

Overview of the Results of the Bright Sky Learning Lancaster-Lebanon Intermediate Unit 13 School District of Lancaster Tutoring Research Project

by

Lana Edwards Santoro, Ph.D. – Education Associates
Angela Kirby Wehr, M.Ed. – Pennsylvania Training and
Technical Assistance Network
Edward S. Shapiro, Ph.D. – Lehigh University



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About the Program:

Bright Sky Learning, LLC, is an educational publishing and consulting company that develops and markets the *Smart Way Reading and Spelling™* program, an Orton-Gillingham based reading methodology. The program has been skillfully scripted to allow for tutor ease in using the materials to teach reading. Tutors are provided explicit word by word directions and lesson plans. All students are assessed to determine baseline levels and are progress monitored in reading throughout the tutoring program. The program is based on research that direct, systematic instruction in decoding can be effective in closing the achievement gap by remediating basic reading skills for students who are at risk for reading failure.

Bright Sky provides support in the tutor and tutor supervisor selection, and on-going professional development.

In January 2006, IU13, The School District of Lancaster (SDOL) and Bright Sky Learning began a pilot study to determine the effectiveness of using an Orton Gillingham based model to support students in the area of decoding. The program was run as an after school model at the Martin Luther King Elementary School and as a during the day program at the Alternative middle and high schools. Tutor supervisors, PA certified teachers, were hired to supervise tutors (high school students, college students and community members), providing individualized instruction to students in reading.

SDOL serves a diverse population of approximately 11,200 students: 52.3% Hispanic, 23.7% African American, 21.2% Caucasian, 2.8% Asian/other.

At the elementary level, the research study compared students at King receiving Bright Sky Learning's *Smart Way Reading and Spelling* program with other students at King receiving traditional Educational Assistance Program (EAP) tutoring, students not receiving tutoring at King, and students at Washington Elementary who were offered EAP tutoring. The EAP tutoring model in the School District of Lancaster was described as an eclectic approach, defined by administrators as an approach that allowed for teachers to choose from a tool box of interventions.

Students at King Elementary were assessed by BSL staff using the WRAT 3, a decoding placement test (Franklin Assessments Decoding Skills™) and a high frequency sight word placement test (Dolch Word). PaTTAN staff assessed the same students at King and at the Control school-Washington using the Woodcock Johnson III and DIBELS for 4th and 5th grade. The School District of Lancaster furnished DIBELS scores for 1-3.

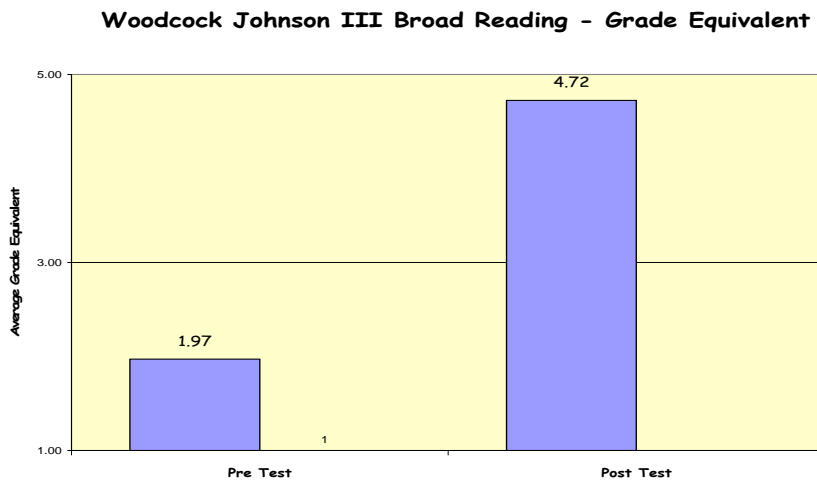
All comparisons at the elementary level show that at pre-test Bright Sky Learning students were significantly behind their peers in the areas of basic reading skills. Bright

Sky students were compared with peers at King receiving traditional tutoring program and students not receiving any tutoring. BSL students were also compared with students in the control school Washington who were also receiving tutoring. The students chosen for BSL were “low basic.” They were picked because they were not receiving tutoring in the traditional EAP model since they weren’t “bubble students”; bubble students were defined as students who would move from “high basic” to proficiency by the time of the PSSA. It should be noted that although there is no data on hours of tutoring for the students in the traditional EAP program both at King and Washington, the tutoring program at both sites had started by October, 2005. Post-test comparisons of BSL with all three groups, EAP, non EAP at King, and the control site-Washington, indicate that BSL students made the most gains of all the three groups.

