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Repeated reading and reading fluency in learning disabled children

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THIS STUDY investigated whether improved fluency and comprehension across different stories in repeated reading depend on the degree of word overlap among passages and whether repeated reading is more effective than an equivalent amount of nonrepetitive reading. Non-fluent, learning disabled students read passages presented and timed by a computer under three different conditions. In Conditions 1 and 2 (repeated reading) the same passage was read four times before proceeding to a new story in the next session. Stories in Condition 2 contained three times as many overlapping words as stories in Condition 1. In Condition 3 (nonrepetitive reading), each of the four passages in a session was different. Results suggest that over short periods of time, increases in reading speed with the repeated reading method depend on the amount of shared words among stories, and that if stories have few shared words, repeated reading is not more effective for improving speed than an equivalent amount of nonrepetitive reading.

Lecture répétée et facilité de lecture chez les enfants handicapés qui apprennent

CETTE ÉTUDE a examiné si la facilité et la compréhension améliorées à travers différentes histoires dans une situation de lecture répétée dépendent du degré de chevauchement des mots parmi les passages et si la lecture répétée est plus efficace qu'une quantité équivalente de lecture non répétitive. Les élèves handicapés qui ont des difficultés de lecture, ont lu des passages présentés et minutés par un ordinateur sous trois conditions différentes. En condition 1 et 2 (lecture répétée) le même passage était lu quatre fois avant de continuer avec une nouvelle histoire dans la session suivante. Les histoires en condition 2 contenaient trois fois plus de mots en chevauchement que les histoires en condition 1. En condition 3 (lecture non répétitive), chacun des quatre passages dans une session était différent. Les résultats suggèrent qu'à travers de courtes périodes de temps, les augmentations en vitesse de lecture avec la méthode de lecture répétée dépendent de la quantité de mots partagés parmi les histoires, et que si les histoires ont peu de mots partagés, la lecture répétée n'est pas plus efficace pour améliorer la vitesse qu'une quantité équivalente de lecture non répétitive.

Lectura repetida y facilidad de lectura de niños minusválidos de aprendizaje

ESTE ESTUDIO investigó si la mejora de facilidad y comprensión en la lectura repetida de varios cuentos, depende de la cantidad de palabras utilizadas repetidamente entre pasajes y si la lectura repetida es más efectiva que una cantidad equivalente de lectura no repetida. Alumnos minusválidos sin facilidad, leyeron pasajes presentados y cronometrados por una computadora bajo tres condiciones diferentes. En Condición 1 y 2 (lectura repetida), el mismo pasaje se leyó cuatro veces antes de proceder a un cuento nuevo en la sesión siguiente. Los cuentos en Condición 2 contenían tres veces más palabras utilizadas repetidamente que los cuentos en Condición 1. En Condición 3 (lectura no repetida), cada uno de los cuatro pasajes durante la sesión eran diferentes. Los resultados sugieren que durante períodos cortos de

tiempo, la aceleración en velocidad de lectura con el método de lectura repetida dependía de la cantidad de palabras en común entre los cuentos, y que si los cuentos tenían pocas palabras en común, la lectura repetida no era más efectiva para mejorar la velocidad que una cantidad equivalente de lectura no repetida.

For many educators, the attainment of reading fluency has meant an emphasis on word attack skills and the development of word accuracy. Recent research has suggested that in order to improve the reading fluency and comprehension of many poor readers, reading instruction must also focus on ways to increase the speed of word recognition (Lesgold & Resnick, 1982).

Several investigators (Chomsky, 1978; Lauritzen, 1982; Moyer, 1979; Neill, 1980; Samuels, 1979) have reported that the rather simple practice of repeatedly reading entire passages can be an effective supplementary technique for increasing reading fluency and comprehension. Essentially, the method involves the selection of passages of 50-200 words at a level that enables the reader to recognize most of the words. The selection is orally read by the student three or four times, or until a satisfactory level of fluency is reached, before proceeding to a new passage. Word accuracy rates and reading speed are usually reported to the student after each reading, and daily practice is recommended.

Recent reviews of the repeated reading method (Kann, 1983; Moyer, 1982) have been supportive of the use of the technique with some slow readers, although both note that there has been little experimental evidence of its instructional effectiveness. In particular, there have been no direct comparisons of the repeated reading method with other methods. There has also been little research to indicate why the technique is successful and whether its success depends on certain passage characteristics.

