

The Effects of Repeated Readings on Student Performance in the Corrective Reading Program

Abstract: This study examined the effects of adding a repeated reading intervention on the oral reading fluency of students within the context of the *Corrective Reading Decoding Strategies B2* program (Engelmann, Meyer, L. Carnine, Becker, Eisele, & Johnson, 1998). A multiple baseline design across participants was used to determine the effectiveness and efficiency of a repeated reading intervention on student rate and accuracy for both practiced and unpracticed passages. Results showed that the repeated readings intervention provided positive effects on students' rate and accuracy for practiced passages, but did not produce rate and accuracy gains for unpracticed passages.

Oral reading fluency, the ability to read a text quickly, accurately, and with proper expression, is a critical but neglected reading skill (Allington, 1983; Fuchs, Fuchs, Hosp, & Jenkins, 2001; National Reading Panel [NRP], 2000). The National Assessment of Educational Progress used oral reading fluency as a major indicator of reading competence among fourth-grade children and found that 44% of the students were disfluent readers (Fuchs et al., 2001; NRP, 2000). Allington

noted that students' lack of fluency in oral reading is seldom assessed or treated.

Bransford, Brown, and Cocking (2000) argue that reading fluency is most effectively enhanced when students engage in deliberate practice, monitor their performances, and gain feedback about their degree of progress. The NRP (2000) conducted an analysis of studies that focused on fluency development and found that guided repeated oral reading procedures had a clear impact on reading ability of competent readers through Grade 4 and on students with various types of reading problems throughout high school.

Samuels (1979) coined the term *repeated reading* to describe the process of "rereading a short, meaningful passage several times until a satisfactory level of fluency is reached" (p. 404) as a method to build reading fluency. Dowhower (1994) suggested that the method of repeated readings be integrated into daily literacy instruction for regular and struggling readers, as she found that subsequent readings led to higher levels of recall, deeper processing of words in text, and generalized fluency abilities to new passages. Blum and Koskinen (1991) explained that reading practice enhances knowledge, and knowledge enhances interest and continued motivation to practice.

Older, struggling readers are often in particular need of interventions to improve their reading fluency. The poor reading habits that are

Journal of Direct Instruction, Vol. 3, No. 1, pp. 17–27. Address correspondence to Candace Steventon at epeces@lan-gate.gsu.edu.

ingrained after years of practice present an instructional challenge, and inadequate reading rates make it difficult for these students to remember passage details. In addition, many of these students are not highly motivated and often display negative attitudes about reading.

Engelmann et al. (1998) designed the *Corrective Reading* series for struggling readers in Grades 4 through 12. Engelmann et al. employed a Direct Instruction model of teaching that provides (a) explicit instruction of decoding skills, (b) daily practice of oral reading with immediate feedback, (c) daily reading checkouts with specified rate and accuracy criteria, and (d) a management system that rewards students for steady improvements. The programs within the *Corrective Reading* series include daily peer checkouts on story passages, in which students work in pairs. They read a passage to each other from the day's current lesson and assess accuracy. Next, the students conduct a 1-min timed reading of a passage from the previous lesson. Students earn lesson points for meeting the criteria for these passages. Most students reach the rate and accuracy criteria, but some students struggle and are unable to reach the criteria and attain lesson points.

There is little research on the effects of repeated reading on student fluency gains in Direct Instruction programs. Frankhauser, Tso, and Martella (2001) investigated the effects of adding a repeated reading component to the *Reading Mastery II* (Englemann & Bruner, 1995a) and *Reading Mastery Fast Cycle* programs (Englemann & Bruner, 1995b). Frankhauser et al. selected four students with learning disabilities who were having difficulty reaching the program's rate and accuracy criterion and investigated the effects of adding a daily 1-min timed reading on student performance on the rate checkouts that occur every five lessons in the programs. They implemented multiple phases of (a) using procedures as specified in the program, and (b) adding a

daily timing to the program-specified procedures. These researchers found no significant differences for mean number of words read per minute, errors per minute, or number of timings required to meet program-specified criteria. Frankhauser et al. concluded that the *Reading Mastery* program provided sufficient practice of word recognition and fluency skills for students in need of reading remediation. Ungless (as cited in Grossen, 1997) investigated the degree to which the addition of repeated readings provided additive effects on student performance in *Corrective Reading*. Ungless found no apparent benefit gained by additional repeated readings.

