Reading Program Evaluation: Read 180
Grades 4-8
November, 2003

Jeanette Thomas, Communication Arts Facilitator

The data below reports students' reading performance from 1999-2003, detailing scores in word recognition, spelling, and level of reading resulting from the implementation of Read 180 in grades 4-8.

General Observations
• The percentage of students scoring below the 25th percentile in reading on standardized tests has significantly decreased.
• On average, 90% of students participating in Read 180 have increased their reading levels from pre to post tests.
• A comparison of SSD and regular education students shows that both groups are making comparable progress, however, SSD students' pre-test scores in word recognition, spelling, and reading levels are typically lower than regular education students' scores. As a result, regular education students' post-test scores are higher than SSD students'.
• Special education students with a Language Impairment disability are showing significantly less progress than other special education diagnoses, indicating Read 180 may not be the best placement for language impaired students.
• African American students participating in Read 180 are showing steady progress in reading.
• On average, approximately 87% of students participating in Read 180 are showing progress in spelling, however, average spelling scores are still well below expected levels on post tests. This finding is consistent with research on struggling readers.
• A significant number of new students are entering Kirkwood in grades 4-8 as struggling readers, impacting trends in reading performance.

Student Population
The chart below shows the number of students participating in Read 180 between 1999 and 2003. In our first year of implementation (1999-2000), implementation began in grades 6-8, with one 5th grade pilot for one semester only. In subsequent years, Read 180 has been servicing students in grades 4-8 (grade 9 beginning the 2002-03 school year).

of Students in Read 180

	1999-2000	2000-01	2002-02	2002-03
# of Students	177	379	311	369
% SSD	16%	34%	43%	41%

Read 180 Subtest Scores
Students' performance was evaluated for word recognition, spelling, and level of reading. Graphs display pre and post test scores for *all* Read 180 students. Charts distinguish between regular education and special education students for each level. General scores are reported for 1999-2000, as students did not participate for the complete school year.

1999-2000 (one semester only)
• 86% maintained or improved performance on a grade-level word list
• 75% improved performance on a grade-level spelling list
• 60% increased their Lexile levels (a measure of reading level)

<u>Word Recognition</u>
Scores reflect the percentage of students improving their performance from pre to post tests on a grade-level word recognition test and average percentage scores for *all* Read 180 students. Scores are further disaggregated (average percent correct) for regular education and special education students, and percent of increases are shown.
- Approximately 85% of students in grades 4-8 are increasing their reading fluency by recognizing high-frequency words, as demonstrated on a grade-level word list.
- An average of 30% of students scored 80% or above on the grade-level word list pre test, whereas 68% of students scored 80% of above on post tests over a 4-year period.
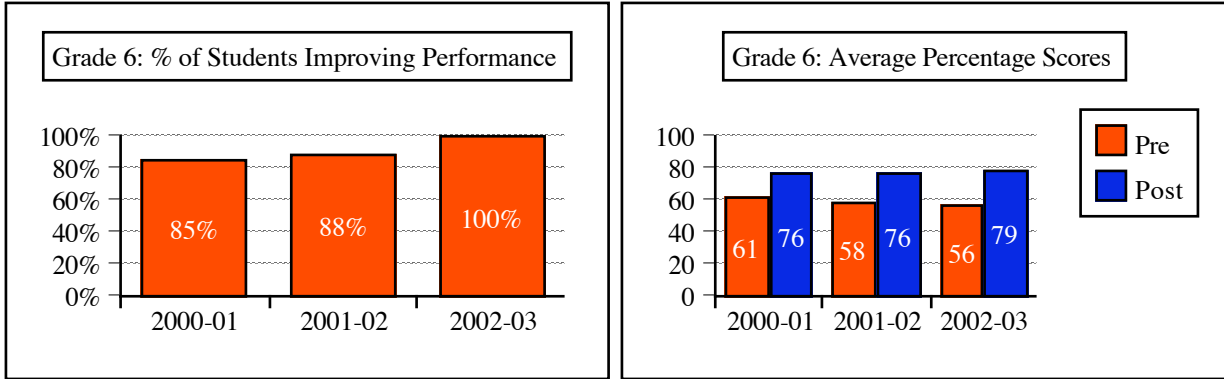
Grade 4: Word Recognition
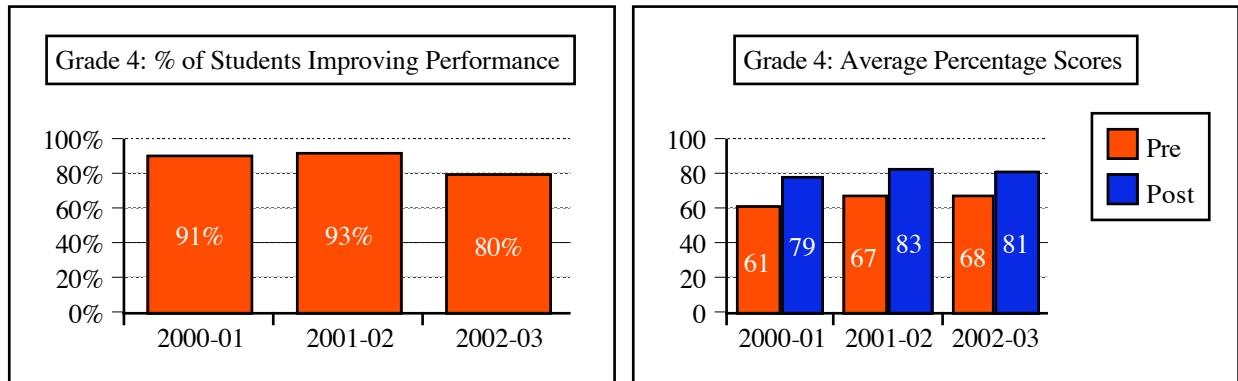
	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	70	87	17	74	91	17	75	87	12
S S D	53	71	18	62	77	15	58	70	12

