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The method of repeated readings

A true reading classic, S. Jay Samuels's "The Method of Repeated Readings" has had a profound impact on the field of reading instruction. In this article, he explained a deceptively simple yet powerful technique called Repeated Reading. The theoretical rationale and research he described was a natural extension of his earlier work in the 1970s toward a model of information processing in reading (LaBerge & Samuels, 1974; Samuels, 1976). The Repeated Reading technique was based on his automaticity theory, which suggests fluent readers are those who decode text automatically, leaving attention free for comprehension.

The article initiated (and in some cases was the forerunner of) a new line of research in the 1980s and 1990s on this and other multiple reading techniques emphasizing practice and repetition. Instructionally, Repeated Reading has been amazingly enduring, influencing educational practice for nearly 2 decades. The technique has been broadly adaptable, working for all stances and philosophies, from holistic to interactive to skill-based reading instruction; widely applicable, helping both regular and special needs students and young children and adults become better readers; and extremely effective, increasing word recognition, fluency, and comprehension. Strong evidence, from numerous studies done since the article was published, suggests that repeated reading, in all its simplicity, works!

Perhaps more important than the technique itself, Samuels's article called the attention of scholars and practitioners to an even bigger issue—fluency. As a result, we have a growing body of knowledge addressing the importance of fluency, fluency techniques, and the many ways fluency can be nurtured in the classroom. Since its publication, Samuels's seminal article has been cited in hundreds of books and journals. With it, Samuels has made a lasting mark on both reading research and classroom instructional practice.

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References

LaBerge, D., & Samuels, S.J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293 – 323.

Samuels, S.J. (1976). Automatic decoding and reading comprehension. *Language Arts*, 53, 323 – 325.

mentally retarded elementary school student asks for a stopwatch for his birthday so that he can keep track of his gains in reading speed with each rereading of short paragraphs he has selected. An adult with a history of reading failure continues to reread a passage after her tutor has left because for the first time she is reading with fluency. In a junior high school remedial reading classroom, a group of students wearing earphones is rereading a story while simultaneously listening to it on a tape recorder.

These situations share a little known and easily used technique called the method of repeated readings. Some teachers are familiar with this technique and have used it, but it is so useful for building reading fluency that it deserves to be more widely known and used.

It is important to point out that repeated reading is not a method for teaching all beginning reading skills. Rather, it is intended as a supplement in a developmental reading program. While the method is particularly suitable for students with special learning problems, it is useful for normal children as well.

While we were researching this method at the University of Minnesota, unknown to us Carol Chomsky at Harvard University was using similar techniques with poor readers and was getting similar good results. With regard to the effectiveness of this method, she (Chomsky 1978) states, "The procedure proved to be facilitating for slow and halting readers, increasing fluency rapidly and with apparent ease. Successive stories required fewer listenings to reach fluency.... The work provided in addition a heightened sense of confidence and motivation. Within several months the children become far more willing and able to undertake reading new material on their own."

What is the procedure?

The method consists of rereading a short, meaningful passage several times until a satisfactory level of fluency is reached. Then the procedure is repeated with a new passage.

For example, in one of our earlier studies, children who had been experiencing great difficulty in learning to read were instructed to select easy stories which were of interest to them. Then, depending on the reading skill of the student, short selections (50–200 words) from these stories were marked off for practice.

The student read the short selection to an assistant, who recorded the reading speed and number of word recognition errors on a graph, as shown in the Figure. The student then returned to his/her seat and practiced reading the selection while the next student read to the assistant. When the first student's turn came again, the procedure was repeated until an 85-word-per-minute criterion rate was reached. Then the student went on to the next passage.