In spite of these findings suggesting that in some circumstances, repeated readings may not provide added benefit beyond that of Direct Instruction programs, the issue remains important. Given the importance of reading fluency, the difficulties encountered by remedial readers, and the theoretical and empirical evidence regarding the effectiveness of the method of repeated reading (Dowhower, 1994; NRP, 2000; Samuels, 1979), the combination of Direct Instruction with repeated readings is strongly suggested. The purpose of this study was to examine the effects of adding a supplemental oral repeated reading component to the *Corrective Reading Decoding Strategies Level B2* program. The specific questions were (a) How does the addition of an oral repeated reading component affect students' rate and accuracy performances on in-program timed reading checkouts?, and (b) How does the addition of an oral repeated reading component generalize to unpracticed in-program passages?

Method

Participants

The participating teacher was a middle school science teacher with 10 years of prior teaching experience and no advanced degrees. She had no prior formal training in teaching reading. All

teachers at the alternative school where the teacher was employed were required to provide some form of reading for the first 90 min of the school day. The staff received a 2-hr general overview session that described the components and philosophy of Direct Instruction and a 3-hr specific training on the *Corrective Reading Decoding* series.

Three middle school students participated in the study. All participants attended the alternative middle school located in an urban school system in the Southeastern United States. The school system removed these students from their home schools and placed them in the alternative school due to disciplinary infractions or lack of satisfactory progress for promotion to high school. Specifically, the school system placed Carl (African-American male, age 15) in the alternative school due to lack of academic progress, Andy (African-American male, age 13), and Mack (African-American male, age 13) due to repeated disciplinary infractions. Previous standardized test scores were not available for any of the students.

The classroom teacher selected these students to participate in the study based primarily on their relatively stable attendance records compared to their class peers. Each of these three students had been assessed with the *Corrective Reading Decoding* Placement Test and placed in level B2 of the program. By the beginning of the study, the students had progressed to lesson 32.

Setting

The study took place in a science classroom during the schoolwide reading period. The class consisted of seven male students, all of whom placed into *Corrective Reading Level B2*. The teacher had modified the reading checkouts due to students' chronic poor attendance. She eliminated the program-specified untimed readings of the current lesson and timed readings of the previous lesson. Instead, she conducted timed reading checkouts on the

current lesson for each student after the students had practiced once with a peer. Students completed the workbook portion of the lesson and worked on computers while the teacher conducted the reading checkouts. The teacher instructed students who returned from an absence to silently read the story and practice with a peer before she conducted reading checkouts for missed lessons.

Materials and Measures

Instructional materials and reading passages from *Corrective Reading Decoding Strategies Level B2* lessons 33 to 52 were used in this study. The dependent variable was reading fluency. This was operationalized as the number of words read correctly per minute (CWPM) and errors per minute (EWPM) on two types of passages. Both types of passages were sections from the previous lesson's story. Practiced passages were the specific sections that were identified as checkouts in the program. Unpracticed passages were later sections of those same stories. Stories in the program are of sufficient length to allow for the two unduplicated sections. CWPM was calculated by subtracting errors from total words read in 1 min. Errors included omissions, additions, mispronunciations, self-corrections, and not identifying a word within 3 s. Rereading of a word or phrase was not counted as an error. Data recording sheets and a timer were used to record rate and accuracy of students' oral reading for both practiced and unpracticed passages. In addition, the researcher developed two 10-item treatment integrity checklists to monitor correct implementation of the procedures. One integrity checklist specified critical aspects of the baseline procedures and the other targeted the repeated reading procedures.