Grade 5: Word Recognition
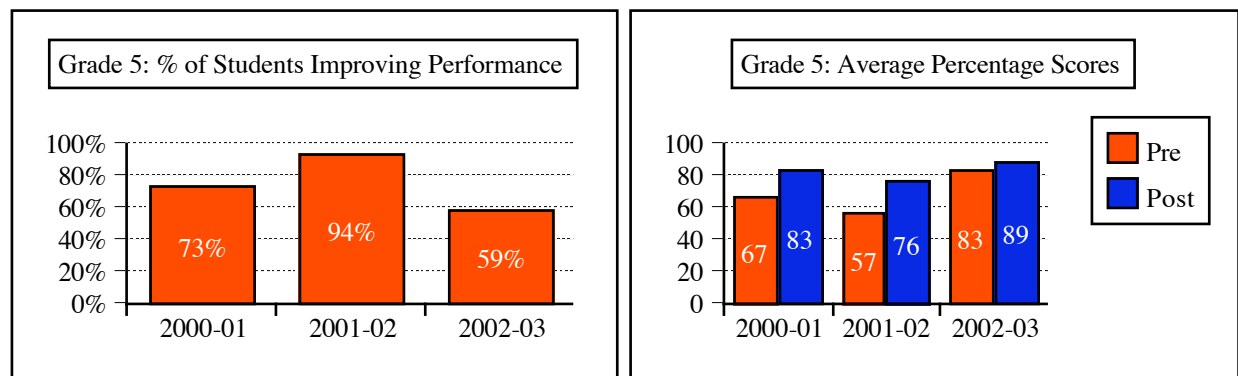
	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	78	87	9	67	87	20	87	93	6
S S D	59	77	18	47	65	18	79	86	7

Grade 6: Word Recognition

Grade 6: % of Students Improving Performance

Year	%
2000-01	85%
2001-02	88%
2002-03	100%

Grade 6: Average Percentage Scores

Year	Pre	Post
2000-01	61	76
2001-02	58	76
2002-03	56	79

	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	68	79	11	65	88	23	68	89	21
S S D	52	70	18	54	71	17	49	73	24

Grade 7: Word Recognition
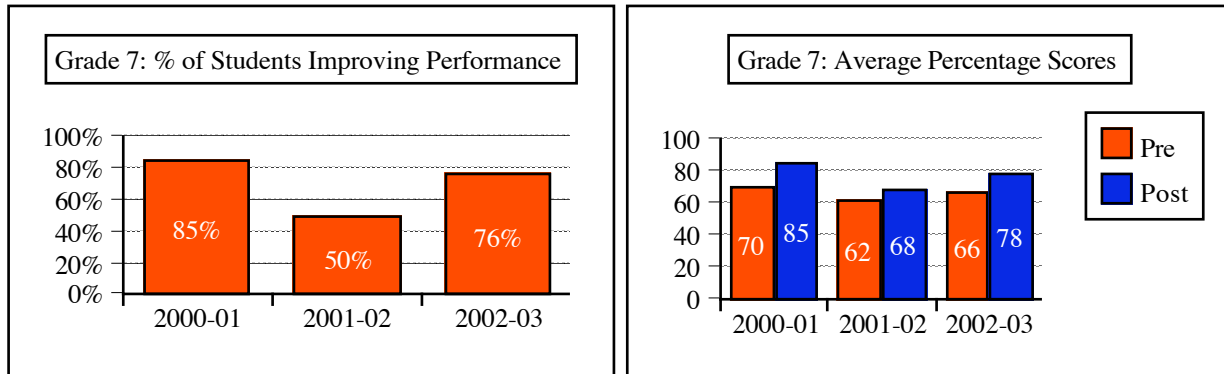
Grade 7: % of Students Improving Performance

Year	%
2000-01	85%
2001-02	50%
2002-03	76%

Grade 7: Average Percentage Scores

Year	Pre	Post
2000-01	70	85
2001-02	62	68
2002-03	66	78

	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	68	79	11	65	88	23	68	89	21
S S D	52	70	18	54	71	17	49	73	24

