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THE EFFECTS OF A FIRST DAY AND SECOND DAY READS ON READING ACCURACY WITH *READING MASTERY III TEXTBOOK B* FOR A FIFTH GRADE STUDENT WITH LEARNING DISABILITIES

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The purpose of the present case report was to examine the effects of one and two day reads over lessons in Reading Mastery. The participant was a fifth grade male with learning disabilities. Data were collected on his correct and error rate across various lessons. The data were gathered in the participant's resource room classroom. The overall outcomes indicated a sharp decrease in errors with a smaller increase in corrects. The procedures were easy to carry out and data collection straightforward. Recommendations for future research combining Direct Instruction curricula and procedures with that of precision teaching were made.

Reading can be viewed as one of the most important skills that students learn in school (Slavin, 1996; Slavin et al., 1994), because it is the skill that is essential for learning to take place across multiple subject areas such as social studies, math, or spelling (Kameenui, 1998). For example, students asked to complete applied math problems are typically asked to read story problems (Stein, Silbert, & Carnine, 1997). Similarly, as students progress into the middle and high school grades, greater emphasis is given to their ability to gain knowledge from the written word rather then direct experience (Entwisle & Hayduk, 1981; Stein et al., 1997). To increase and improve student learning school personnel should consistently strive to identify instructional methods that are easy to administer while effectively increasing their student achievement in reading (Kameenui, 1998; Liberman & Liberman, 1990; Slavin, 1989).

The importance of reading and education in general is recognized by our society. Educational as well as our political leaders have initiated programs to lend their support to reduce poor reading performance and to break the downward economic and social

spiral created by low reading skills. Illiteracy has broad-reaching effects on our society (Adams, 1990; Askov, 1991; Howard, McLaughlin, & Vacha, 1996; Livingstone, 1998). With escalating global competition where advanced technological skills and knowledge are critical, we can no longer ignore the seriousness of illiteracy (Askov, 1991; Darch, 1995; Kameenui, 1998; Livingstone, 1998). If children do not learn to read it can prevent them from learning in the future and can result in negative attitudes toward schooling (Carnine et al., 2004; Kameenui, 1998; Lloyd, 1978). Reading and language skills are the key building blocks for success in school and adult life (Hart & Risley, 1995; Howe, 1993; Liberman & Liberman, 1990). Children's early school experiences can influence their success (Greenwood, 1996; Howard et al., 1996; Slavin, 1986). In addition, how children are taught at an early age will affect their learning throughout life (Gersten & Keating, 1987; Hart & Risley, 1995; Slavin, Madden, Dolan, Wasik, Ross, & Smith, 1994).

A reading methodology that has been used with great success is Direct Instruction (Adams & Engelmann, 1996; Carnine et al., 2004; Gersten, 1985; Gersten, Carnine, &Woodward, 1987; Gersten & Keating, 1987). Direct Instruction teaching procedures rely on: (a) providing the learner with phonic skills needed to decode, and (b) a set of instructional prompts and cues that allow similar teaching methods across students and instructors (i.e. teachers, parents, and para-educators). Direct Instruction also emphasizes frequent teacher-student interaction guided by carefully sequenced lessons utilizing principles of learning and advanced strategies for obtaining generalization of reading skills (Engelmann & Carnine, 1982).

The two major rules of Direct Instruction are to *teach more in less time*, and to *control the details of what happens* (Engelmann, Becker, Carnine, & Gersten, 1988). More is taught by giving instruction in small groups while maintaining a fast pace for active student responding, using strategies that can be taught on a limited number of examples but generalized to a large set of new examples, providing immediate and positive corrections, and sequencing instruction carefully to build on preskills, consistencies, review, and high utility applications (Carnine et al., 2004; Johnson et al., 2001). The details of instruction are controlled by giving teachers scripted lessons, close supervision and teacher training, continuous progress testing, and detailed procedural manuals for teachers, supervisors, administrators, and parents (Engelmann et al., 1988). Direct Instruction implements the systematic use of positive consequences such as a point system to strengthen children's motivation for learning, including: knowledge of results, behavior-specific praise, enjoyable games, and point systems (Carnine et al., 2004).