Experimental Design and Procedures

A multiple baseline design across participants was employed to assess the effects of the intervention on reading fluency and generalization of any fluency gains. Eckert, Ardoin,

Daisey, and Scarola (2000) found that single-case methods could determine efficacious treatments in reading. A multiple baseline across participants design is a single-case method that allows for demonstration of a functional relationship between the dependent and independent variables (Richards, Taylor, Ramasamy, & Richards, 1999).

Teacher training procedures. Prior to implementation, the teacher was provided a one-page summary of the proposed repeated reading intervention, a figure of a multiple baseline design across participants, copies of the treatment integrity checklists for baseline and intervention, and a list explaining what were and were not oral reading errors. The primary researcher conducted a 1-hr training session in the teacher's classroom during her planning time. The researcher modeled the procedures for conducting the student readings and scoring baseline and intervention data. The teacher followed the checklists as the researcher modeled the baseline and repeated reading intervention procedures. Next, the teacher practiced both procedures as the researcher monitored correct implementation on the procedural checklists. The teacher's procedural integrity during training was 90% as she failed to provide a separate, quiet space for the student to conduct the oral reading session. After the training session, the teacher arranged a separate space within the classroom. Immediately prior to implementation of the repeated reading intervention, the researcher reviewed the repeated reading procedures with the teacher.

Baseline. Beginning with lesson 32, the teacher implemented baseline procedures. Baseline procedures began with conducting the reading lesson as specified in the teacher presentation book. After the group activities, the teacher conducted the reading checkout portion of the lesson with each student in the class. The teacher instructed all students to complete the workbook assignment while she com-

pleted the reading checkouts. The teacher told each student what would and would not count as errors on the checkout. Reading checkouts consisted of listening to each participant read for 1 min from the program-specified checkout passage. The teacher recorded total number of words read and number of errors during the minute. Results from this timing were used as the practiced passage measure. Next, she performed the same procedure for a different section of the previous lesson's story—the unpracticed passage. This section had not been practiced outside of the group story reading that is part of the normal reading lesson. The teacher provided feedback to all students regarding rate and accuracy and recorded the results.

Repeated Reading Procedures

For the first intervention session, the reading teacher conducted the reading lesson as specified in the teacher presentation book. She followed the same procedures for reading checkouts as specified during the baseline condition for students not in the study. Students not in the intervention phase worked on supplementary reading materials and computer-based programs while the teacher instructed the first participant (Carl) to orally read the program-specified checkout passage three times. The teacher continued to provide corrective feedback and encouragement to the student immediately after each rereading of the passage. Next, the teacher instructed the student that the fourth and final reading of the passage would count as the official reading checkout for program points. The data from the fourth reading of all passages were used to assess the efficiency and effectiveness of the intervention. Finally, to assess generalization to unpracticed passages, the teacher instructed the student to begin at a point in the story that the student had not practiced and read for 1 min. The teacher replicated this intervention procedure for the 2 remaining participants.

After an initial baseline, the repeated readings procedures were implemented with one student (Carl). The decision rule for implementing the intervention with a subsequent student was a 20% fluency increase over baseline across two consecutive sessions or a 10% increase over baseline across three consecutive sessions. That is, the repeated reading procedures were not implemented with the next student (Andy) until the first student (Carl) had achieved this level of measurable improvement. Similarly, only after Andy showed improvement was the intervention extended to the third student (Mack).

Results

The purpose of this study was to examine the additive effects of a repeated reading intervention on the oral reading fluency of students within the context of the *Corrective Reading Decoding Strategies B2* program. Data were collected on student rate and accuracy of practiced passages to document the direct effects of the intervention and on unpracticed lesson passages to assess the generalization effects of the repeated reading intervention. Figure 1 shows the CWPM on the practiced and unpracticed passages for each student during the baseline and intervention phases.