Elementary-Martin Luther King Elementary Logistical Data:

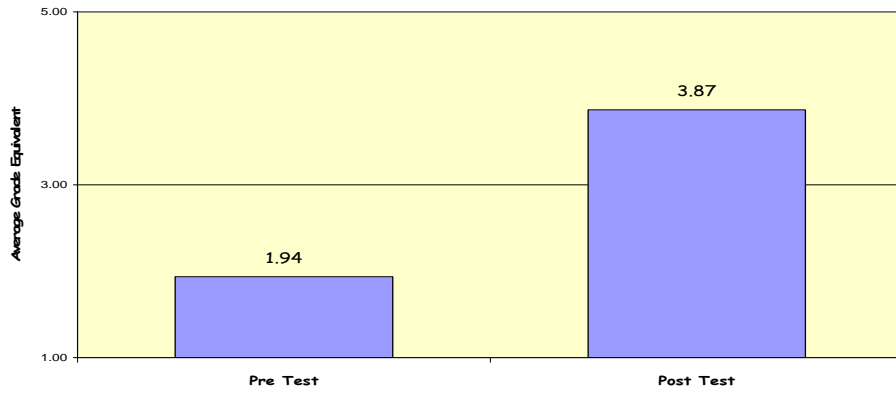
- Program duration: Feb 7th-June 1st
 - Enrolled: 130
 - Attendance rate: 77.38%
 - After School Program 4 days per week for 1.5 hours.
 - Cost per student: \$30-\$40 per hour
 - Of the 111 students pre and post tested 98% made progress

- Of the 55 students who received 40 plus hours of instruction, these students gained on average 2.75 grade levels on WJIII Broad Reading measure



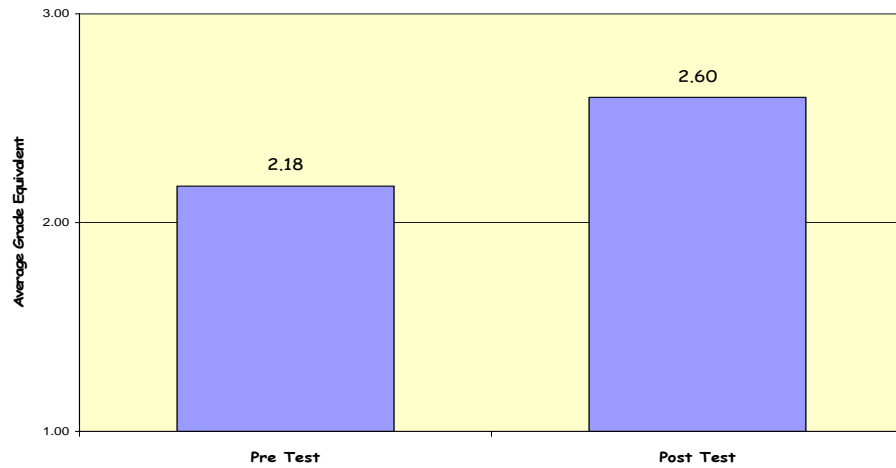
- Of the 91 students who received over 20 hours of instruction, these students gained approximately 1.93 grade levels on WJIII Broad Reading measure

Woodcock Johnson III Broad Reading - Grade Equivalent



- Of the 4 students who received less than 20 hours of instruction, these students gained 0.42 grade level on the WJ III broad reading measure.

Woodcock Johnson III Broad Reading - Grade Equivalent



I. Comparison between BSL tutored students at King with non-tutored students at King

All students in grades 1-5 made progress in reading, but students who received tutoring made greater progress in reading from winter to spring when compared to a sample of students who didn't receive tutoring. These gains were particularly evident in grades 1, 2, and 3. Data also suggests that tutoring made the largest impact on the lowest performing students—students at or below the bottom 25th percentile—before the project began.

- Before the tutoring project began in February, students in grades 1-5 who were selected to receive Bright Sky Learning tutoring started the project significantly behind comparison students who did not receive tutoring. Average performance of the comparison students in grades 1-3 was either slightly below or at grade for both tutoring and non-tutoring groups at the start of the project. Average performance for both tutoring and non-tutoring students in grades 4 and 5 was below grade level before the project began.
- In the spring, posttest performance indicates that students from grades 1, 2, and 3 who participated in the BSL tutoring project were performing at similar levels in reading when compared to students who did not receive tutoring. Overall, students who participated in the tutoring project in grades 1-3 “caught-up” to the students in the comparison group. These outcomes are notable given the differences between the groups before the tutoring project began.
- For students in grades 4 and 5, the average performance of students in the non-tutoring group was slightly higher at the conclusion of the project than the posttest performance of students who received BSL tutoring. These differences, however, were not as significant as the pretest differences between groups at the start of the project.
- When examining winter to spring performance for grades 1-5, data indicates that students who received BSL tutoring made greater reading gains from pretest to posttest than students who did not receive tutoring. These differences are specifically observed on measures of sight word knowledge (DOLCH) and word decoding. Results also show that students in grades 1-5 from both groups made reading progress from winter to spring.
- It appears that the largest impact on student performance occurred for students performing at or below the 25th percentile. Across grades 1-5, results indicate that students in the bottom 25th percentile who participated in the tutoring program made greater gains in reading from pretest to posttest than students in the bottom 25th percentile who did not receive tutoring. Overall, data shows how the Bright Sky tutoring program helped advance the reading performance of the lowest performing students. The following line graphs illustrate pretest