Studies of the effectiveness of Direct Instruction used specifically with special education students have also been examined (White, 1988). An analysis of 25 studies carried out with children specifically labeled handicapped, e.g.. learning disabled, reading disabled, or mentally retarded, as opposed to *at risk* revealed not one study favoring the comparison method over Direct Instruction materials and procedures (White, 1988). The outcomes showed that Direct Instruction was equally effective for mildly and moderately

disabled students. Also, Direct Instruction was effective regardless of age range, disability designation, or skill area examined.

This article will examine the effects of employing first and second reading opportunities on the rate of correct and error words from the *Reading Mastery Work Book, B.* That is, can the use of additional opportunities to read improve student performance? A second purpose to increase the number of corrects while decreasing the number of errors in see to say words in context with a fifth grade student with learning disabilities. A first day and second day read technique was used to implement increase the frequency of error correction procedures on the words missed during the first day read.

Method

Participant and Setting

The participant of this study was a 10-year-old fifth-grade elementary student. The child was assigned to a regular fifth-grade classroom in the Pacific Northwest. The participant received daily 50 minutes of spelling, written language and reading in the resource room. The participant was selected for this study because he was reading at a third grade level and showed deficiencies in decoding and word recognition. Data from the *Woodcock-Johnson Psycho-Educational* Battery (Woodcock &Johnson, 1977), adminstered in April 2000 indicated that the student was reading at the grade equivalent of 2.6. The student also met the state and federal guidelines for the label of learning disabled.

The study took place three to four times a week in the participant's resource room located in an elementary school in the Pacific Northwest. Present in the resource room during the study were the resource room teacher and instructional assistant. The study took place over a six week time period.

Dependent Variables and Measurement Procedures

The dependent variable was the number of corrects and errors made while reading from *Reading Mastery III Textbook B.* During each 40-minute session the participant would first read the word list provided in the beginning of each lesson. The researcher would first say the word and the participant would repeat the word. After the researcher and the participant went over the word list together, the participant then read the word list by himself. The participant then read the entire passage aloud while the researcher measured the number of misread words. A misread word consisted when the participant reversed the order of words, omitted words, incorrectly identified words or told the researcher he did not know the word. The researcher chose not to count a self-correction as a misread word. A self-correction consisted of the student misreading a word then within 5 seconds saying the word correctly. After each lesson was read, the participant then answered questions about the material just read in his workbook. The child's scores in the workbook exercises were not measured in the study.

Experimental Design and Conditions

An ABC single subject replication design (Kazdin, 1982) was used to evaluate the effects of a first day and second day read on the number of correct and error in see-to-say

words in context from *Reading Mastery III Textbook B.*

Baseline. Baseline consisted of three lessons read by the participant one day only. During this time the researcher measured and recorded the number of corrects and errors made while reading the passages.

First day Reading. Each session the participant was given a passage to read. The participant and researcher first went through the new vocabulary words listed in the beginning of the lesson. The participant would then begin to read the lesson aloud to the researcher. The researcher recorded the number of words read correctly and incorrectly in the lesson. When the participant misread a word the researcher would correct the participant. The correction procedure consisted of the following: the researcher saying the correct word, the participant repeating the correct word and the participant starting at the beginning of the sentence and rereading the word. Errors were scored if words were incorrectly read, omitted or substituted. If the participant made a self-correction on a word, the researcher did not count the word as incorrect. After the participant finished reading the passage he and the researcher set a goal for the number of errors to be read the next session. The goal consisted of decreasing the number of errors by at least 50% during the second day read. If the goal is met, the participant would receive 10 minutes on the computer. After the goal setting was finished, the participant received a small piece of candy as a reward for reading the lesson.

Second day reading. The participant would again read the same lesson the second session. During this session the first author and participant would review the words at the beginning of the lesson. As the participant read the lesson again the researcher recorded the number of correct and incorrect responses read by the student. Errors were scored if the words were incorrectly read, omitted, or substituted. We did not count self-correcting a word as an error. After each lesson was read, the first author and participant then totalled the number of errors made in the lesson. If the participant met his goal of decreasing the errors by at least 50% then he received 10 minutes on the computer.