Direct Effects on Practiced Passages

All students made gains in their mean CWPM on practiced passages with the repeated reading intervention. Carl's correct reading rate increased from a mean of 92.1 CWPM (range = 74–108) during baseline to a mean of 113.9 (range = 88–145) during the repeated reading phase, a 24% increase. Andy's correct reading rate increased from a mean of 128.2 CWPM (range = 102–166) during baseline to a mean of 165.5 (range = 148–177) during the intervention, a gain of 29%. Mack showed an improvement from 106.6 CWPM (range = 80–131) during baseline to 144 CWPM (range

= 132–151) during the repeated reading phase, a 35% increase.

In order to put these gains in perspective, we can evaluate whether students met our criterion for substantial improvement. The criterion was reading 20% faster than their baseline mean on 2 consecutive days during intervention. All students achieved the criterion. Carl achieved this targeted increase during the seventh and eighth repeated reading sessions, and Andy and Mack both exceeded the criterion for substantial improvement within the first two repeated reading sessions.

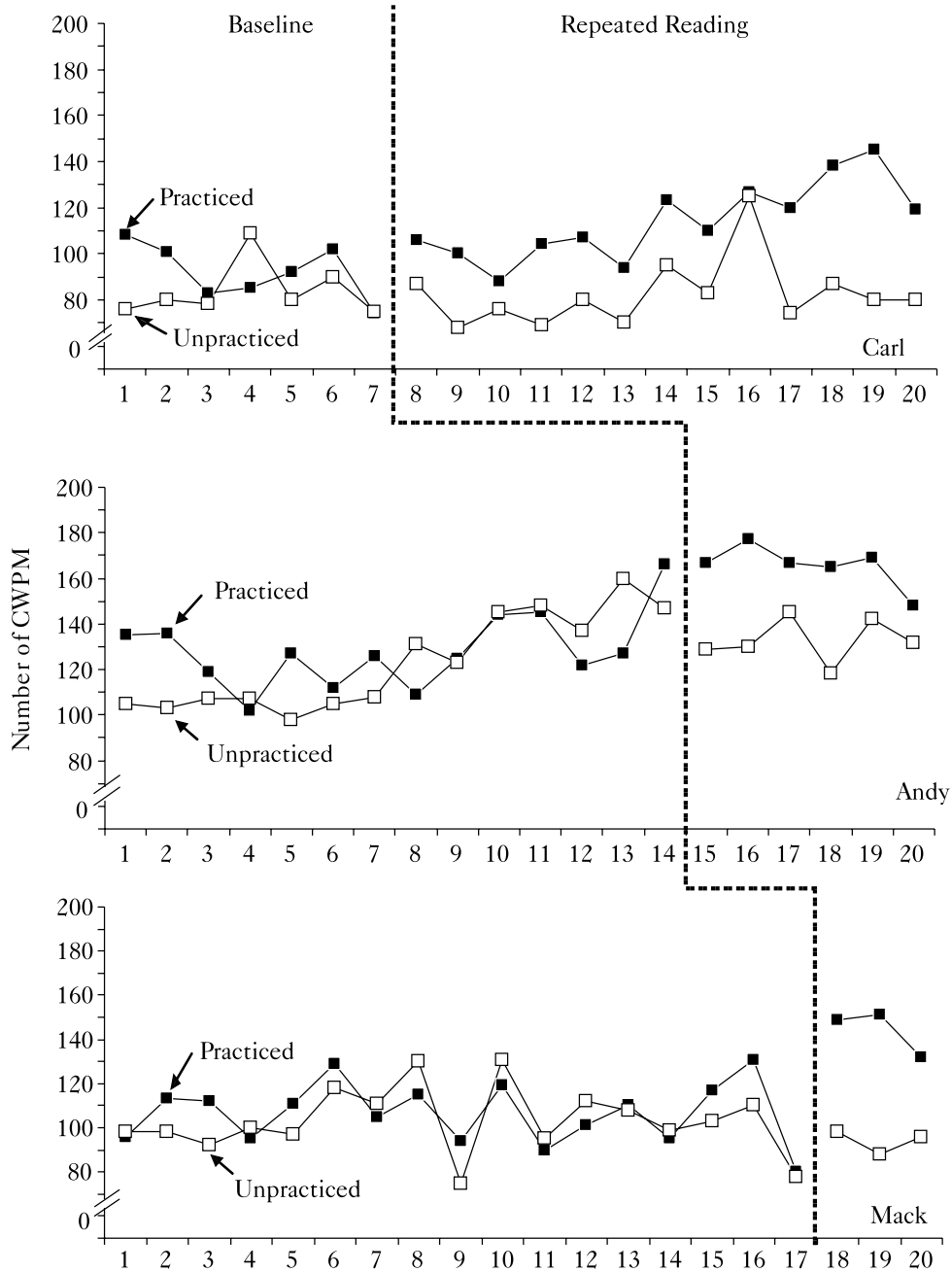
Another important standard for oral reading rate is achieving the checkout rates specified in the *Corrective Reading* program. These rates have been established by the program authors as standards for adequate progress. The rate standards escalate during the program; in lessons 32–39 students are required to read 105 CWPM, in lessons 40–49 they must read at least 110 CWPM, and in lessons 50–60 the standard is 115 CWPM. Throughout the program, the maximum error rate is set at three per minute.