The repeated reading method is based largely on the teaching implications of the theory of automatic information processing in reading (LaBerge & Samuels, 1974). According to automaticity theory, fluent readers decode text automatically, that is, they read without expending processing effort in decoding individual words. Their reading speed ap-

proximates speaking rate and comprehension is good because attention is available to process meaning. Poor readers, on the other hand, must expend processing effort, or attention, to decode each word. As a result, their reading speed is slow and comprehension is more difficult. According to Samuels (1979), nonfluent but accurate readers have acquired word attack skills but require more practice before these skills are performed automatically. The repeated reading method provides the necessary practice. Fluency and comprehension increase with each re-reading of a single passage and improvements are carried over to new selections.

While Samuels's explanation offers a reasonable framework for understanding the effectiveness of the repeated reading method, it provides little specificity as to how repetition of an entire passage facilitates word identification. In particular, it is unclear how improved fluency obtained through repeated reading of the same passage is transferred to a new passage.

Moyer (1982) concluded that increased gains in reading fluency occur because repeated reading of entire passages maximizes redundancy at all levels of the written language structure. Repetition of entire passages gives the poor reader the needed extra practice in using higher linguistic structure (contextual and syntactic cues) as well as in extracting grapho-phonemic word structure. These improved skills are applied to the new reading material and thus, reading fluency is increased across new passages.

Schreiber (1980) suggested that the success of repeated reading was not so much a matter of extra practice of certain skills, but rather the discovery that various morphological and syntactical cues must be used in order for fluency to develop. According to Schreiber, this discovery comes about as a result of several repetitions of the same passage. Once discovered, these cues are used in new passages.

At the present time there is little empirical

support for the above explanations. Unfortunately, the advancement of a rationale for the effectiveness of repeated reading has been hampered by a lack of documentation in existing studies of the reading passage characteristics. None of the studies report the amount of word overlap or context relatedness among the repeated passages. Thus, it is not clear whether the improved reading fluency achieved across passages with the repeated reading method is obtained only when the reading material has a high degree of word overlap and/or contextual relatedness.

It is also not known whether equivalent amounts of nonrepetitive reading can increase reading fluency as effectively as repeated reading. It may be that when the repeated reading method is introduced, students actually read more. Less time may be devoted to other reading skills such as word analysis and comprehension, or in their enthusiasm for the method, teacher and students may simply allot more instructional time to repeated reading. If this is the case, then equivalent amounts of nonrepetitive reading may also increase the reading fluency of children who are slow but accurate readers.

The present study is an attempt to investigate two aspects of the repeated reading method. First, by controlling the word and context characteristics of the reading material it is hoped that the present investigation will indicate the extent to which the effectiveness of repeated reading is dependent on passage characteristics. In Condition 1, students will repeatedly read passages in which the number of words shared among stories is low and relatedness of context is minimal. In Condition 2, the same students will repeatedly read passages in which the word overlap among stories is high. These passages will be unrelated, although there may be some context similarity due to the high degree of word sameness. Reading speed, word accuracy, and comprehension scores obtained under both conditions will be contrasted.

Second, this study will compare the effectiveness of repeated reading and nonrepetitive reading when equivalent amounts of reading are given. In Condition 3, the students will com-

plete the same total number of readings as those in Condition 1 or 2; however, they will read each passage only once. The passages will be similar to those in Condition 1 (i.e., word overlap and relatedness of context will be minimal). Students' reading speed, word accuracy, and comprehension scores in Condition 3 will be contrasted with those in Conditions 1 and 2.

Method

Subjects

Subjects were 12 nonfluent, learning disabled (LD) students drawn from three elementary schools. Ages ranged from 8.6 to 12.0 years with an average age of 10.5 years. Students were enrolled in Grades 2 through 5 and had a mean IQ of 100. Reading level was Grade 3 or higher as measured by the reading subtests of the Peabody Individual Achievement Test (Dunn & Markwardt, 1970).

Classification as a nonfluent reader was determined by the following criteria: (a) identified as a slow reader by the LD teacher; (b) obtained an average reading rate of 65 words per minute (wpm) or less on Grade 2 reading passages of 90 words. The measure used was the Sucher-Allred Reading Placement Inventory (Sucher & Allred, 1973); and, (c) achieved a word accuracy score of 90% or better on the same reading passages for which reading speeds were determined.