Grade 8: Word Recognition

Grade 8: % of Students Improving Performance

- 2000-01: 95%
- 2001-02: 100%
- 2002-03: 91%

Grade 8: Average Percentage Scores

	Pre	Post
2000-01	71	92
2001-02	78	90
2002-03	23	51
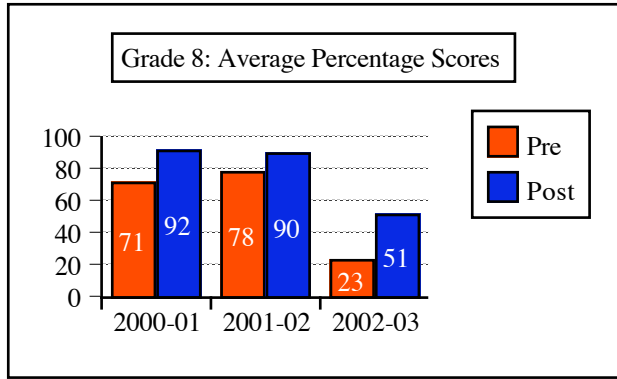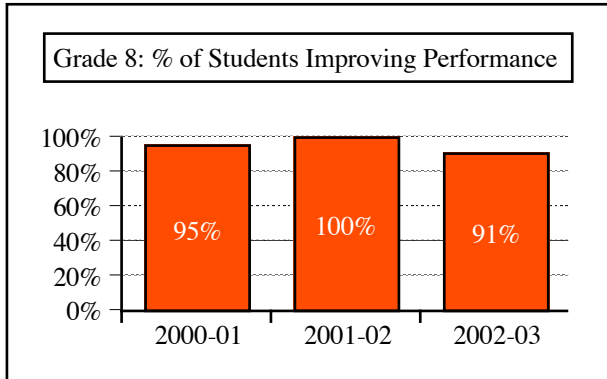
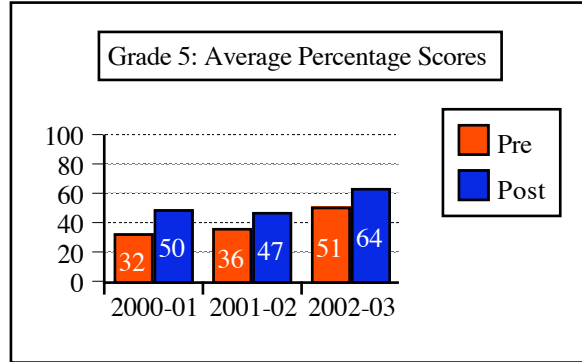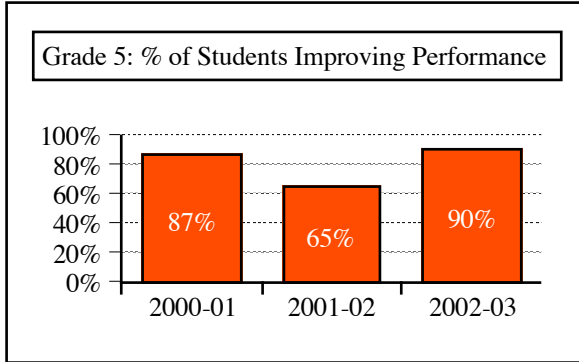|	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	77	94	17	84	93	9	29	53	24
SSD	45	84	39	71	87	16	17	49	32

Spelling

As indicated above, the percentage of students improving performance in spelling is significant, however, students' scores are well below expected grade-level performance. Research on struggling readers and our own Kirkwood research suggest that recognizing similarities and spelling patterns in words is a common challenge for students whose reading is developmentally delayed. Spelling deficiencies are more pronounced for our special education students. Not only are pre-test scores lower for SSD students, post-test scores generally show lower percentages of increase for most grade levels. Seventh and eighth-grade students generally have a higher percentage correct on post tests than other grade levels, perhaps as this skill becomes stronger developmentally. See charts below:
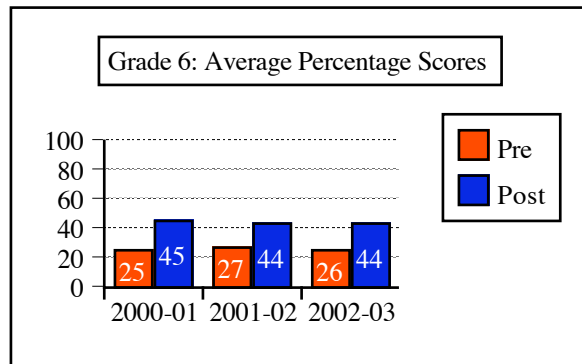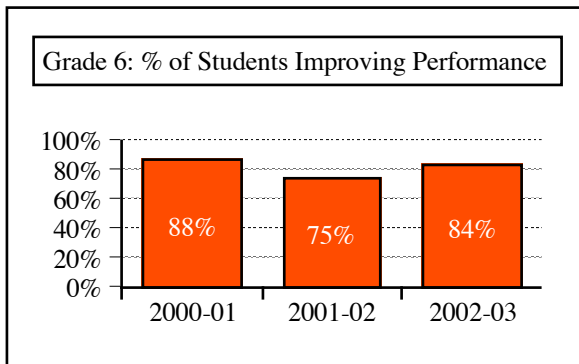
Grade 4: Spelling

Grade 4: % of Students Improving Performance

- 2000-01: 93%
- 2001-02: 90%
- 2002-03: 89%

Grade 4: Average Percentage Scores

	Pre	Post
2000-01	20	42
2001-02	27	45
2002-03	28	43
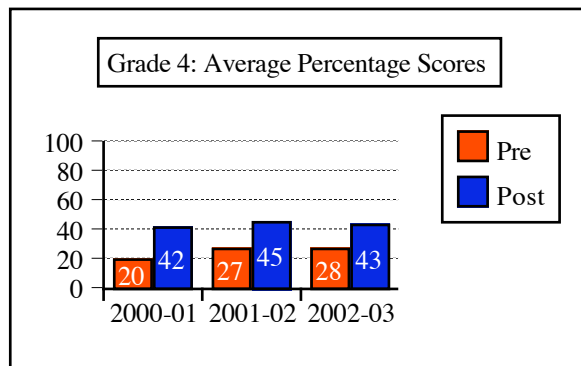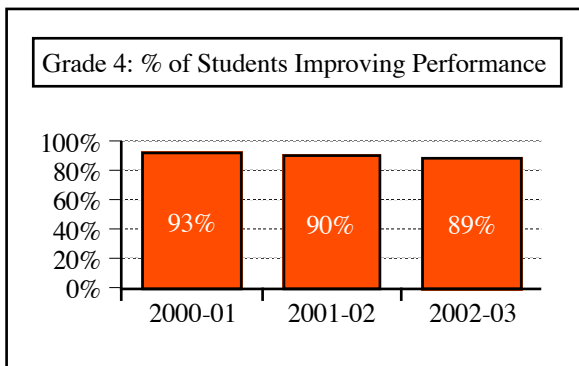
	2002-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	27	56	29	37	54	17	32	48	16
SSD	15	32	17	17	35	18	18	33	15