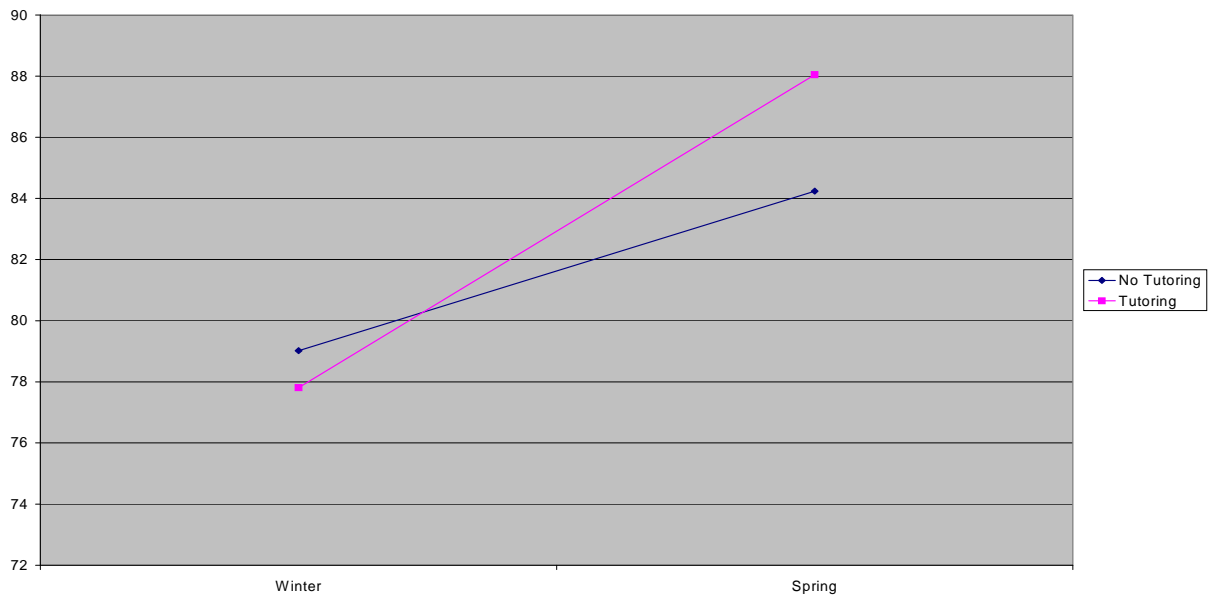
to posttest performance for students at or below the 25th percentile in grades 1-5. Standard scores are used to present the data for the combined grades 1-5 sample.

- Another important consideration when reviewing these findings is the relatively short duration of the BSL tutoring intervention. Data in this report are reflective of an intervention that was implemented from late winter to early spring of the academic year. Obtaining performance differences on standardized measures in this study suggests that an even more powerful impact is possible with increased intensity, training, and extended duration of implementation.

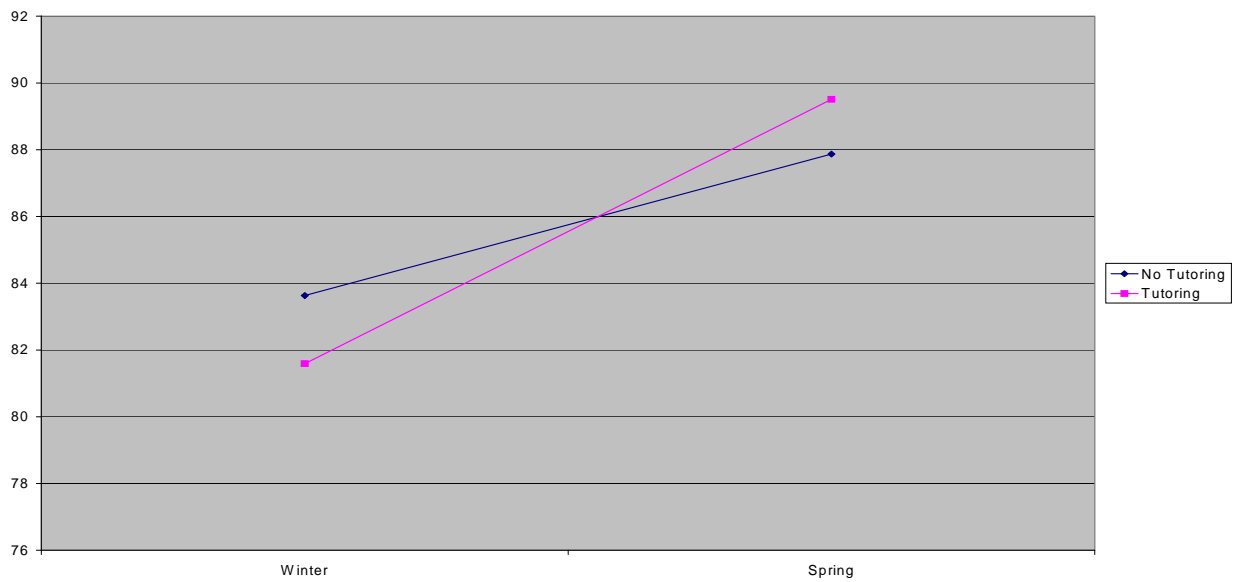
Examining the Bottom 25th Percentile of Tutoring and Non-Tutoring Students

Winter to Spring Performance (Pretest to Posttest)

WRAT Standard Scores - Winter to Spring Performance



WJIII Standard Scores - Winter to Spring



II. Comparison between BSL and EAP at King and Control-Washington

GENERAL INTERPRETATION INFORMATION

Examination of the technical analysis manuals for the PSSA identify the following percentiles as equivalent to Proficient, Basic, and Below Basic in reading. Thus the 35th percentile is used to denote Proficient for the overall group and 18th percentile to denote Basic.

