated in 99 or more Enterprise sessions.

RESULTS

Overall, Table 2 indicates that 56.2% of Read 180 students demonstrated a year's worth of growth or more in reading as assessed by the FCAT while only 51.5% of controls demonstrated a year's growth or more.

TABLE 2: Overall comparison of Read 180 students to Controls

	GROWTH OF 1 YEAR or MORE in READING FOR 2006-2007?			
	No		Yes	
NOT READ 180	7216	48.5%	7661	51.5%
READ 180	1645	43.8%	2114	56.2%

Results presented in Table 3 indicate that when students' level of participation in Read 180 is taken into account, higher levels of participation are associated with higher percentages of students demonstrating growth of a year or more in reading scores. Among students with less than 44 sessions of Enterprise computer use, 53.8% demonstrated a year's worth of growth in FCAT reading scores. While this percentage is higher than the 51.5% of non-Read 180 students making gains of a year or more, the percentage of students making a year's worth of gains in reading rises to 56.3% among students participating in between 44 and 98 sessions, and 58.4% among students participating in 99 or more sessions.

TABLE 3: Comparison of Read 180 students to Controls by Participation Level

	GROWTH OF 1 YEAR or MORE in READING FOR 2006-2007?			
	No		Yes	
NOT READ 180	7216	48.5%	7661	51.5%
LOW PARTICIPATION (less than 44 sessions)	294	46.2%	343	53.8%
AVERAGE PARTICIPATION (44 to 98 sessions)	1098	43.7%	1416	56.3%
HIGH PARTICIPATION (99 or more sessions)	253	41.6%	355	58.4%

When comparisons are made as a function of grade level, results presented in Table 4 indicate that differences exist in performance of elementary students compared to secondary school students. Overall, elementary students enrolled in the Read 180 program were less likely to make a year's worth of gains in reading (50.2%) compared to their non-Read 180 counterparts (51.2%). In contrast, secondary students enrolled in Read 180 were more likely to make a year's worth of gains in reading (57.7%) than their non-Read 180 counterparts (51.6%).

TABLE 4: Overall comparison of Read 180 students to Controls by Grade Level

		GROWTH OF 1 YEAR or MORE in READING FOR 2006-2007?			
		No		Yes	
Elementary	NOT READ 180	1530	48.8%	1605	51.2%
	READ 180	372	49.8%	375	50.2%
Secondary	NOT READ 180	5686	48.4%	6056	51.6%
	READ 180	1273	42.3%	1739	57.7%

Differences between elementary and secondary Read 180 classrooms are clarified further when the participation levels of students are examined. Results presented in Table 5 indicate that a higher percentage of elementary students make gains in reading relative to controls, but only when their participation rate is high. Elementary students participating in 99 or more sessions were more likely to make gains in reading (56%) relative to controls (51.2%). However, elementary students in the Average (48.4%) and Low (43.2%) participation groups were less likely to make a year's worth of progress relative to controls.

For secondary school students, those enrolled in Read 180 were more likely to make a year's worth of progress in reading relative to controls regardless of their level of participation in the program. However, data indicate that the percentage of students making a year's worth of gains in reading increases as student participation in Read 180 goes from Low (54.6%) to Average (58.3%) to High (59.6%).

TABLE 5: Comparison of Read 180 students to Controls by Participation and Grade Level

		GROWTH OF 1 YEAR or MORE in READING FOR 2006-2007?			
		No		Yes	
Elementary	NOT READ 180	1530	48.8%	1605	51.2%
	LOW PARTICIPATION (less than 44 sessions)	25	56.8%	19	43.2%
	AVERAGE PARTICIPATION (44 to 98 sessions)	256	51.6%	240	48.4%
	HIGH PARTICIPATION (99 or more sessions)	91	44.0%	116	56.0%
Secondary	NOT READ 180	5686	48.4%	6056	51.6%
	LOW PARTICIPATION (less than 44 sessions)	269	45.4%	324	54.6%
	AVERAGE PARTICIPATION (44 to 98 sessions)	842	41.7%	1176	58.3%
	HIGH PARTICIPATION (99 or more sessions)	162	40.4%	239	59.6%

LIMITATIONS

Computer usage data within the Enterprise system appeared to present a valid means of assessing student participation in the Read 180 program. Results are in the direction one would expect given participation levels, where students who participated in higher numbers of sessions generally showed stronger performance in FCAT reading gains relative to controls. While this is true, last year's participation data are only a general approximation of student's actual participation level. As Enterprise was not implemented until some point following the start of the school year in almost all Read 180 schools, participation of students in Read 180 prior to Enterprise was not captured by the sessions data used in this study. Data for the 2007-2008 school year should provide a more precise assessment of each student's level of participation within the program.

Criteria used to divide Read 180 students into three groups based upon participation level with the Average group comprised of students participating in the

mean number of sessions plus or minus one standard deviation was somewhat arbitrary. However, consistent improvement in FCAT scores at higher levels of participation supported the validity of this method of group formation.

The design of the present study permitted a general assessment of the effectiveness of the Read 180 program with respect to achievement of a year's growth or more in reading for the 2006-2007 school year. A more detailed analysis of factors associated with student success in Read 180 could be obtained through a study that directly examines the influence of behavior, motivation, teacher classroom management skills, methods of placing students in Read 180 classrooms and any of a number of other factors that evaluations conducted in Pinellas County in the past two years have suggested may be associated with students' reading outcomes within the program.

CONCLUSIONS

Overall, results of the present evaluation supported the effectiveness of the Read 180 program in promoting gains in reading for struggling students within the Pinellas County school district. Results indicated that for the 2006-2007 school year gains in reading were stronger for secondary students enrolled in Read 180 relative to controls than for elementary students enrolled in Read 180 relative to controls. Results also indicated that the participation level of students in the Read 180 program was related to the degree of student success in reading. Higher levels of participation in the program were associated with higher percentages of Read 180 students making a year's worth of gains or more in reading as assessed by the FCAT.

Importantly, even for secondary students at the highest level of participation, the difference in success rate between Read 180 students and controls was only 8%, with 59.6% of Read 180 students making a year's worth of progress or more versus 51.6% of controls. Even these modest differences could be an artifact of an effect where students enrolled in Read 180 classes for longer periods of time are less likely to have behavior problems that interfere with their ability to make gains in reading.

Alternatively, it may be the case that much stronger gains are made as a result of enrollment in Read 180 for certain subgroups of students. It may also be the case that more robust effects will be found as implementation of Read 180 improves within the school district and assessment methods allow us to track student participation levels with more precision.

When evaluating the Read 180 program within the Pinellas School district it is necessary to base program decisions upon multiple sources of data as no single method or evaluation in isolation can tell the whole story. Results presented in the present evaluation are cautiously optimistic. Continued monitoring of the program is necessary as improvements in program implementation are expected given that students will be starting the 2007-2008 school year with the newly updated Enterprise system in place.