All of the students showed increases in percentage of sessions in which they achieved the program-specified criteria for CWPM from the baseline to the repeated reading phase. Carl increased his percentage of sessions meeting the CWPM criteria from 0% during baseline to 62% during the repeated reading phase, Andy improved from 86% in baseline to 100% in repeated readings, and Mack increased his percentage 59% to 100%.

Carl and Mack decreased their mean error rates and were more often within the error criteria during the repeated reading phase than during baseline. For Carl, the error rate decreased from baseline (mean = 4.3 errors per minute) to the repeated reading phase (mean = 2.9 errors per minute). For Mack, the error rate decreased slightly from baseline (mean = 2.6 errors per

Figure 1

*Number of words read correctly per minute (CWPM)
for the program-specified timed reading checkouts and unpracticed passages
during baseline and repeated readings intervention.*



minute) to the repeated reading phase (mean = 2.3 errors per minute). For Andy, the error rate increased from baseline (mean = 2.5 errors per minute) to the repeated reading phase (mean = 3.0 errors per minute). Carl improved the percentage of sessions in which he achieved the criterion of three or fewer errors from 43% in baseline to 54% in repeated reading; Mack also showed improvement going from 41% in baseline to 67% in repeated readings. However, Andy achieved the error criterion less often in repeated readings—he showed a reduction from 79% in baseline to 67% in repeated readings.

Generalization to Unpracticed Passages

None of the students showed distinct evidence of fluency gains on the unpracticed passage timed readings. Carl's CWPM on unpracticed passages decreased by 2% from baseline (mean = 84 CWPM; range = 75–109) to the repeated reading phase (mean = 82.6 CWPM; range = 68–125). Mack's correct reading rate on unpracticed passages decreased by 9% from baseline (mean = 103.2 CWPM; range = 75–131) to the repeated reading phase (mean = 94 CWPM; range = 88–98). Andy showed an 8% increase in correct reading rate from baseline (mean = 123.1 CWPM; range = 98–160) to the repeated reading phase (mean = 132.6 CWPM; range = 118–145).

Interobserver Agreement

The classroom teacher was the primary observer, and the lead researcher served as the secondary observer. Interobserver agreement for the program-specified timed readings across baseline and repeated reading phases was obtained for Carl, Andy, and Mack for 45%, 55%, and 20% of the sessions, respectively. Observers independently and simultaneously recorded the number of words read per minute and the number of errors made per minute. Interobserver agreement was obtained by dividing the smaller number of words read per minute by the larger number of words read per minute and multiplying by 100.

