

**YEAR TWO REPORT SUMMARY:  
EVALUATION STUDY OF THE WRITING ROAD TO READING  
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Arizona State University conducted the second of a four-year quasi-experimental study for Spalding Education International in the 2007-2008 school year. This study was conducted in 11 diverse Arizona schools with a total of 1,055 participating first grade students at the first benchmark test. This number declined to 1,002 total students by the year-end test. In this second year, the study involved 47 teachers in 5 treatment and 6 control schools. The majority of the students in the treatment group were in the 2006-2007 study kindergarten cohort. The study matched schools/classrooms on socioeconomic status of students, class size, student race/ethnicity, and the school's geographic location. These measures were taken to ensure that the treatment classrooms/schools did not differ significantly in their structure or composition from the control schools.

The purpose of this evaluation was to study the effectiveness of *The Writing Road to Reading* program in helping children attain critical reading skills. *The Spalding Method* is a total language arts approach because it provides explicit, sequential, multisensory instruction in spelling (including phonics and handwriting), writing, and listening/reading comprehension. The study assessed teachers' implementation of the materials and measured the effect of the program on student achievement. Researchers also examined comparisons between children taught using Spalding's *Writing Road to Reading* and children taught using other, more traditional reading programs. This report presents the study results to date.

**METHOD**

The study evaluated teachers' implementation of Spalding's *Writing Road To Reading* using a uniform quantitative instrument. Researchers collected data through classroom observations using the observation protocol. For the student measures, researchers employed the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) as the primary measure to assess changes in students' reading skills during the 2007-2008 school year. Table 1 on the next page lists the study schools, number of classes and number of students.

In the second year, the distribution of students by gender, language ability, and SES was as follows. A little more than half of the students (52%) were male. There were more EL students in the control schools which increased the average percentage of ELL students to 38% of participants as compared to 33% in year 1. The same trend occurred in the SES measure, free and reduced lunch. The rates increased in control schools from the previous year so that, overall, 49% of participating students across treatment conditions qualified as low-income compared to 47% in year 1.

Table 1: *Schools Included in the Analysis*

Group	Name of School	# Total 1 <sup>st</sup> graders	# of classrooms
Experimental	Alhambra	88	3
	Bret Tarver	126	7
	CTA-Liberty	138	5
	Gallego	92	4
	Valley Academy	104	4
<b>Total</b>	<b>5</b>	<b>548</b>	<b>23</b>
Control	#1 – M	92	4
	#2 – N	104	4
	#3 – O	86	4
	#4 – P	70	3
	#5 – Q	121	5
	#6 - R	34	4
	<b>Total</b>	<b>6</b>	<b>507</b>

## PROGRAM IMPLEMENTATION & RESULTS

The classroom observations were the primary measure for classroom implementation of *The Writing Road to Reading*. The goal for observations is to see consistent Spalding instruction across grade levels and schools. Observers noticed an increase in consistency within and across the five schools by the fourth-quarter observations. This is attributed to consistent use of the Spalding *Teacher Guides*.

In terms of treatment teachers' performance, the year-end researchers' overall observation protocol results showed that at least 87% of program practices were satisfactorily implemented by treatment teachers with 9% of treatment teachers' behaviors needing further refinement. The final observation summary showed that in the area of program philosophy and spelling, most teachers were successfully adhering to *The Spalding Method*.

In program philosophy, observers noted a slight decline in the number of teachers who consistently encouraged higher-level thinking in the writing lesson. There was an increase

however in the use of higher-level thinking in the reading lesson. Last, compared to the previous round of observations, there was a decline in the number of classrooms that demonstrated the connection between spelling, writing, and reading.

During the year, there was a decline in modeling composing sentences that demonstrate usage and meaning of unfamiliar words. There were also teachers needing to refine coaching as children identify and label three mental actions (24%). Observers also saw a decline in the number of classrooms where children read a decodable book in unison. In all instances this was because of poor time management.

In terms of student performance results, similar to last year, Spalding students had consistently higher *mean* values on all DIBELS areas, which indicate that Spalding has been more effective than all the other methods used in the control schools in teaching those reading skills. Please see Tables 3 and 4 on page 5.