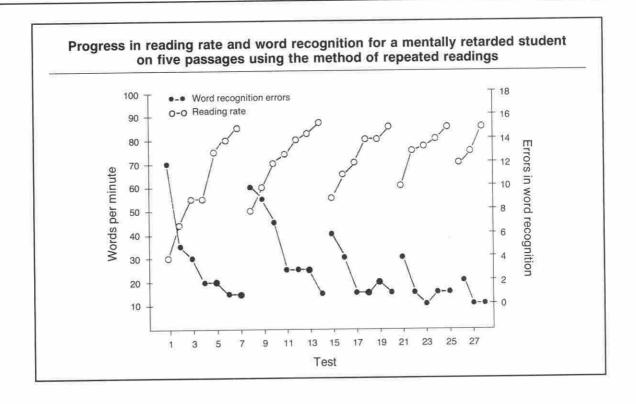
The accompanying Figure shows the progress made by one student on reading speed and word recognition accuracy on five separate passages. These passages began at tests 1, 8, 15, 21, and 25. As reading speed increased, word recognition errors decreased. As the student continued to use this technique, the initial speed of reading each new selection was faster than initial speed on the previous selection. Also, the number of rereadings required to reach the criterion reading speed decreased as the student continued the technique.

The fact that starting rates were faster with each new selection and fewer rereadings were necessary to reach goals indicates transfer of training and a general improvement in reading fluency. Although this figure shows the progress of one individual, the charts for other students were quite similar.

Since the main purpose of repeated reading is to build fluency, it is important to be able to define fluency in ways which are observable and measurable. In the Minnesota research, fluency was separated into two components—accuracy of word recognition and reading speed. While both components are important, for purposes of building fluency, speed was emphasized.

Why emphasize speed over accuracy? There appears to be a trade-off between accuracy and speed. If 100% word recognition accuracy is required before the student can move on to a new passage, the student becomes fearful of making a mistake, and consequently the pace of reading slows down. In fact, if we overemphasize accuracy, we tend to impede fluency. Therefore, for purposes of building fluency, speed rather than accuracy should be stressed.

Repeated readings can be done either with or without audio support. If audio support is used, the student reads the passage silently while listening to the tape recorded narration



over earphones. After a number of rereadings, the audio support is no longer necessary and the student reads the story without help.

There are additional factors to consider regarding the use of repeated readings. So that students will understand why rereading is done, we have involved them in a discussion of how athletes develop skill at their sports. This discussion brings out the fact that athletes spend considerable time practicing basic skills until they develop speed and smoothness at their activity. Repeated readings uses this same type of practice.

Some teachers who are considering using repeated readings are concerned that the method will lead to student boredom. On the contrary, we found that the students were excited by the gains they made in fluency. Similarly, Amarel (1978) has found that beginning readers are very interested in working at the skills necessary for helping them to comprehend text.

While it is not essential that each student keep an individual reading record of the type in the Figure, we found it to be an excellent motivating device. Without the graph, gains can at times go unnoticed. The graph provides visible proof of progress. Of course, a tape

recording can show improvement from an early to a later reading and is useful for showing gains in fluency to students and their parents.

What about comprehension?

Teachers may wonder what role comprehension plays in the rereading method. Repeated reading is a meaningful task in that the students are reading interesting material in context. Comprehension may be poor with the first reading of the text, but with each additional rereading, the student is better able to comprehend because the decoding barrier to comprehension is gradually overcome. As less attention is required for decoding, more attention becomes available for comprehension. Thus rereading both builds fluency and enhances comprehension. One additional technique for building comprehension is to ask the student a different comprehension question with each rereading of the story.

The amount of material to be read depends on the student's skill. Generally the passage should be short. At Minnesota our early experimental work was done with mentally retarded students without audio support. These students had extremely poor reading skills, and we started them on passages of about 50

words. As they gained in reading skills, the length of the passages increased to 200 words.

In other studies, students of average intelligence who were word-by-word readers were given passages of about 200 words. These passages usually came from a book the student had selected, which was broken into short passages. Once mastery on one short passage was reached, the next short section of the book was used for practice. By breaking a longer story into parts and mastering one part at a time before moving on, the student experiences relatively frequent successes.

Other students in the class, teacher aides, and parents can be used to help with repeated readings. They can listen to students read, record word recognition errors and time, and help with words the students need to learn. In other words, while the teacher is giving directed reading instruction to one group of students, other students, either on their own or with the aid of others, can be practicing repeated readings.