	Grade 3	Grade 5
Proficient	38th	35th
Basic	20th	18th
Below Basic	<20th	< 18th

At pretest, BSL group statistically ($p < .02$) lower than EAP or Control which did not differ. Between pre- and post-test, both EAP and BSL made significant improvements, with BSL making the most gain. Control showed only small increases which were not statistically significant. Most important finding at post-test is that BSL and Control group were identical in performance, EAP group somewhat higher.

PERCENTILES

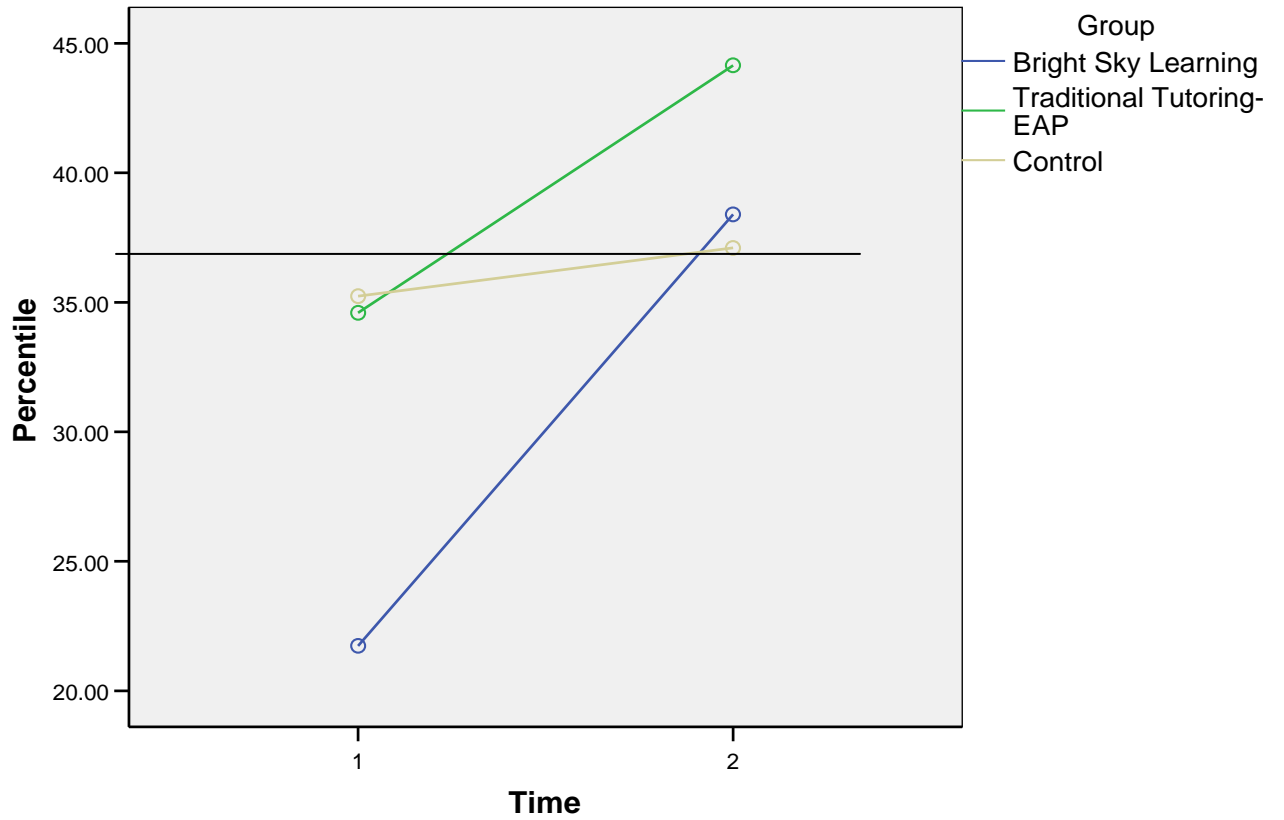
	Group	Mean	Std. Deviation	N
WJIII-Broad-Read-%-A	Bright Sky Learning	21.7339	16.59344	96
	Traditional Tutoring-EAP	34.5941	25.87399	101
	Control	35.2369	25.39688	84
WJIII-Broad-Read-%--B	Bright Sky Learning	38.3958	23.69965	96
	Traditional Tutoring-EAP	44.1485	28.09889	101
	Control	37.1000	25.61478	84

BSL students moved from just barely **Basic to Proficient** between pre- to post-test.

EAP students began nearly **Proficient** and moved well within the **Proficient** level.

Control students began at the just **Proficient** level and remained at that level at post-test.