Grade 5: Spelling

Grade 5: % of Students Improving Performance

Grade 5: Average Percentage Scores

	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	39	57	18	48	62	14	63	74	11
S S D	18	36	18	22	29	7	27	44	17

Grade 6: Spelling

Grade 6: % of Students Improving Performance

Grade 6: Average Percentage Scores

	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	33	54	21	41	64	23	27	56	29
S S D	15	36	21	20	34	14	25	35	10

Grade 7: Spelling

Grade 7: % of Students Improving Performance

Grade 7: Average Percentage Scores
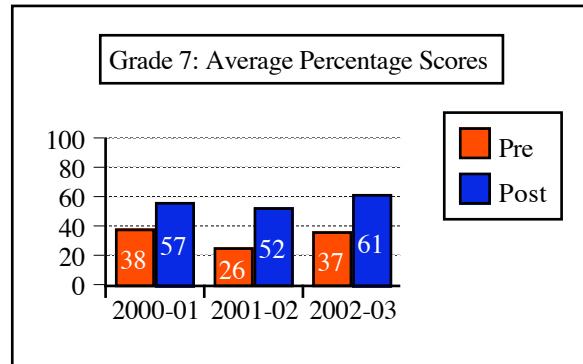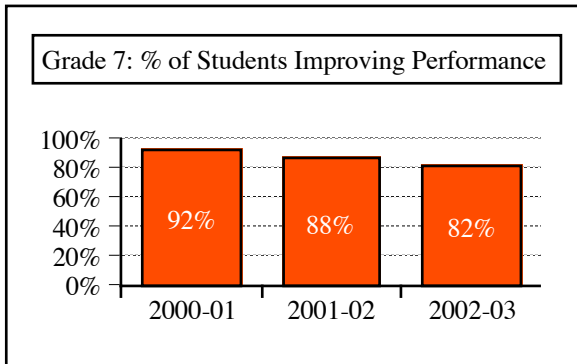
	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	46	66	20	30	49	19	45	66	21
S S D	9	25	16	19	57	38	32	58	26

Grade 8: Spelling

Grade 8: % of Students Improving Performance

Grade 8: Average Percentage Increase
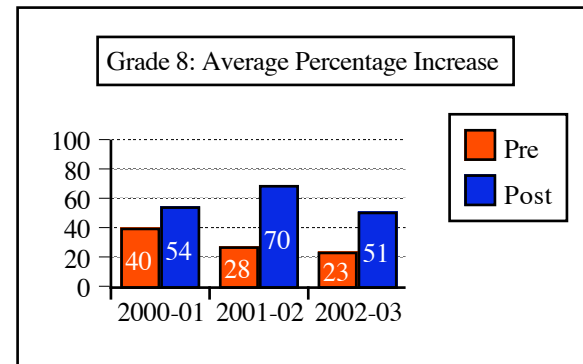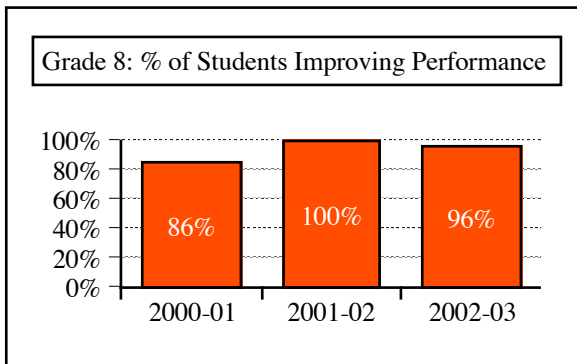
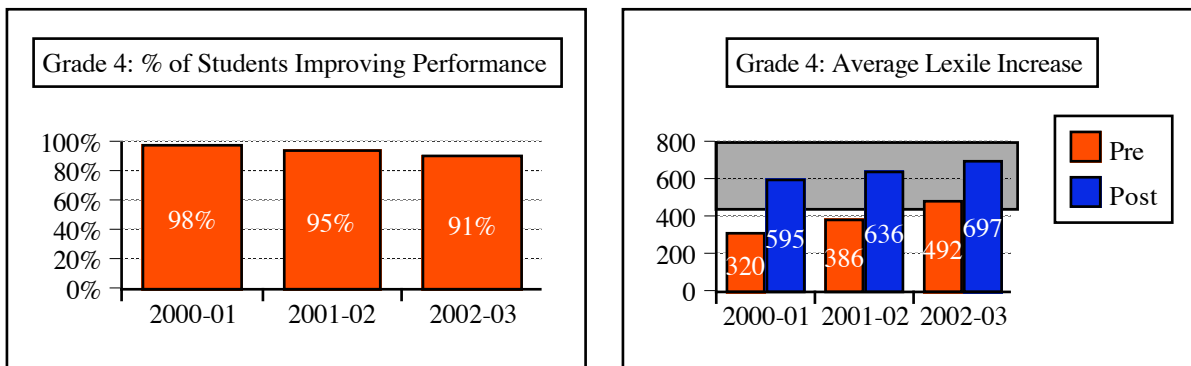|	2000-01			2001-02			2002-03		
	Pre	Post	% of Increase	Pre	Post	% of Increase	Pre	Post	% of Increase
Reg Ed	44	61	17	42	70	28	29	53	24
S S D	21	26	5	15	71	56	17	49	32