Interobserver agreement was 100% for words read per minute for all students. Agreement on errors per minute was recorded and scored the same as words per minute (smaller number of errors divided by the larger number of errors times 100). Interobserver agreement was 90.2%, 84.6%, and 74% for Carl, Andy, and Mack, respectively. These low rates of interobserver agreement are partly a result of the small number of errors.

Interobserver agreement for unpracticed passages across baseline and repeated reading phases was obtained for Carl, Andy, and Mack for 40%, 35%, and 25% of the sessions, respectively. Agreement was calculated in the same manner as the curriculum-specific timed readings. Interobserver agreement was 100% for words read correctly per minute for all students. Interobserver agreement for errors per minute was 80.8%, 93.8%, and 96.6% for Carl, Andy, and Mack, respectively.

Procedural Fidelity

The lead researcher used a procedural checklist to assess the teacher's percentage of correct implementation procedures during training, baseline, and the repeated reading phases. The treatment integrity was 90%, 83%, and 87% across training, baseline, and intervention, respectively. The teacher did not provide a separate, quiet place to conduct the timed readings on 33% of the observed sessions, and failed to implement proper correction procedures on 67% of the observed sessions.

Social Validity

At the end of the last session, the three students and the teacher completed similar six-item questionnaires to assess their satisfaction with the repeated reading method. The evaluation employed a 5-point scale (1 = *disagree*, 2 = *slightly disagree*, 3 = *unsure*, 4 = *slightly agree*, and 5 = *agree*) of agreement with positively worded statements. Carl, Andy, and Mack's mean satisfaction ratings across all six items were 4.3, 4.5, and 4, respectively. All students

agreed that the repeated reading method was (a) easy to learn, (b) helped to reduce their reading errors, and (c) helped to improve their reading rate. Carl and Mack agreed and Andy slightly agreed that the repeated reading method helped them to achieve the program-specified timed reading criteria. Carl and Mack were unsure and Andy slightly agreed that the repeated reading method was easy to use. Mack did not want to continue the repeated reading intervention, Carl was unsure, and Andy slightly agreed that he wanted to continue using the repeated reading intervention.

The mean rating of the teacher who implemented the repeated reading intervention was 4.3. She agreed that the repeated reading method was (a) easy for her to learn, (b) provided added value to the *Corrective Reading* program, and (c) proved effective for increasing students' oral reading rates. She slightly agreed that the repeated reading method was easy to implement with the students, and that she would share this method with her colleagues. Finally, she was unsure that she would use the repeated reading method in the future as she was transferring to another school for the next school year.

Discussion

This study examined the additive effects of a repeated reading component on the oral reading rate, accuracy, and generalization of oral reading fluency for three students in the *Corrective Reading Decoding B2* program. The findings from this study add to the broad research base that supports the benefits of repeated readings on performance of practiced passages; however, the outcomes of the study failed to find generalization to unpracticed passages.

This study provided several positive findings. For each of the students, the intervention means for words read correctly per minute

exceeded the targeted minimum of 20% over their baseline means. Two students demonstrated these gains in the first two sessions of the repeated reading intervention. Carl, the least fluent reader of the three students, increased his reading fluency by the minimum 20% within eight sessions. In addition, two of the three students showed a reduction of mean errors per minute from baseline to the repeated reading phase, thereby maintaining high levels of accuracy as their reading rates increased. Andy evidenced a slight increase of mean errors per minute; however, his error rate remained within the program-specified error limit. This increase may have been caused by his insistence of reading for speed, thereby not attending to accuracy. These findings support the importance of maintaining reading accuracy while increasing reading rate (D. Carnine, Silbert, & Kameenui, 1997).