Reliability of Measurement

The researcher and the instructional assistant both recorded the number of errors the participant made while reading . The inter-observer agreement between the first author and instructional assistant was 95%.

Results and Discussion

The overall results revealed a decrease in the number of errors from the first day read to the second day read (See Figures 1 and 2). During baseline the participant read a mean of 468 words while making 23.7 errors and 444 correct responses per lesson. The range in errors during baseline went from 15 errors in lesson 82, to 32 errors in lesson 83.

During first day readings, the participant read a mean of 513 words with a mean of 45.7 errors and 473.1 correct responses per lesson. The range of errors in this phase was from 26 errors in lesson 88 to 56 errors in Lesson 86. The number of errors decreased in the second day reading to a mean of 18.2 per lesson from the mean of 45.7 in the first day

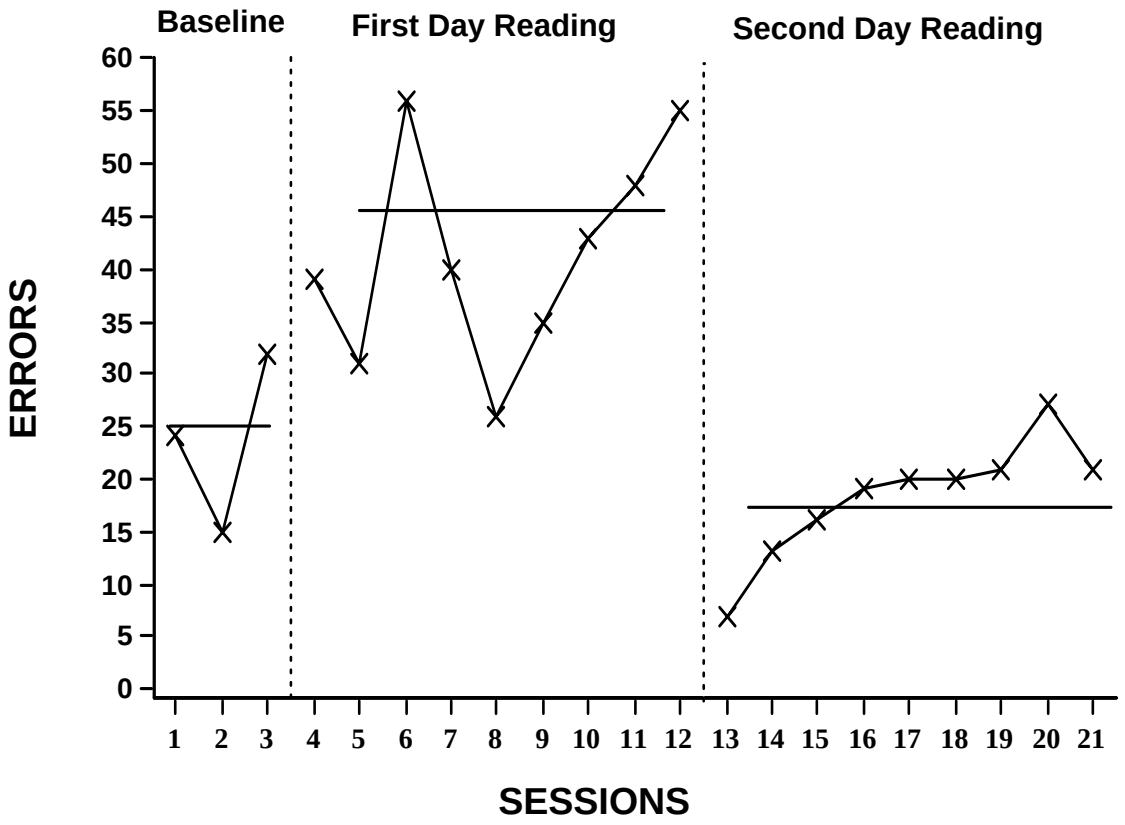

Figure 1.
Number of errors across conditions. Solid horizontal lines indicate condition means.