Reading Level
Two measures were used to determine students' reading levels: Scholastic Reading Inventory (SRI), which results in a *Lexile* level corresponding to a reading level and the STAR (Standardized Test for the Assessment of Reading). There is nearly an exact correlation between the two measures in terms of ranking students and distinguishing between regular and special education students' performance. Some general observations include:
• Approximately 90% of students participating in Read 180 have increased their reading levels over the past 4 years.

- Regular education students score higher on measures of reading level than special education students on both pre and post tests. However, there is little difference between the amount of *increase* from beginning of year to end of year for both groups.
- Students tend to score slightly higher on the SRI, which is not timed. The STAR is a timed test.
- Fourth and fifth grade students have higher increases than middle school students, reinforcing the need for earliest intervention. Middle school scores, however, are influenced by higher numbers of new students needing reading intervention.

Student reading levels are reported below using the SRI and Lexile levels. Expected end-of-year, grade-level ranges are identified by the shaded band for each grade level.
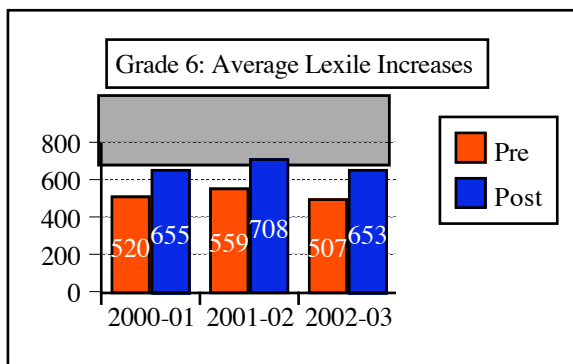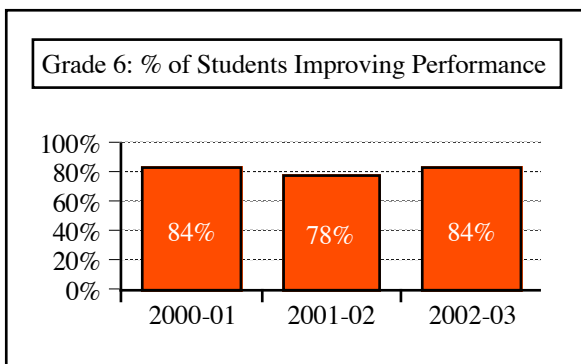
Grade 4: Reading Level

Grade 4: % of Students Improving Performance

Grade 4: Average Lexile Increase

	2000-01			2001-02			2002-03		
	Pre	Post	Average Increase	Pre	Post	Average Increase	Pre	Post	Average Increase
Reg Ed	359	625	266	429	670	241	554	751	197
SSD	284	567	283	337	595	258	339	562	223

Grade 5: Reading Level
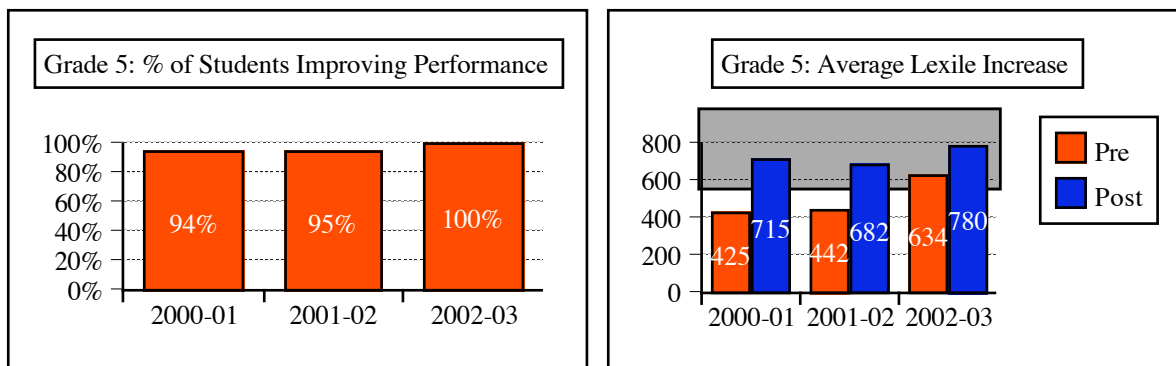
Grade 5: % of Students Improving Performance

Grade 5: Average Lexile Increase

	2000-01			2001-02			2002-03		
	Pre	Post	Average Increase	Pre	Post	Average Increase	Pre	Post	Average Increase
Reg Ed	463	751	288	565	780	215	700	858	158
SSD	348	645	297	285	557	272	551	684	133

Grade 6: Reading Level

Grade 6: % of Students Improving Performance

Grade 6: Average Lexile Increases

	2000-01			2001-02			2002-03		
	Pre	Post	Average Increase	Pre	Post	Average Increase	Pre	Post	Average Increase
Reg Ed	527	665	138	702	801	99	541	662	121
S S D	511	643	132	479	655	176	484	647	163