Theoretical rationale

The rereading method emerged largely from the teaching implications of the theory of automatic information processing in reading (LaBerge & Samuels, 1974). According to automaticity theory, a fluent reader decodes text automatically—that is, without attention—thus leaving attention free to be used for comprehension. Beginning readers, on the other hand, are nonautomatic in their decoding since attention is required. Because the beginning reader's attention is on decoding, it is not immediately available for comprehension, thus making the process of deriving meaning more difficult and slower.

In approaching the problem of how teachers can help students develop fluent reading skills, we traced the development of word recognition skill through its three levels. The first level is what may be called the non-accurate stage. The student has great difficulty in recognizing words, even when a reasonable amount of time is provided.

The next level is the accuracy stage. The student is able to recognize printed words with accuracy but attention is required. When listening to the oral reading of a student who is at the accuracy stage, one notes that the reading is rather slow and halting, without expres-

sion, and despite high word recognition accuracy, there may be poor comprehension.

The third and most advanced level is what we call the automatic stage. At the automatic stage, the student is able to recognize the printed words without attention. The oral reading of a student at the automatic stage is characterized by a rate which approximates or may even be faster than speaking rate, the reading is with expression, and if the material is familiar, the student should be able to comprehend while reading aloud.

Currently we do not have tests suitable for classroom use which would tell us if a student is at the automaticity stage, so we have to settle for what may be called indicators of automaticity. Fortunately, several research studies suggest that speed of response may be used as an indicator of automaticity (LaBerge, 1973; Perfetti & Lesgold, n.d.; McCormick & Samuels, 1976).

Teachers can do two things to help students achieve automaticity in word recognition. They can give instruction on how to recognize words at the accuracy level. Second, they can provide the time and the motivation so that the student will practice these word recognition skills until they become automatic. One important function of repeated reading is that it provides the practice needed to become automatic.

Several other questions had to be dealt with in the development of the project. Are there activities in which extremely high levels of performance are required? If there are such activities, are the methods of training different from those used in teaching reading? The answers to these questions led directly to the development of repeated reading.

Compare with music, sports

Two general areas in which high levels of performance are required come immediately to mind: sports and music. In sports such as football, soccer, boxing, and wrestling, moves must be made rapidly and automatically.

Musicianship is somewhat different from sports but bears many similarities to reading. The musician is faced with a text comprised of notes. The goal is not just the mechanical rendition of sounds indicated by the notes, but rather the rendering of those printed notes with fluency and expression. Decoding must be done automatically so that the mind of the mu-

sician is free to play the score with emotion and feeling.

When comparing the methods used to train athletes and musicians to those used in reading, one notes an important difference. Both in athletics and music, the beginning student is given a small unit of activity and this unit is practiced over and over until it is mastered. At the risk of overgeneralizing, in contrast, we in reading are often too eager to have children cover a year's work in a year's time, so that some children, especially those having difficulty with reading, are moved too rapidly through a book, never having mastered a single page. What repeated readings does is to give the student the opportunity to master the material before moving on.

Leaving the theoretical side of repeated reading, let us examine how versions of this method were used in early schooling. In 17th-century America and Europe, the books used for reading instruction frequently contained familiar material, some of which the student could recite from memory but could not read. For example, hornbooks, used in 17th-century America, introduced reading through the use of prayers and verses already familiar to the children (Meyer, 1957, p. 34). Common prayers were also included in *The New England Primer* (Ford, 1899, p. 13).

Another text used frequently for teaching reading was the catechism (Littlefield, 1904, p. 106). Young Puritans memorized the catechism at home, and later at school reading was taught by having them read from the catechism. In Europe, school was often taught by the local priest, who integrated memorization of the catechism with reading.

Small (1914, p. 366) reports the Bible was one of the most popular texts. In a religious age, many of the Bible stories were already familiar to the young children. The teacher would then have skilled readers repeatedly read the same Bible passage orally until the less skilled had learned the words

In each of the cases mentioned, the children were introduced to reading with material which was known to them, and they read the material a number of times until they were able to read the words with some degree of fluency.