Similar to last year, Spalding students had consistently higher *mean* values on all DIBELS areas, which indicate that Spalding has been more effective than all the other methods used in the control schools in teaching those reading skills. Although some mean differences are small (e.g., LNF, PSF), the significance value is large because the issue is whether the null hypothesis (no difference in scores) is unlikely to be true. The smaller the p value, the more convincing is the rejection of the null hypothesis.

One possible reason for the smaller mean score differences of Letter Naming Fluency and Phoneme Segmentation is that reading programs used in both control and experimental schools teach these skills. However, the largest mean score difference is in Oral Reading Fluency. Spalding's *Writing Road to Reading* teaches short and long vowel sounds and sounds of letter combinations from the beginning, enabling Spalding students to independently segment and read more words. Other score differentials are hypothesized as being due to Spalding's emphasis on multisensory word meaning/usage and comprehension strategies such as summarizing (retelling).

According to DIBELS decision rules, at the end of first grade student scores on the ORF reading level is the most important score. Based on their research, high scores on ORF (40 or more words correct per minute) should also mean high scores for PSF and NWF skills as well.

The researchers note, "Students who meet the end of first grade benchmark goal on ORF have odds of 75 – 92 percent of achieving the second grade goal for more common patterns of performance." Spalding students in this study exceeded the low risk reading level by twice the level: 33.33 points above the low risk indicator as opposed to 13.51 points above for the control group.

An additional analysis was conducted to compare the 2007-2008 kindergarten student achievement with that of the 2006-2007 kindergarten cohort. During the 2007-2008 year, the kindergarten students, teachers, and administrators were not participants in the study; however, data was collected on a sample of 2007-2008 kindergarten students. As shown in Table 2 below, kindergarten student performance slightly exceeded the kindergarten cohort of 06-07.

Table 2: Comparative Mean Scores of Selected Spalding Kindergarten Students on the year-end DIBELS from two year study (Spring, 2007 = Year 1; Spring, 2008 = Year2)

		Year 1 ('07) Kindergarten	Year 2 ('08) Kindergarten	Difference
Year End Testing Results	Letter Name	48.43	49.35	0.92
	Phoneme Segmentation	50.09	51.49	1.4
	Nonsense Word	45.92	50.41*	4.49
	Word Use	37.51	41.46*	3.95

\*p<.05

### SUMMARY

According to the year two results, students who used *The Writing Road to Reading* continue to demonstrate statistically significant learning gains as measured by DIBELS. In addition, their scores were significantly higher than control group student scores again this year. This achievement pattern is augmented by looking at the 2007-2008 kindergarten students. Their year-end scores exceed those of their counterparts in the year one study. These preliminary findings suggest that use of *The Writing Road to Reading* curriculum is an effective method for enhancing performance on critical early literacy skills.

Table 3: Comparative Mean Scores of Spalding and Control First Grade Students on the DIBELS (Fall 2007, Winter 2008, Spring, 2008)

		Experimental	Control	Difference
Fall, 2007	LNF	45.74**	42.18	3.56
	PSF	47.60 <sup>+</sup>	35.55	12.05
	NWF	48.87 <sup>+</sup>	34.70	14.17
	WUF	35.82 <sup>+</sup>	18.80	17.02
Winter, 2008	PSF	51.91 <sup>+</sup>	45.31	6.61
	NWF	63.12**	56.73	6.39
	ORF	54.92 <sup>+</sup>	31.36	23.61
	RF	20.72 <sup>+</sup>	11.82	8.87
Spring, 2008	PSF	52.94 <sup>+</sup>	48.95	4.01
	NWF	78.29*	72.69	5.65
	ORF	73.33 <sup>+</sup>	53.51	19.87
	RF	30.65 <sup>+</sup>	19.76	10.92

\*p<.05

\*\*p<.005

<sup>+</sup> p<.001

Table 4  
First-grade Students' Mean Post-Scores on DIBELS

		Mean Test Scores		
		Treatment (n = 517)	Control (n = 484)	DIBELS End of First-grade Low risk score
Phoneme Segmentation Fluency (PSF)	Spring test	52.94	48.95	35
Nonsense Word Fluency (NWF)	Spring test	78.29	72.69	50
Oral Reading Fluency (ORF)	Spring test	73.33	53.51	40