Woodcock- Broad Reading Percentile



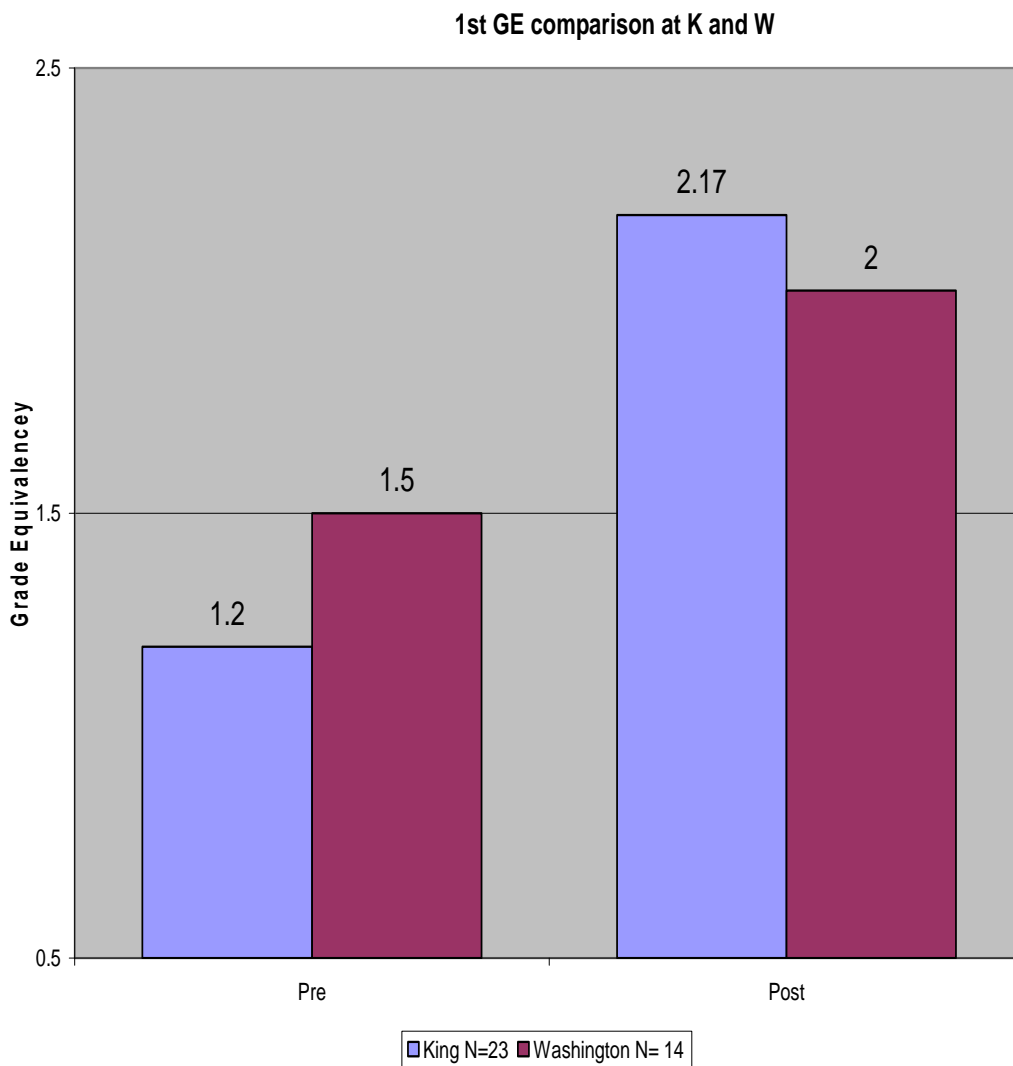
Note: Proficiency Line drawn at 35% based on technical manual analysis.

III. Comparison of the Grade Equivalency pre/post of grades 1-5 for all students assessed on WJ III at King and Washington

Grade One:

Of the 23 students assessed on the Woodcock Johnson III at King, the treatment school, the average pre-test grade equivalency score was 1.2. On the post-test the King students' average was 2.17.

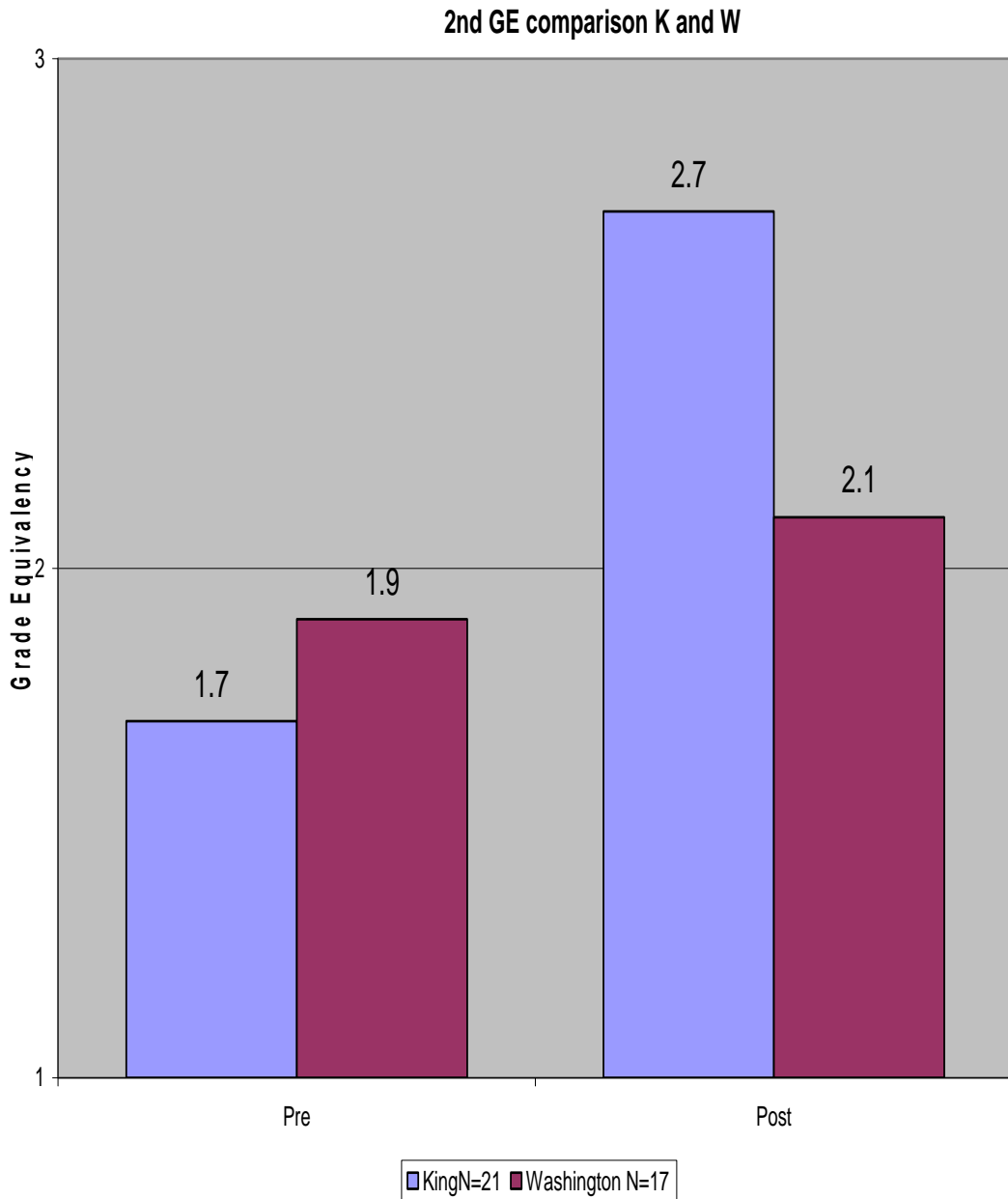
Of the 14 students assessed on the Woodcock Johnson III at Washington, the control school, the average pre-test grade equivalency score was 1.5. On the post-test the Washington students' average was 2.0.