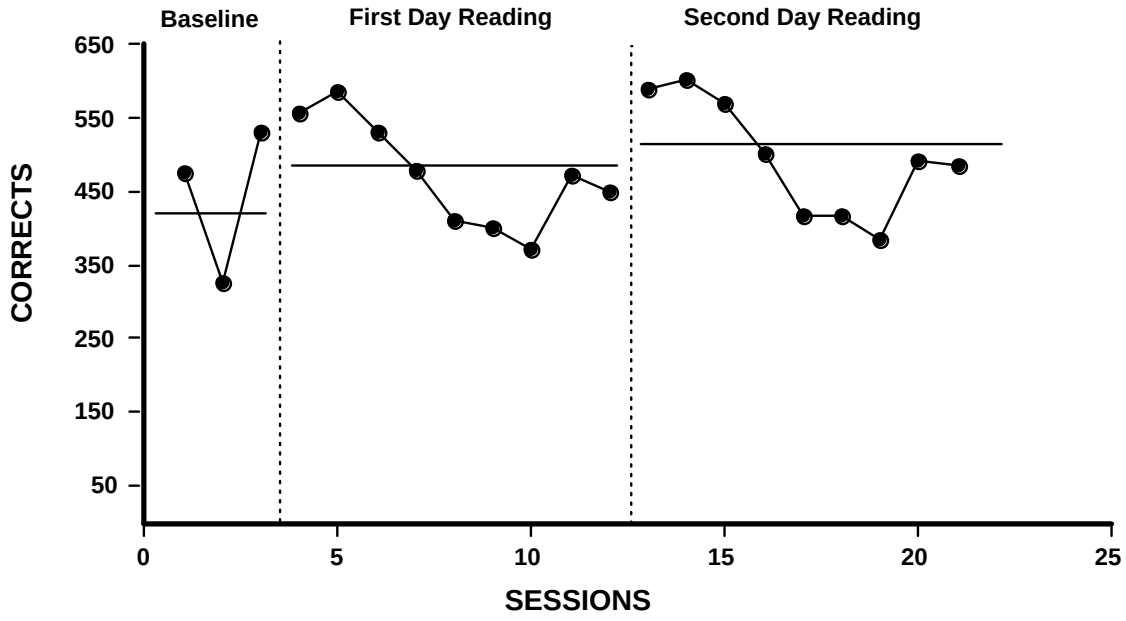

Figure 2.
The number of corrects across conditions. Solid horizonal lines indicate condition means.

readings. During the second day readings the participant read a mean of 513 word lessons while making 18.2 errors and 495.2 correct responses. The range of error responses was from 7 errors in lesson 84 to 27 errors in lesson 91

The results of this study indicated the effectiveness of a first day and second day read when decreasing the number of errors made while reading with see-to-say words in context. Also shown in the results is the large range of errors in lessons. This outcome could be due from the participants successive days absent from the study. Low attendance, spring break and difficulties in the home were all factors in producing low school attendance on the part of the child. The participant also had difficulty in word attack skills. This deficiency in skill made it difficult to identify unknown words. Words that caused extreme difficulties were multi-syllable words compound words and words with the *ou* blends.

The cost and time-effectiveness of this study were minimal. The candy provided for reading could be bought in bulk and one piece of candy was awarded per lesson read. Any type of instructional staff could easily continue to use these procedures at any time. The use of computer time is typically available in most special education classroom settings (Willis, Whalen, Sweeney, & McLaughlin, 1995).

We have long advocated for the combining of Direct Instruction with the methodology of precision teaching in the area of reading (Drago & McLaughlin, 1996; Rinaldi & McLaughlin, 1996; Rinaldi, Sells, & McLaughlin, 1997). Our work has shown that combining these two data-based and effective teaching strategies can improve the academic skills of a wide range of students, both with and without disabilities.

There were some weaknesses in the present case report. First a return to baseline was unable to take place due to concerns for time and student absences. Second, the attendance of the participant was erratic and this may have reduced his performance in reading, especially for corrects. A long term analysis of these outcomes could not take place due to the closing of school for the academic year. Finally, data on the participant's comprehension should have been taken. These issues will have to be examined in future research.

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