Grade 7: Reading Level
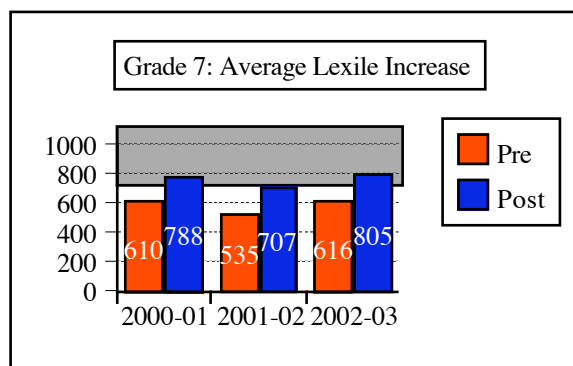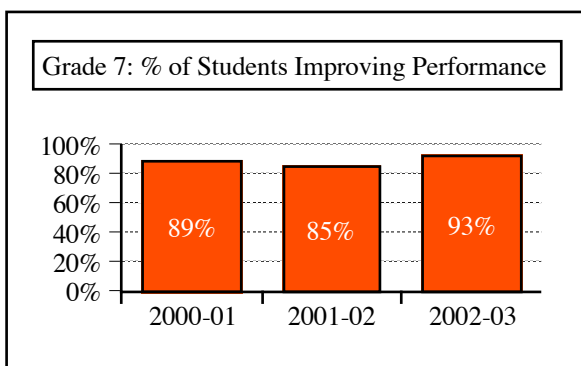
Grade 7: % of Students Improving Performance

Grade 7: Average Lexile Increase

	2000-01			2001-02			2002-03		
	Pre	Post	Average Increase	Pre	Post	Average Increase	Pre	Post	Average Increase
Reg Ed	678	857	179	581	722	141	724	892	168
S S D	418	592	174	473	683	210	550	753	203

Grade 8: Reading Level
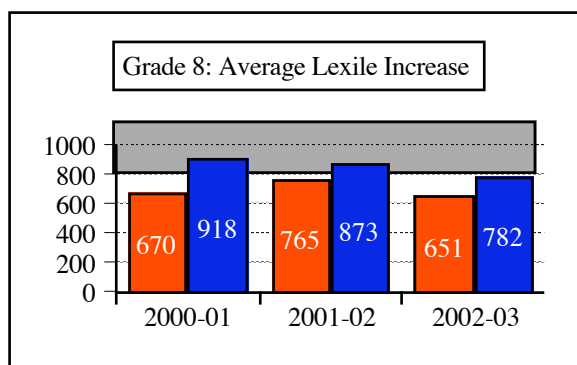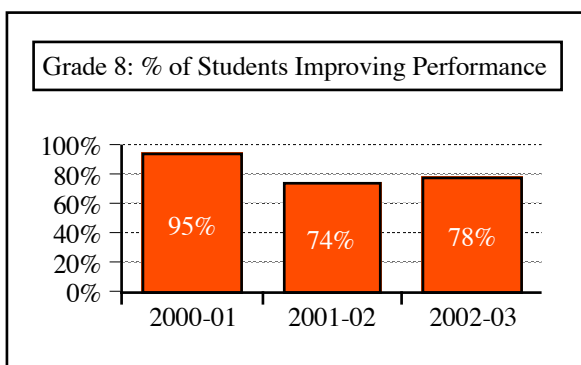
Grade 8: % of Students Improving Performance

	2000-01	2001-02	2002-03
	95%	74%	78%

Grade 8: Average Lexile Increase

	2000-01	2001-02	2002-03
orange	670	765	651
blue	918	873	782

|	2000-01			2001-02			2002-03		
	Pre	Post	Average Increase	Pre	Post	Average Increase	Pre	Post	Average Increase
Reg Ed	700	939	239	792	916	124	713	819	106
SSD	542	830	288	704	774	70	583	742	159

Standardized Test Scores

Missouri Assessment Program (MAP)
Students' performance in the lowest 2 levels of the MAP are compared in 1998 (prior to the implementation of Read 180) and 2003. The chart below shows the decrease in the percentage of students in the lowest 2 levels of the 7th-grade MAP (criterion-referenced).

Grade 7 MAP: % of Students in Lowest Levels

Legend: 1997-98 (orange), 2002-03 (blue)

	Progressing	Step 1	TOTAL
1997-98	15	11	26
2002-03	14	5	19
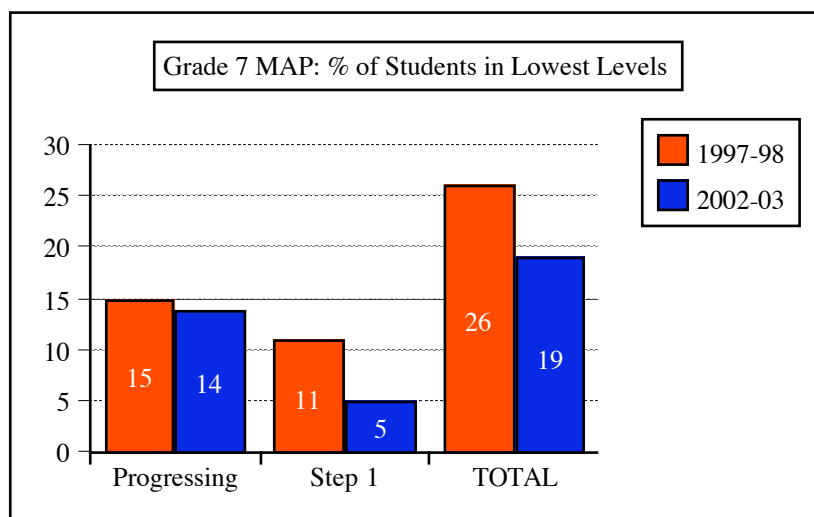
The percentage of students scoring in the "Unsatisfactory" level on the MAP Reading Standard is showing a slight decline since implementation of Read 180:

Grade 7 MAP Reading Standard

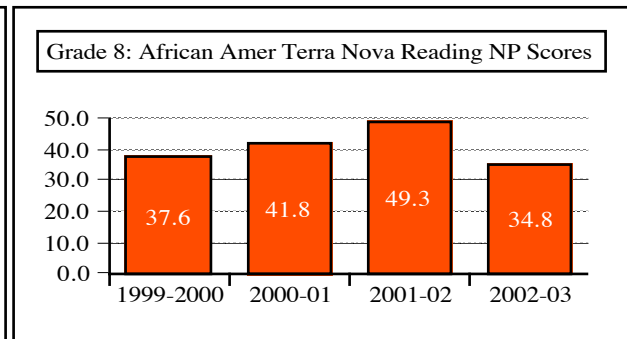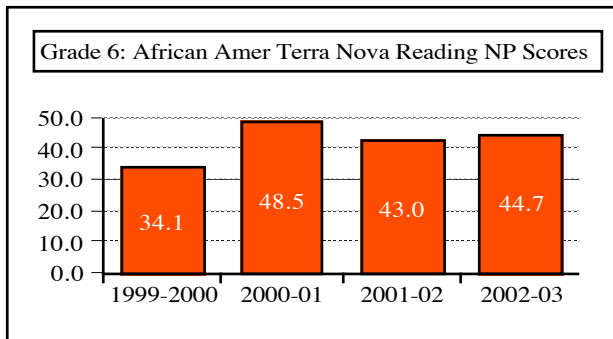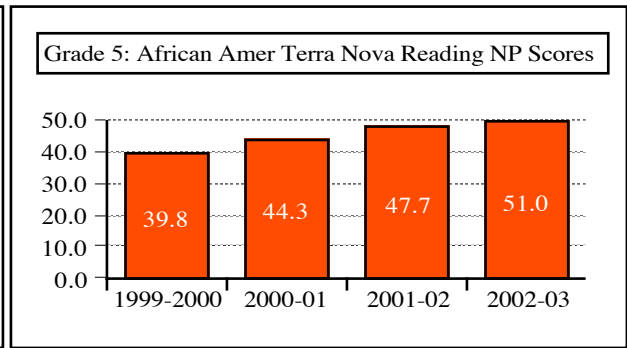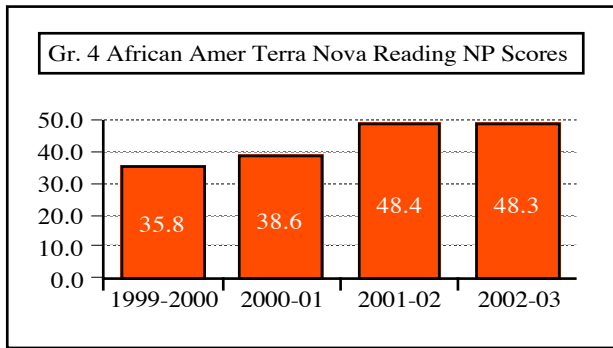| Year	Percentage
1998-99	27.0
1999-2000	25.1
2000-01	22.9
2001-02	24.3
2002-03	21.1
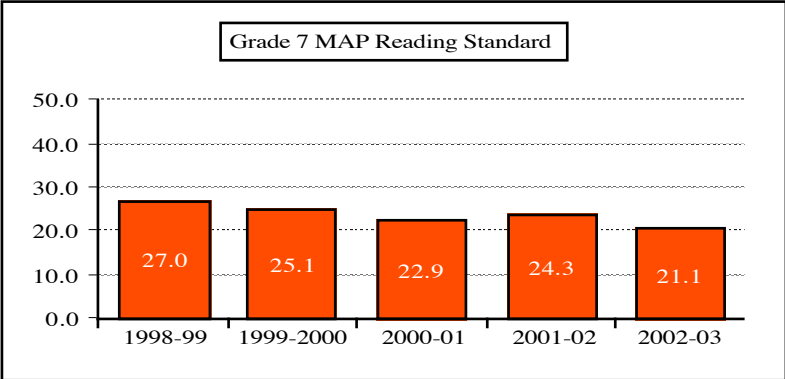
Stanford Achievement Test and Terra Nova
District norm-referenced tests are compared prior to the implementation of Read 180 (1998 Stanford Achievement Test and recent Terra Nova scores) showing the percentage of students performing below the 25th percentile. The chart displays a decreasing trend in the percentage of students performing below the 25th percentile in reading on norm-referenced tests.