Grade Two:

Of the 21 students assessed on the Woodcock Johnson III at King, the treatment school, the average pre-test grade equivalency score was 1.7. On the post-test the King students' average was 2.7.

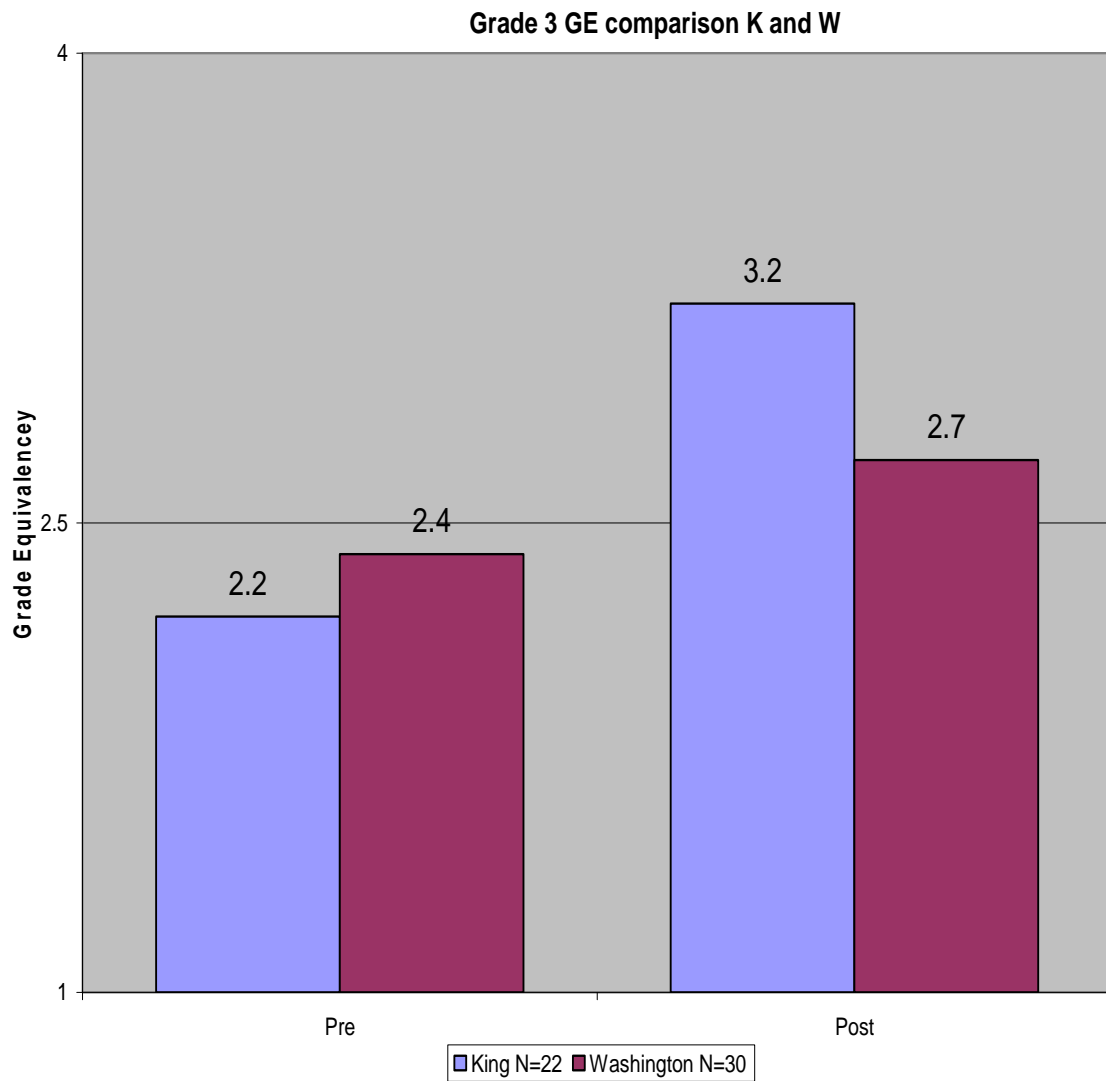
Of the 17 students assessed on the Woodcock Johnson III at Washington, the control school, the average pre-test grade equivalency score was 1.9. On the post-test the Washington students' average was 2.1.