Subjects were grouped in six pairs with each pair matched as closely as possible on reading scores. Using pretest reading speeds, pairs were arranged so that each contained a relatively high and low speed reader, and all pairs had similar mean reading speeds. The six pairs were then randomly assigned to Groups 1 through 6.

Materials

Students were required to read a total of 44 different reading passages. These passages were based on material with a stated Grade 2 readability level (Reader's Digest Skill Builders, Level 2, Berke, 1977; and Reader's Digest Triple Takes, Level 2, Goodman, 1982), then

modified to provide equivalent passages of 100 words. As a further test to establish equivalency of readability at the Grade 2 level, Fry's (1977) readability formula was computed for each passage. The number of syllables contained in each passage was limited from 117 to 122, and the number of sentences was restricted from 10 to 12.

Of the 44 passages, 37 were designed with minimal word overlap among the stories and unrelated context. Minimal word overlap means that only about 20 words were common to three or more stories in a condition, and these words were limited to easy, frequent words such as *the, he, to*, etc. Of these 37, 2 were designated as pretest passages, 7 comprised the stories in Condition 1, and 28 comprised the stories in Condition 3. The remaining 7 passages were designed with a high degree of shared words among the stories. Approximately 60 words were common to at least three or more of the seven stories. The stories were unrelated; however, because of word overlap, some context similarity was unavoidable. These passages comprised Condition 2.

Passages were randomly assigned to Conditions 1 and 3 as well as the pretest conditions. Ordering of passages within the three conditions was also varied. Students were randomly assigned one of seven different orderings of the stories.

All selections were presented on an Apple II Plus computer. The computer was programmed in Apple SuperPILOT (1982) using graphics mode. This procedure enabled the examiner to offer the reading selection to the student in one screen presentation with all lines of the story appearing on the screen simultaneously. Characters in the text included both upper- and lowercase.

Following the first reading in each session in all conditions, four comprehension questions were given orally to students. One comprehension question was given after each of the remaining readings. These questions involved literal comprehension requiring recall of information from the passage and were similar to those presented in reading inventories.

Experimental Design and Procedure

The present study consisted of three experimental reading conditions each covering 7 days for a total of 21 sessions. Conditions 1 and 2 represented the two repeated reading conditions. Condition 3 was the nonrepetitive reading condition. The general format of all three conditions was the same. Students read approximately 15 minutes a day, 5 days a week for each 7-day period. Every 15-minute session included four passage presentations with four comprehension questions given directly after the first reading, and one comprehension question given after each remaining reading. Students were also provided feedback on reading speed and word accuracy immediately after each reading of a selection. Reading conditions differed, however, in the following ways: In Condition 1, students orally read one of seven unrelated, nonoverlapping stories four times each day for a total of 28 readings. In Condition 2, students again read repetitively except that the seven stories in this condition contained a high degree of shared words. In Condition 3, students read four different stories each day none of which were repeated. Thus, over the 7-day period of this condition, students read 28 different, unrelated, and nonoverlapping stories.

Each student participated in all three conditions. However, ordering of reading conditions differed for each of the six groups of students.

An initial practice session was given to all students to familiarize them with the computer format. In this session, students read two reading passages similar in length and difficulty to the test selections and were given four oral comprehension questions per passage. Following the practice session, a pretest session was held in which two pretest passages were presented. Each passage was again read once and was followed by four oral comprehension questions. The first session of the experimental reading conditions began directly after the practice and pretest sessions. In this session, students were told the format of each session and were given a rationale for their reading activities. At the end of the last session students were

repetitive reading) they would prefer to use to practice their reading.

Dependent Measures

Oral reading fluency involves two components: reading speed and word accuracy. While reading speed may be emphasized over accuracy in building fluency (Samuels, 1979), both components were measured in the present study.

Reading speed for each passage was defined as the number of words read per minute. The microcomputer was programmed to record the amount of time taken by each subject to read each passage and to compute the number of words read per minute. The student initiated the time recording by pressing the space bar to begin reading. When the reading was completed and the space bar was again activated, the time clock recorded the elapsed time and the words read per minute. A printout of these times was displayed immediately on the screen for the student.