However, none of the students showed substantial evidence of transfer of fluency gains to the unpracticed passage timed readings. Wolf and Katzir-Cohen (2001) suggested that the question of whether repeated reading instruction significantly changes accuracy and rate on unpracticed materials is still unresolved. The results of this study support Wolf and Katzir-Cohen's caution on this point. There are many variations on the repeated reading strategy. The particular procedures employed in this study may have lacked critical features that are necessary to produce generalization of fluency gains. For example, students experienced only 3 to 13 days of intervention. More extensive intervention may be necessary to produce generalizable gains on unpracticed passages. In the present study, the repeated reading procedure called for three practice readings before the final timing (the fourth reading); more repetition may be necessary to realize generalization. Strecker, Roser, and Martinez (1998) suggested that prosody (reading with expression and proper intonation) is an important factor in developing reading fluency. This study did not include procedures to enhance

prosody. This omission may have hampered students' generalization of fluency to the unpracticed passages.

Given the lack of clarity about the aspects of repeated readings that are critical for generalized improvement in fluency, it is not surprising that the results of studies that have combined repeated readings interventions with Direct Instruction programs have been mixed. The Frankhauser et al. (2001) study and the present study differed with respect to the Direct Instruction program used, the age and type of student learner, and the repeated reading procedure. Frankhauser et al. used the *Reading Mastery II* and *Fast Cycle* programs with 2 second- and 2 third-grade students with documented reading disabilities. The daily fluency practice component included only one 1-min timing. In addition, the fluency practice was implemented in several short phases of 3 to 5 days alternated with phases that lacked the fluency component. The relatively small amount of additional fluency practice and the short duration of the phases may have mitigated against large effects and generalization.

Ungless' study (as cited in Grossen, 1997) differed from the present study with respect to design and *Corrective Reading* programs used. Ungless reported group results for students who were receiving instruction at three different levels of the *Corrective Reading Decoding* program. He cautioned that the study was not sensitive to individual differences and that there was a considerable variation of performance among the students.

This study included several limitations that may be important targets for improvement in future research. Although the procedural integrity checklist yielded satisfactory ratings, the teacher failed to provide corrective feedback to the students during four of the six observed sessions. McCoy and Pany (1986) noted in their analysis of research on oral reading corrective feedback that two corrective

feedback procedures, word drill and word supply, consistently improved the reading accuracy of students with learning disabilities. Corrective feedback is an integral component of the *Corrective Reading* programs. It is vital that teachers receive training and on-going support to ensure high levels of program implementation. The teacher was a science teacher, and while she volunteered for training in the *Corrective Reading* program, she received only limited training and follow-up technical support. In addition, due to the school's history of inconsistent student attendance, the teacher modified the *Corrective Reading* program. She eliminated the required untimed readings and conducted the timed reading for the day's lesson on the same day instead of the following day. Upon a student's return from an absence, the student was required to independently read the story and complete the worksheet before participating in the repeated reading component. Andy was absent 3 days and Mack was absent a total of 7 days during the 25 days of the study. Program modifications due to inconsistent attendance or other factors may decrease program effectiveness. In order to maintain student progress, methods that counterbalance program modifications should be considered.

All students experienced a decrease of performance in the last session of the repeated reading phase. Prior to the last session, the principal announced that the school would be closing. Students and staff were not sure of their future educational placements. The primary researcher observed a noticeable decrease in the students' and teacher's willingness to complete the study. This news may have had some impact on the social validity results as well.

The findings of this study, both positive and negative, support the importance of future research regarding the integration of the repeated reading method with Direct Instruction reading programs. Reading fluency

is vital to the development of reading skill (Breznitz, 1997). Guidelines for oral reading fluency indicate that students should perform at fluency levels of at least 150 words per minute by the end of fifth grade (D. Carnine et al., 1997; Hasbrouck & Tindal, 1992). Coupled with this skill demand, adolescents who continue to struggle with reading as they enter middle and high school do not receive many opportunities for reading instruction or additional reading practice (Harris, Marchand-Martella, & Martella, 2000).

