Are you bothered by the repetitions, hesitations, word miscalls, laborious attempts to decode words, and the painfully slow reading rate of many of your students? Not surprisingly, most remedial reading instructors and teachers of students with mild handicaps answer yes and report that the same students who have reading fluency problems also have problems comprehending what they struggle to read. But where should teachers begin? Should they attempt to improve students' ability to read fluently (i.e., to decode words rapidly), or should the focus be on improving their ability to understand what is being read? Where is precious instructional time best spent, and how can teachers be sure their instructional strategies and materials are having an impact on students' reading fluency and understanding? This article describes a set of procedures that has provided some answers to these difficult questions.

The research literature cites numerous studies linking reading fluency and comprehension (Deno, Mirkin, & Chiang, 1982; Fleisher, Jenkins, & Pany, 1979; Fuchs & Deno, 1981; LaBerge & Samuels, 1974). For example, Harris (1970) has noted that slow readers do poorly in comprehension due to the fact that their many repetitions and hesitations break up the continuity of thought. Smith (1971) noted more specifically that "a reader is unlikely to comprehend while reading slower than 200 words a minute because a lesser rate would imply that words were being read as isolated units rather than as meaningful sequences" (p. 38). Starlin (1979) also supported a view that links fluent decoding and comprehension:

Very few students who have word pronunciation proficiencies in specific reading material will have difficulty in comprehending this material. The vast majority of students who are referred for "reading" comprehension problems do not understand what they read because they lack fluency and/or accuracy in word pronunciation skills. (p. 9)

Additional literature has cited several strategies for improving reading fluency while simultaneously having a positive effect on reading comprehension (Dowhower, 1987; Henk, Helfeldt, & Platt, 1986; Kann, 1983; Samuels, 1979). Two of the most widely used strategies for improving reading fluency have included the method of repeated readings (Samuels, 1979) and the neurological impress
Repeated Readings

The method of repeated readings involves having students orally reread a passage until a satisfactory level of fluency is reached (Dowhower, 1987; Moyer, 1983; Samuels, 1979). The purpose of repeated readings is to provide the practice necessary to make decoding automatic, thus enabling the reader to concentrate on comprehension. The oral reading can include sections of text containing words that occur frequently in written English or it may include sections of text from the book or basal reader currently assigned. Reading occurs at each session (2-3 rereadings) and is repeated daily until a predeterined fluency standard is reached. Text passages generally range from 50 to 200 words in length.

Neurological Impress

The neurological impress method (NIM), like the repeated readings method, attempts to increase fluency in slow and hesitant readers. With NIM, however, students traditionally read new passages each session. These passages are read aloud and simultaneously with the teacher, covering as much material as possible in 10 minutes. Initially the student sits slightly in front and to one side of the teacher and they read in unison as the teacher moves a finger beneath the words. The teacher maintains a brisk pace (150-200 words per minute) and prevents the student from slowing down or repeating words. The teacher reads louder than the student at first, but quickly fades his or her volume as the student becomes less hesitant and more fluent.

Program Procedures

The procedures outlined here are modifications of the NIM and repeated readings methods. They have been used successfully with students who have demonstrated reading problems related to poor reading fluency.

Step 1. Identify students needing reading fluency improvement through direct observation and measurement of the students' oral reading. The following criteria are used for student selection:
1. Slow reading (i.e., less than 80 wpm).
2. Frequent repetitions, hesitations, and/or miscalls.
3. Reading level far below grade placement.
4. Reading too fast and ignoring punctuation (run-on phrases and sentences).
5. Lack of expression and inflection in voice tone (monotone).
6. Unwillingness to take risks in reading (i.e., refuses or resists reading orally in individual sessions).

Step 2. Meet with and explain the procedure and its benefits to each student. Obtain an agreement from each student to participate. Model the process with the students, explaining the pauses necessary at commas and ending punctuation. Explain the need to continue reading if they do not know a word. Confirm their commitment.

Step 3. Meet with each student the next day. Have the student bring the assigned reading text and have your own copy handy. Meet at a table or desk away from other students so as not to distract them. Sit on the student's right side and give the following instructions and encouragement:
1. Say to the student, "We are going to read this page, and I want you to follow along with my finger and read with me. Try to keep up. If you don't know all the words, that's OK. Say the words you know and follow along with my finger."
2. Provide reassurance if the student hesitates, pauses, or in any way has difficulty keeping up (e.g., "You're doing well."
3. Provide praise for close approximation in keeping pace (e.g., "You're really trying."
4. Provide praise for close approximation in keeping pace and at the end of sentences and at the end of the page.)

Step 4. For very hesitant students (those who read only one out of every three words), go back and repeat a paragraph by saying, "Let's try that again." "I'll read this paragraph and you listen, and then we'll read it together." The primary purpose in rereading at this point is to have the student experience success. After rereading the paragraph, say, "Now we are going to read this together. Are
2. If a student hesitates on any words, you ready? Remember to follow my finger and try to read with me." When the rereading is completed, praise the student.

**Step 5.** The next part of the process is a timed 1-minute measure without your auditory input. During this phase, continue to use your finger to guide the reading while the student reads exactly the same material just read using the NIM method. Observe the following procedures:

1. Begin the timed measure by saying, "Please begin."
2. If a student hesitates on any words, wait 3 seconds and then provide the word.
3. If a word is miscalled and the student hesitates, correct the error.
4. If a word is miscalled and the student does not pause or hesitate, do not interrupt the process.

**Step 6.** At the end of 1 minute, thank the student and ask him or her to stop. Praise the student immediately ("Look how many words you read!"). Help the student count up all the words read during the 1-minute measure.

The next step is to point out the learning opportunities the student has by identifying any errors the student made, including any miscalls and words skipped. Identify errors as follows:

1. Say, "Let's look at the learning opportunities you had."
2. Point out the words to the student and write them on a tablet. Tell the student each word and ask him or her to read it.
3. Have the student subtract the "learning opportunities" from the total words read to obtain a count of corrects and errors.

**Step 7.** Chart the data (corrects/errors per minute) on a standard celeration chart as shown on page 6 of this issue.

**Step 8.** Repeat the process in the same fashion the next day. The next day's reading will be done on a different page in the text (a page the student has read or will be reading that day). The process repeats itself daily until the data indicate the NIM method can be dropped.

The data gathered are critical to the success of this process. When charted on the standard celeration chart, the data will provide:

1. A measure of learning and an indication as to whether or not a change should be made so that learning can be improved.
2. Motivation and feedback for both the student and the teacher.
3. A record of when reading fluency was first reached and what changes in fluency occur as the procedures are gradually phased out.

**Conclusion**

We have included in this process several instructional procedures and methodologies that maximize learning over a short period of time including (a) modeling and practicing the desired behavior, (b) blocking interfering responses such as repetitions, (c) moving to fluency rapidly, and (d) frequent and specific reinforcement and feedback for the learner.

The process works! It has been used with readers from elementary grades through high school, all of whom demonstrated rapid improvement in reading fluency and a renewed confidence in their abilities as readers and as learners.

**References**


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