Grade Three:

Of the 22 students assessed on the Woodcock Johnson III at King, the treatment school, the average pre-test grade equivalency score was 2.2. On the post-test the King students' average was 3.2.

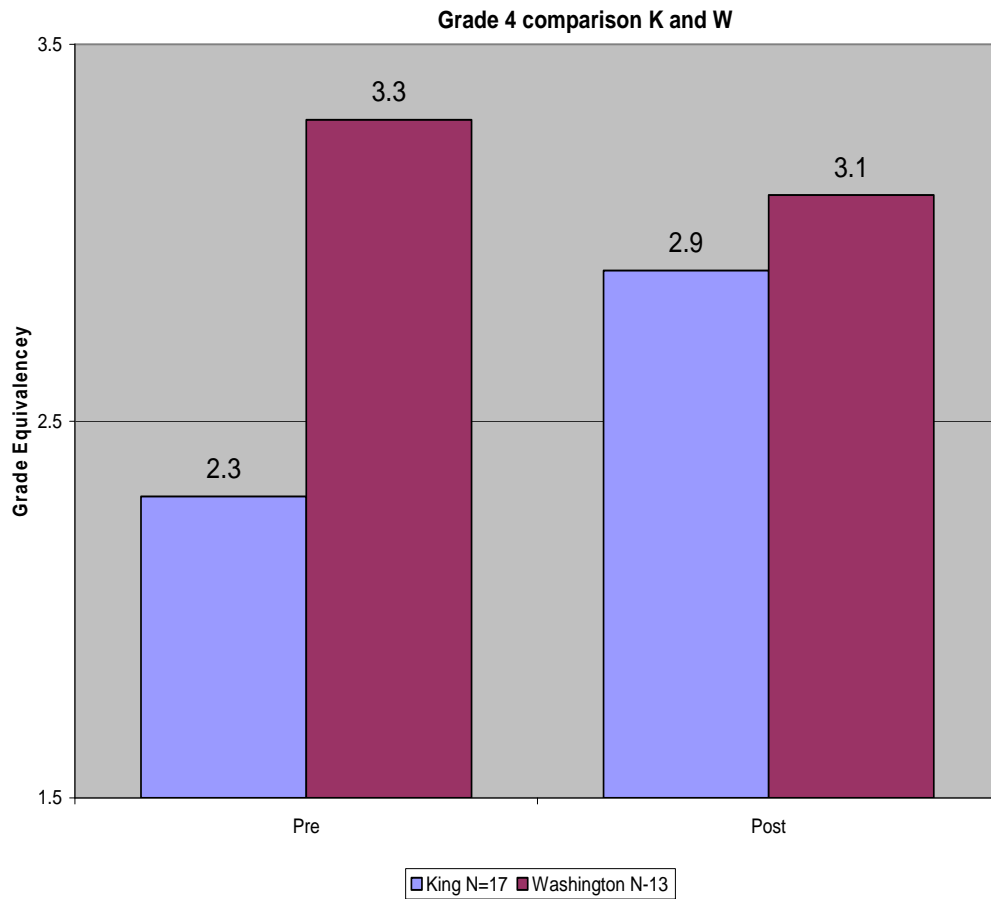
Of the 30 students assessed on the Woodcock Johnson III at Washington, the control school, the average pre-test grade equivalency score was 2.4. On the post-test the Washington students' average was 2.7.



Grade Four:

Of the 17 students assessed on the Woodcock Johnson III at King, the treatment school, the average pre-test grade equivalency score was 2.3. On the post-test the King students' average was 2.9.