Word accuracy was defined as the number of errors per passage and was recorded by the experimenter as the student read the passage. Errors included mispronunciations, nonpronunciations (the subject pauses, but does not produce a response), omissions, insertions, line skipping, and substitutions. No error corrections were made during the reading of the first passage in each session. However, in the three remaining readings of a session, the examiner corrected errors that distorted the meaning of the passage. The total number of errors per passage was given to the student immediately after each reading.

Four comprehension questions were given by the examiner after the first reading in each session to assess each student's comprehension level. Answers were scored zero if totally incorrect, 1/2 if partially correct, and 1 if completely correct.

Although reading speed and word accuracy scores were recorded for all 28 readings in each condition, the key scores used to determine between-session changes were those obtained on the first reading in each session. The resulting seven data points were then used to yield a line of best fit for each student in each condition on

the above measures, with the slope of these lines becoming the dependent measure.

Reliability

Word accuracy for oral reading was recorded by a second observer for at least 2 of the 21 initial readings per subject. Reliability was calculated by dividing the total error agreements by the total number of error events. Average error agreement based on 32 reading passages was 90%.

Agreement on comprehension scores was checked by correlating scores obtained by the examiner with those of a second observer. Each comprehension score was based on answers to four questions given by the student after an initial reading. The correlation obtained for 24 reading passages of which 2 were initial readings by each student was .93.

Results

Pretest

Means, standard deviations, and ranges based on average pretest scores for each student were calculated on each measure. The mean speed for the total group (49.7 wpm) indicates that the group was reading at a slow speed at the beginning of the study, but there was a fairly wide spread of slow speeds among the group (30.6 to 62.4 wpm). Word accuracy, however, was quite high for all students (mean errors = 6.45%, $SD = 2.5$) indicating that the reading material was at an appropriate level for the group and that slow reading was not simply due to an inability to identify words in the passages. Comprehension scores were also high (out of a possible score of 4, the total mean score was 3.5). This result suggests that at least with literal recall-type comprehension questions at the Grade 2 level, the group's slow reading did not interfere with passage understanding. It also allowed little room for improvement on this measure.

Within-Session Changes in Fluency

Although changes in speed, accuracy, and comprehension across sessions under various reading conditions were of primary interest in

this study, within-session changes were also analyzed. Difference scores between Reading 1 (R1) and Reading 4 (R4) for each student in a session were computed for speed and errors to assess within-session changes. A 3 (Conditions) x 6 (Groups) analysis of variance (ANOVA) with repeated measures indicated significant speed differences among the three reading conditions, $F(2,12) = 45.74, p < .001$. In Conditions 1 and 2, where the four readings were repetitions of the same story, the mean increase in speed from R1 to R4 was 35.3 wpm and 33.0 wpm respectively. In both cases, using Tukey's HSD procedure to test contrasts, the mean increase in Conditions 1 and 2 was significantly greater than that in Condition 3 ($p < .01$). The small mean increase in speed from R1 to R4 within Condition 3 (5.2 wpm), however, was also significant, $F(1,6) = 14.01, p < .01$. This increase may have been due partly to the fact that errors were corrected by the examiner in R4 but not in R1.

ANOVA procedures to determine changes in word accuracy within sessions under differing reading conditions indicated that there was also a significant difference in word error reduction among the 3 conditions, $F(2,12) = 7.35, p < .01$. In Conditions 1 and 2 the mean decrease in errors from R1 to R4 was 2.52 and 2.16 respectively. Both of the mean difference scores in Conditions 1 and 2 were significantly greater than the difference score of Condition 3 ($p < .01$). The small reduction of errors within sessions in Condition 3 (0.82) was not significant.

Between-Session Changes in Fluency and Comprehension

To determine the effects of the different reading conditions on speed, word accuracy, and comprehension over several days, slopes and intercepts were calculated for each student

in each condition on the above three measures. ANOVA procedures with repeated measures (group by condition) using slopes for each student in each condition revealed no significant effects on any of the measures.