Recent reports of methods used by Heckelman (1969) and Hollingsworth (1970) superficially resemble repeated reading. Their "listening while reading" technique attempts to increase reading fluency in slow readers. However, their students read new material at each listening session instead of concentrating on a particular passage until mastery was reached.

Recent studies using repeated reading have produced interesting results. Gonzales and Elijah (1975) had students who were at the third grade reading level read the same passage twice. The researchers found that the second reading had 3.3% fewer errors than the first reading. This improvement was equivalent to the second reading's being at the instructional level of difficulty whereas the first reading was at the frustration level.

In another study, Terry (1974) had college students read *Reader's Digest* stories typed in mirror-image print. She reported that while the first reading was painfully slow with poor comprehension for most students, both speed and accuracy improved following several readings. After a week of repeated reading practice using a new story each day, the comprehension rate was as high as it was for stories typed in regular print.

It should be pointed out in closing that a carefully designed empirical study of repeated readings (Dahl & Samuels, n.d.) was done with elementary school children who were the poorest readers in the school but who were of normal intelligence. When repeated readings were used as an adjunct to regular instruction, significant gains were made over the control group in both comprehension and reading speed.

The theoretical and empirical evidence in this article leads us to believe that the method of repeated readings deserves to be more widely used as a technique for building fluency in reading.

Author notes

I was very pleased to learn that my article on repeated reading, published almost 20 years ago, is being reissued. Since its publication, I have kept a literature search on this topic and have learned the following from the almost 200 studies on the topic:

1. The original finding has been replicated; that is, a high degree of accuracy and speed develops on the practiced text. We can give accuracy and speed another name if we wish—fluency.

2. There is transfer of fluency to other portions of the text, even the parts that were not specifically practiced. Some have even reported improvements in comprehension.

3. Repeated reading is the most universally used remedial reading technique to help

poor readers achieve reading skill.

4. Repeated reading is now widely used to teach reading in foreign languages.

SJS

References

Amarel, M. (1978). Educational Testing Service reading study. *Institute for Research in Teaching: Notes and News*, 5, 2 – 3.

Chomsky, C. (1978). When you still can't read in third grade: After decoding, what? In S.J. Samuels (Ed.), What research has to say about reading instruction (pp. 13 – 30). Newark, DE: International Reading Association.

Dahl, P.R., & Samuels, S.J. (n.d.). A mastery based experimental program for teaching poor readers high speed word recognition skills. Unpublished manuscript.

Ford, P.L. (1899). The New England primer. New York: Dodd, Mead.

Gonzales, P.G., & Elijah, D.V. (1975). Rereading: Effect on error patterns and performance levels on the IRI. The Reading Teacher, 28, 647 - 652.

Heckelman, R.G. (1969). A neurological impress method of reading instruction. *Academic Therapy*, 44, 277 – 282.

Hollingsworth, P.M. (1970). An experiment with the impress method of teaching reading. *The Reading Teacher*, 24, 112 – 114.

LaBerge, D. (1973). Attention and the measurement of perceptual learning. *Memory and Cognition*. 1, 268 – 276.

LaBerge, D., & Samuels, S.J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293 – 323.

Littlefield, G.E. (1904). Early schools and schoolbooks of New England. Boston: The Club of Odd Volumes.

McCormick, C., & Samuels, S.J. (1976). Word recognition by second graders: The unit of perception and interrelationships among accuracy, latency and comprehension (Research Rep. No. 102). Minneapolis, MN: Research, Development and Demonstration Center in Education of Handicapped Children, University of Minnesota.

Meyer, A.E. (1957). An educational history of the American people. New York: McGraw-Hill.

Perfetti, C., & Lesgold, A. (n.d.). Coding and comprehension in skilled reading. Unpublished manuscript, University of Pittsburgh, PA.

Small, W.H. (1914). Early New England schools. Boston:

Terry, P. (1974). The effect of orthographic transformations upon speed and accuracy of semantic categorization. Unpublished doctoral dissertation, University of Minnesota, Minneapolis.

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