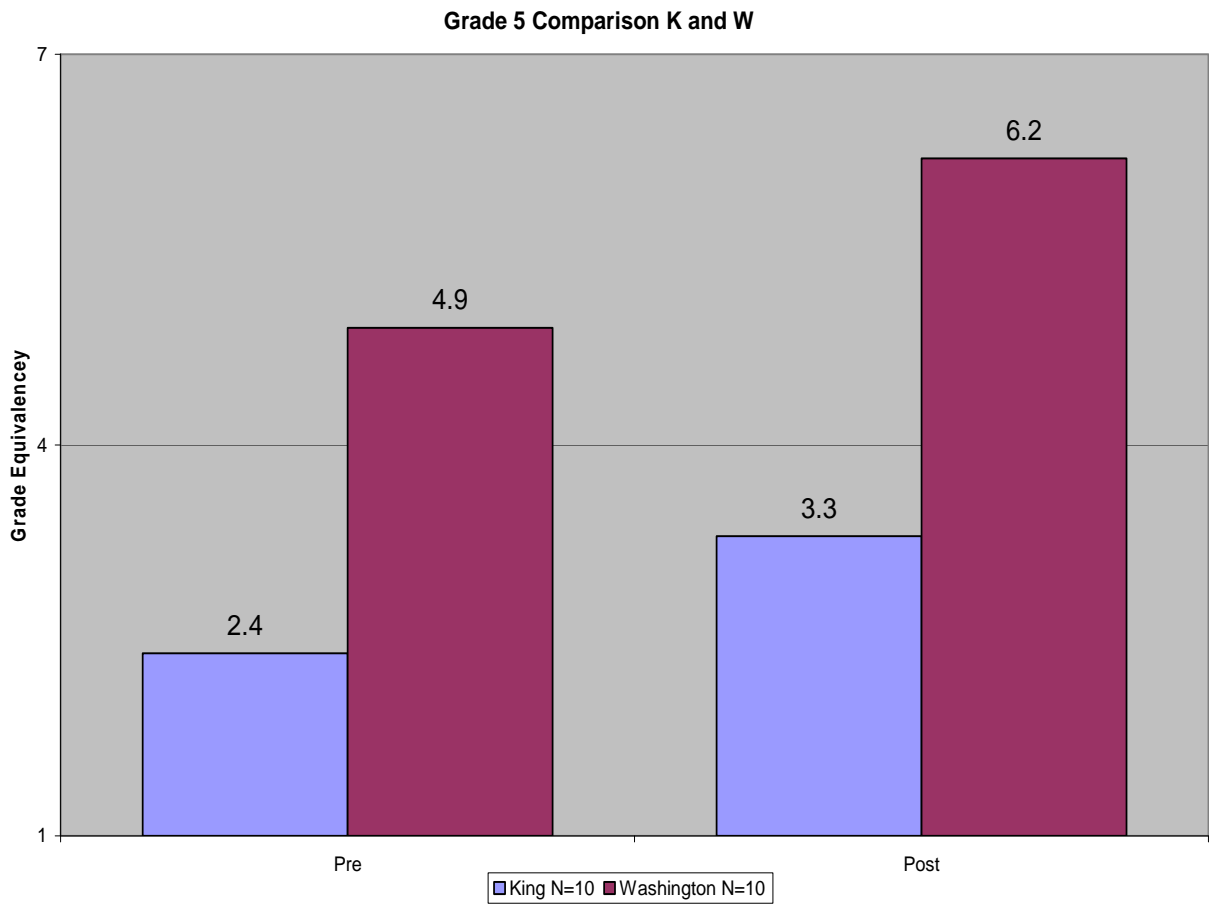
Of the 13 students assessed on the Woodcock Johnson III at Washington, the control school, the average pre-test grade equivalency score was 3.3. On the post-test the Washington students' average was 3.1.



Grade Five:

Of the 10 students assessed on the Woodcock Johnson III at King, the treatment school, the average pre-test grade equivalency score was 2.4. On the post-test the King students' average was 3.3. It should be noted that all fifth graders in the treatment group made progress.

Of the 10 students assessed on the Woodcock Johnson III at Washington, the control school, the average pre-test grade equivalency score was 4.9. On the post-test the Washington students' average was 6.2. It should be noted that minimal or no progress was made by the majority of students in the fifth grade control group. However, two students who were at or above grade level at pre-test, made significant gains, thus skewing the overall average of growth.



IV. Secondary Tutoring Pilot

The research study at the secondary level compared student progress via a single subject research design, pre-testing and post-testing students utilizing standardized measures. Overall, students received an average of 26 hours of tutoring and made significant gains in the area of basic reading skills, gaining on average 1.5 grade levels on standardized measures.

The following information summarizes the pilot study logistical data as well as research results at King and the Alternative Education sites:

Middle School and High School Alternative Education Programs (Phoenix Academy, Buehrle School and A.C.T.S.) Logistical Data

- Program Duration:
Phoenix Academy: Feb 27th – June 6th
Buehrle: April 3rd – June 6th
ACTS: April 4th – June 6th
- Enrolled: 163
- Attendance rate: 75%
- Of the 49 students pre and post tested 93% made progress
- Students received, on average, 26 hours of instruction, gaining on average 1.5 grade levels
- During the school day program five days per week 43 minute periods at Phoenix and Buehrle and 60 minutes at ACTS
- Cost per student: \$30-\$40 per hour

Overall Implications of the Research Study:

- Results indicated that intervening early has the biggest effect on gain, students in grades 1-3 made significant gains in the area of basic reading.
- 1:1 instruction is extremely motivating for students as determined by qualitative survey and attendance data, particularly middle and high school students who often resist attending tutoring.
- Systematic, explicit instruction in a decoding program can significantly impact overall reading scores, particularly for students in grades 1-3.
- All students were progress monitored weekly: data informed decision making model is the most effective way of ensuring that decisions are based on solid rationale instead of opinion.
- As attendance and recidivism are a significant problem in alternative education, during-the-day programs are one way of ensuring that students receive needed remedial reading interventions.
- Supervised by a certified teacher, high school students, college students and community members were effectively able to deliver this one-on-one reading program with fidelity due to the explicitness of the program.