Although groups were balanced on the basis of pretest scores, score differences within each grouping still remained, particularly on the speed measure. Correlations between the intercepts and slopes for each student showed a consistent, negative relationship between the level at which the student began a condition on each measure and the amount of performance change that occurred across the condition. Mean correlations for the three reading conditions were as follows: speed, $r = .50$; errors, $r = -.80$; comprehension, $r = -.90$. Thus, the lower the student's intercept for speed, errors, and comprehension, the greater was the increase in speed and comprehension, and the less the error reduction. Because of the high correlation between the slopes and intercepts on each measure, analyses of covariance (ANCOVA) with repeated measures were performed with the intercepts as the covariate. The choice of the intercepts rather than the pretest scores for the covariate was based not only on the stronger relationship between the intercepts and slopes, but also on the fact that the initial performance of some students varied across conditions and differed from that of their pretest performance.

Adjusted mean slopes for each measure in the three reading conditions are shown in Table 1. Results of the ANCOVA on word errors and comprehension indicated no significant effects. However, reading conditions did have a significant effect on improvements in speed across sessions, $F(2,11) = 7.32, p < .01$. An extension of Tukey's method of multiple comparisons adapted for analysis of covariance procedures was used to contrast the adjusted mean slopes among the reading conditions (Bryant & Paulson, 1976). Comparisons indicated that

Table 1 Adjusted mean slopes for speed, errors, and comprehension in each reading condition

	Speed	Errors	Comprehension
Condition 1	0.1956	-0.1814	0.0419
Condition 2	1.0522	-0.2887	0.0378
Condition 3	0.3733	-0.1758	0.0244

Condition 2 produced greater mean increases in reading speeds across sessions than Condition 1 ($p < .05$). The difference between Conditions 2 and 3 was not significant, although the obtained t of 3.89 was close to the required t of 4.02 ($p < .05$). Mean speed increase in Condition 1 did not differ from that of Condition 3.

To explore the possible relationship between errors and speed in this study, correlations were computed between students' error slopes and speed slopes in all conditions. Findings indicated a moderately negative relationship, that is, as speed increased, errors tended to decrease (Condition 1, $r = -.48$; Condition 2, $r = -.28$; Condition 3, $r = -.47$).

Inspection of each student's daily progress both within and between sessions over all reading conditions indicated that there was individual variation in the amount of speed gain during a session and between sessions. To assess whether there might be some relationship between the degree of speed gain within a daily session and the amount of speed increase over several sessions, correlations were computed between speed slopes and speed difference scores ($R4 - R1$). Correlations in each reading condition ranged from low to moderate (Condition 1, $r = .44$; Condition 2, $r = .17$; Condition 3, $r = .22$).

The relationship between intelligence and the amount of speed improvement over several sessions was also explored. Results indicated a somewhat low, negative correlation between ability and speed slopes suggesting that, if anything, those with lower ability tended to show greater speed increases than those with higher ability (Condition 1, $r = -.23$; Condition 2, $r = -.10$; Condition 3, $r = -.37$).

In response to the question about preference for practicing reading by reading repeatedly or reading nonrepetitively, 75% of the students were in favor of using the repeated method. They felt that repeated reading made it easier to get a high speed score.

Discussion

The present research addressed two questions in evaluating the effectiveness of repeated

reading as a method for increasing fluency and comprehension. The first concerned the role of passage characteristics. Would increases in reading speed, word accuracy, and comprehension across sessions depend upon the degree of word overlap among passages read in different sessions? The second question asked whether repeated reading would be more effective than an equivalent amount of nonrepetitive reading.

On the issue of passage characteristics, the present findings suggest that gains in reading speed were affected by the degree of word commonality among the stories. When speed scores were adjusted so that beginning reading speeds were constant across conditions, mean speed gains in Condition 2, where stories contained many shared words, were significantly greater than gains in Condition 1 where stories had few overlapping words.

The amount of word commonality among stories, however, had less effect on error reduction or comprehension gains. There were no significant differences among the reading conditions on either measure even when scores were adjusted.

The lack of significant findings on the comprehension measure probably reflects the fact that there was little room for improvement. The LD students in this study showed a good level of understanding on the pretest stories despite poor reading fluency. This attainment may be peculiar to the LD population or may reflect the simple structure and content of Grade 2 level stories.

The findings on the speed measure indicate that there was little carryover of fluency gains achieved from reading the same story several times unless the new stories shared many of the same words. Because error reduction across Condition 2 did not differ significantly from Condition 1, increased speed in Condition 2 appears to be largely the result of faster identification of words shared by the stories. This finding fits with Samuels's (LaBerge & Samuels, 1974) view that word repetition promotes faster word processing or word automaticity. However, according to Samuels (1979), use of the repeated reading method should also make word analysis skills more automatic, resulting in increased efficiency in the processing of both old and new

words. Findings from the present study indicate that, if repeated reading does have an effect on word analysis skills, these effects are much weaker or take longer to develop than effects on speed of recognition of whole words.