The effectiveness of Direct Instruction reading programs is well established (e.g., Adams & Engelmann, 1996; D. Carnine et al., 1997; Grossen, 1997). In addition, there is strong evidence of the efficacy of repeated readings and the need for its inclusion in daily instruction (e.g., Dowhower, 1994). Researchers should conduct studies that extend and replicate this and previous studies involving repeated reading within the context of Direct Instruction reading programs because of the promise held out by this nascent body of literature. Moreover, researchers should conduct studies to determine the effects of repeated reading combined with various types and levels of Direct Instruction programs, with various ages of students, and with students with and without disabilities. The integration of these two instructional methods warrants further investigation in order to maximize the reading achievement for students who are deficient readers and are falling further behind in their ability to read and comprehend text.

References

- Adams, G. L., & Engelmann, S. (1996). *Research on Direct Instruction: 25 years beyond DISTAR*. Seattle, WA: Educational Achievement Systems.
- Allington, R. L. (1983). Fluency: The neglected reading goal. *The Reading Teacher*, 36, 556–561.
- Blum, I. H., & Koskinen, P. S. (1991). Repeated reading: A strategy for enhancing fluency and fostering expertise. *Theory Into Practice*, 30(3), 195–200.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school* (Expanded ed.). Washington, DC: National Academy Press.
- Breznitz, Z. (1997). Reading rate acceleration: Developmental aspects. *The Journal of Genetic Psychology*, 158, 427–443.
- Carnine, D., Silbert, J., & Kameenui, E. J. (1997). *Direct Instruction reading* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Dowhower, S. L. (1994). Repeated reading revisited: Research into practice. *Reading and Writing Quarterly*, 10(4), 343–358.
- Eckert, T. L., Ardoin, S. P., Daisey, D. M., & Scarola, M. D. (2000). Empirically evaluating the effectiveness of reading interventions: The use of brief experimental analysis and single case designs. *Psychology in the Schools*, 37, 463–473.
- Engelmann, S., & Bruner, E. C. (1995a). *Reading Mastery II*. Columbus, OH: SRA/McGraw-Hill.
- Engelmann, S., & Bruner, E. C. (1995b). *Reading Mastery Fast Cycle*. Columbus, OH: SRA/McGraw-Hill.
- Engelmann, S., Meyer, L., Carnine, L., Becker, W., Eisele, J., & Johnson, G. (1998). *Corrective Reading Decoding Strategies*. Columbus, OH: SRA/McGraw-Hill.
- Frankhauser, M. A., Tso, M. E., & Martella, R. C. (2001). A comparison of curriculum-specified reading checkout timings and daily 1-minute timings on student performance in *Reading Mastery*. *Journal of Direct Instruction*, 1(2), 85–96.
- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5(3), 239–256.
- Grossen, B. (1997). *The research base for Corrective Reading*. DeSoto, TX: SRA/McGraw-Hill.
- Harris, R. E., Marchand-Martella, N., & Martella, R. C. (2000). Effects of a peer-delivered corrective reading program. *Journal of Behavioral Education*, 10, 21–36.
- Hasbrouck, J., & Tindal, G. (1992). Curriculum-based oral reading fluency norms for students in grades 2 through 5. *TEACHING Exceptional Children*, 24(3), 41–44.
- McCoy, K. M., & Pany, D. (1986). Summary and analysis of oral reading corrective feedback research. *The Reading Teacher*, 39, 548–555.
- National Reading Panel. (2000). Teaching children to read (NIH Pub. No. 00-4754). Washington, DC: U. S. Department of Health and Human Services.
- Richards, S. B., Taylor, R. L., Ramasamy, R., & Richards, R. Y. (1999). *Single subject research: Applications in educational and clinical settings*. San Diego, CA: Singular Publishing Group.

- Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher, 32*, 403–408.
- Strecker, S. K., Roser, N. L., & Martinez, M. G. (1998). Toward understanding oral reading fluency. In T. Shanahan & F. V. Rodriguez-Brown (Eds.), *47th Yearbook of the national reading conference* (pp. 295–310). Chicago: National Reading Conference.
- Weinstein, G., & Cooke, N. L. (1992). The effects of two repeated reading interventions on generalization of fluency. *Learning Disability Quarterly, 15*(1), 21–28.
- Wolf, M., & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading, 5*(3), 211–239.