% of Students Below 25th Percentile

	1998 SAT	2002 TN
Grade 6	9.0	4.3
Grade 8	12.0	6.1
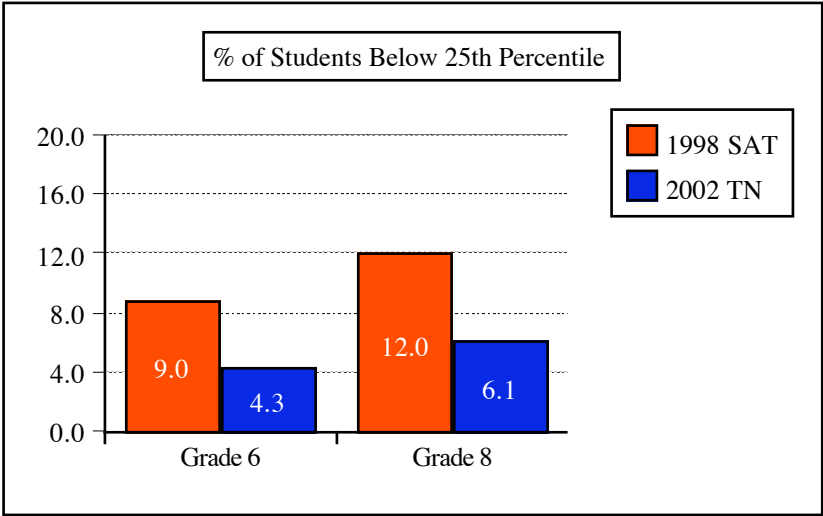
Closing the Gap
The charts below address the district goal of narrowing the achievement gap of our African American students. Terra Nova reading national percentile scores of African American students have steadily increased since our implementation of Read 180, with the exception of 2003 grade 8 scores. However, when analyzing grade 8 subtests, students clearly made adequate progress in word recognition and spelling, however, pre-test scores were <u>very</u> low for this group of students. This would explain the low end-of-year results.

Gr. 4 African Amer Terra Nova Reading NP Scores

Year	Score
1999-2000	35.8
2000-01	38.6
2001-02	48.4
2002-03	48.3

Grade 5: African Amer Terra Nova Reading NP Scores

Year	Score
1999-2000	39.8
2000-01	44.3
2001-02	47.7
2002-03	51.0

Grade 6: African Amer Terra Nova Reading NP Scores

Year	Score
1999-2000	34.1
2000-01	48.5
2001-02	43.0
2002-03	44.7

Grade 8: African Amer Terra Nova Reading NP Scores

Year	Score
1999-2000	37.6
2000-01	41.8
2001-02	49.3
2002-03	34.8

Comments

In our November, 1997 *Reading Task Force Final Report and Recommendations*, we summarized a 5-year trend in standardized test scores and district performance assessments and reported the following:
• an average of 70% of lower socioeconomic students scored below the 50th percentile in reading
• approximately 70% of our African American students scored below the 50th percentile in reading
• the average number of students scoring below the 50th percentile on the SAT increased for both lower and higher socioeconomic students as they increased in age and grade levels
• 20% of students at grade 4 who scored below the 40th percentile were SSD students
• results of the Standardized Test for the Assessment of Reading (STAR) showed an average of 8-10 students per classroom reading below their assigned level
• approximately 30% of all students who qualified for support on the basis of test scores were being serviced in our district reading programs, as services were not available for students in grades 4-8

Read 180 specifically targets students in the lowest quartile (below 25th percentile). In years prior to the implementation of Read 180, struggling readers in grades 4-8 were making little or no progress, not receiving any additional services, and in fact not progressing much beyond a third or fourth-grade reading level. Scores above indicate that a significant number of our struggling readers are making progress in word recognition, spelling, and level of reading. Average Lexile scores (reading level indicators) place students within grade-level ranges. In this report, there is no distinction made for classrooms implementing the recommended 90-minute model of instruction and those middle school classrooms implementing in a 45-minute period. A cursory evaluation indicates that students participating in the suggested 90-minute model are indeed making more progress.

In the past 3 years, an average of 40% of our students being serviced in Read 180 are SSD students, suggesting that more students are being diagnosed for special services than in our 5-year study prior to implementation of Read 180. As noted above, our SSD population is making comparable progress as our regular education students, but their entry scores are well below regular ed students on all subtests, resulting in lower end-of-year scores, as well.

Compared with an average of 70% of lower socioeconomic students (Free/Reduced Lunch) below the 50th percentile on the SAT in reading in the 1997 *Reading Task Force* final report, 51.8% of Free/Reduced lunch students scored in the lowest 2 levels on the 2003 7th-grade Communication Arts MAP.

An average of 70% of our African American students performed below the 50th percentile on the SAT in reading in our 1997 *Reading Task Force* final report, whereas 53% of African American students scored in the lowest 2 levels on the 2003 7th grade Communication Arts MAP assessment.

During the 2002-03 school year, the district Reading Intervention Task Force recommended a tiered model of intervention to service *all* students in reading. With the assistance of our district Literacy Specialists and building intervention teams, we are assured of servicing every student at every level with the appropriate intervention. We are experiencing a trend in the number of new students coming to Kirkwood in grades 4-8, many of whom need additional reading instruction. Our tiered model allows us to assess every student immediately and appropriately place him/her in the most suitable intervention available.

Implications for Instruction
• Include *daily* word study to familiarize students with common similarities and patterns in words. This will assist students with decoding, word recognition, spelling, and fluency.
• Provide frequent practice and repetition in recognizing common, high frequency words to improve fluency and comprehension.
• Re-evaluate placement of language impaired students in Read 180 and consider alternative, more appropriate placements.
• Collaborate frequently with special education teachers to coordinate SSD students' reading instruction.
• Commit to the 90-minute model of Read 180 implementation to allow students the time and consistency needed to improve reading performance.
• Re-establish monthly meetings for reading teachers to discuss and learn new strategies, monitor and evaluate student performance, and set instructional and learning goals.