The results of comparisons between the repeated reading conditions and the nonrepetitive reading condition also suggest that repeated reading techniques do not readily affect a broad range of reading skills. Adjusted mean speed gains in Condition 1 did not differ significantly from those in the nonrepetitive reading condition, and differences between Conditions 2 and 3 only approached significance. What seems established by these results is that when the same amount of practice and the same feedback format of the repeated reading method are used, repeated reading is not necessarily more effective as a tool for increasing reading speed than nonrepetitive reading. Moyer (1982) has argued that the merit of repeated reading is that it provides practice in integrating all levels of written language structure, not just at the word level. The minimal gains made by many students in Condition 1 suggest that this integration may not be easily attained.

Several reasons may be given for the limited performance of students in this study under the repeated reading conditions. The most obvious is that the 7-day period for each condition was too short to obtain meaningful gains, particularly in Condition 1 where stories had few shared words. This charge may be true. However, Samuels's (1979) case presentation indicated substantial improvement (38 wpm) by the fifth repeated reading session (fifth new story), giving the impression that the repeated reading method is effective within very few sessions.

A second possible reason for the present results may be procedural differences. Samuels (1979) had students read the same story repeatedly until they reached a preset speed criterion before being introduced to a new story. In this study, students read each story a fixed number of times (four). The present procedure was similar to that described by Moyer (1982) and was necessary to keep the amount of practice constant among conditions. The data indicate that students were able to make substantial speed gains within the four repetitions (scores im-

proved from an average of 54.7 to 90.0 wpm in Condition 1 and 57.1 to 90.1 wpm in Condition 2) so that this procedural discrepancy should not have influenced results.

In the present research, new stories in the repeated reading conditions were always introduced in a different session on a new day rather than in the same session or during the same day. It is not clear when Samuels introduced new stories to his students. However, if the new stories were given in the same session as the old stories, there may have been some buildup of speed similar to that which occurred within sessions in Condition 3. Because fluency gains are only useful if they persist from day to day, it was felt that the present procedure was best for assessing fluency gains.

The other procedural difference in this study was the use of computers to present the reading text rather than the printed page. While it is difficult to assess the impact of the different media, informal testing with a few LD students who were not included in the study did not reveal speed differences for passages presented in the different modes. Also, if anything, the computers seemed to improve the technique by giving immediate, accurate feedback.

Samuels talked about the possible speed/error tradeoff that could hamper fluency gains in some children. Because accuracy rather than speed is usually emphasized in reading instruction, this could become a problem even when reading repeatedly. The reverse (speed over accuracy) can also occur in repeated reading. Neither tradeoff appeared to be a problem in the present study. Instructions and feedback were geared to encourage speed acquisition. A moderate negative correlation (-.41) between the speed and error slopes for all conditions indicated that as speeds increased, errors tended to decrease.

The last factor that may have influenced the present findings is individual differences. While Samuels (1979) reported that the repeated reading method can be used with retarded children, children with learning problems, and normal children, other researchers (Kann, 1983; Moyer, 1982) have suggested that some children respond better to the technique than others. The present study used chil-

dren who were identified as learning disabled. Inspection of individual graphs for these students indicated that among this group there was considerable variability in speed performance in each condition. Some children increased their reading fluency while others made little or no improvement.

It was noted that there were individual differences in fluency gains within daily sessions that may have influenced performance differences across sessions among students. Correlations between these speed difference scores (R4 - R1) and speed slopes indicated that the degree of speed gain within a daily session was positively related to the amount of speed increase over several sessions. However, the relationship was not strong enough to make this factor a reliable predictor of readers who might profit from the repeated reading method. Level of intelligence also was not a reliable predictor of fluency gains with repeated reading.

It should be noted that students liked the repeated reading method and the general feedback format regardless of the degree of improvement. Even at the end of the study after a month of daily reading practice, half of the students requested to continue the story reading sessions. Thus, one point of usefulness for this technique may be that it encourages students to read more, or at least, to have a more positive attitude toward reading, because with each repetition of the same story the student usually achieves speed improvement.

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Footnote

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