Fluency

Jade Wexler, Ph.D.
The University of Maryland

Introduction

Fluency, one of the five essential components necessary for proficient reading, is the ability to read text with speed, accuracy and expression (National Reading Panel, 2000). Based on the past several decades of reading research, researchers have confirmed the importance of fluency as a way to facilitate reading comprehension, the ultimate goal of reading (Stevens, Walker, & Vaughn, 2016). Explicit, systematic, and extensive instruction and practice in this component of reading can facilitate fluent reading and comprehension of text by improving automatic word recognition, thus relieving cognitive load so a student can focus on meaning (Perfetti, 1985). Many students who have reading difficulties struggle with reading fluently. Fluency instruction is most effective when it incorporates repeated reading of independent-level text, a model of good reading, and corrective feedback from a peer or adult. Teachers can also set a performance criterion to track and provide students with information about their progress, using a graph. This brief will (1) describe fluency instruction and its benefits, (2) highlight the research on fluency for struggling readers, and (3) provide classroom-specific examples of fluency instruction.

What It Is

- **Reading fluency** is defined as the ability to read with speed, accuracy, and prosody (appropriate expression; National Reading Panel, 2000).
- **Fluency instruction** is instruction that targets a student's ability to read with speed, accuracy, and expression.
- **Repeated reading** is a common fluency practice during which a student repeatedly reads text orally with or without a peer or adult. The goal is to increase oral reading fluency.

What It Looks Like

Fluent reading is characterized by reading letters, sounds, words, sentences, or connected text in longer passages "by sight" (i.e., automatically without decoding). Fluency instruction typically consists of students orally reading words quickly and accurately in isolation and in connected text (e.g., a paragraph or more).

Repeated reading is one of the most common instructional practices for building reading fluency. When students engage in repeated reading, they practice reading words, phrases, or connected text repeatedly. Often, repeated reading is conducted with a student and a more proficient or matched-ability peer or an adult who can provide a model of good reading and immediate, corrective performance feedback. This might involve providing a student with his or her words correct per minute (WCPM) or some help with blending a multisyllabic word (e.g.,

reconstruction) that the student reads incorrectly. Similarly, sometimes fluency practice is conducted by having students engage in wide reading. Wide reading means students read the same amount of text that they would for repeated reading practice but instead across a variety of texts. Wide reading processes can also include a model of good reading by pairing a student with an adult or a more proficient reading peer. That peer or adult can also provide immediate corrective performance feedback.

Benefits

- Fluency is associated with better overall comprehension. It allows students to focus cognitive energy on comprehension rather than trying to decode words.

- Fluent readers tend to read more. Students who read more are exposed to more content, vocabulary, background knowledge, text structures, and practice reading words. These students tend to benefit more over time (Shaywitz & Shaywitz, 1996; Stanovich, 1986; Torgesen, 2000).

- The features of fluency instruction—providing opportunities for students to respond and practice; modeling for students; and providing immediate, corrective feedback—are effective for all students, including those with disabilities (Archer & Hughes, 2011). Repeated reading and wide reading practice result in increased opportunities to respond to teacher prompts and practice (Hattie & Timperley, 2007). Repeated and wide reading practice can also include modeling and feedback.

What the Research Says

1. Reading fluently does not directly result in reading comprehension, but the **ability to read fluently is critical** because word reading and comprehension are positively associated with fluency ability (Shin & Good, 1992).

2. Although some students learn to read fluently without explicit instruction and practice, **many students require practice and feedback** from peers and adults to improve their fluency ability (Vaughn & Linan-Thompson, 2004).

3. Many fluency interventions can be characterized as **repeated reading** interventions in which students orally read the same text repeatedly. Repeated reading continues to be associated with positive outcomes in reading rate, accuracy, and comprehension for students in kindergarten through fifth grade (Chard et al., 2002; Stevens et al., 2016; Therrien, 2004).

4. Fluency interventions for both younger and older struggling readers that consistently improve reading fluency outcomes include a previewing procedure such as listening to an audiotape or going over some type of **model of good reading** before reading text (Boardman et al., 2008). When an adult is not available, a more proficient peer can provide modeling. Working with a matched-ability or more proficient peer has been associated with improved reading rate and comprehension (Saenz, Fuchs, & Fuchs, 2005; Staubitz, Cartledge, Yurick, & Lo, 2005).

5. Fluency interventions that incorporate **immediate corrective performance feedback**, such as having an adult or partner provide feedback (e.g., corrections while a student is reading or the WCPM displayed on a graph), produce gains in reading fluency and comprehension (Wexler, Vaughn, Edmonds, & Reutebuch, 2008).

6. Teachers might consider having students practice reading an equal amount of text without rereading (i.e., **wide reading**), similar to what would occur in a repeated reading intervention, as this will expose students to more vocabulary, content, and a variety of text structures. Furthermore, it might be more engaging for students (Wexler, Vaughn, Roberts, & Denton, 2010).

7. **Fluency gains from a repeated reading intervention do not always generalize** to other reading skills such as comprehension and word reading. This is especially true for late elementary and secondary students who are faced with reading more complex text (Homan et al., 1993; Rashotte & Torgesen, 1985). This also applies to students who need more intensive intervention. In fact, the correlation between oral reading fluency and comprehension seems to decrease as students get older and text becomes more complex (Paris, Carpenter, Paris, & Hamilton, 2005). For older students, factors such as students' background knowledge on a topic and working memory may play a larger role in comprehending text. For this reason, teachers can combine fluency instruction with other intervention components (e.g., background knowledge, word reading, vocabulary, comprehension) to provide students with **multicomponent interventions** aligned with the passages being used for fluency practice.

Examples

Fluency instruction that is particularly efficacious incorporates the following:

- Oral repeated or nonrepetitive wide reading of independent-level text
- A model of good reading by an adult, a more proficient or matched-ability peer, or an audio recording
- Immediate corrective performance feedback
- Active student engagement, including many opportunities to respond and practice
- Other intervention components (e.g., comprehension) when necessary

Next, we present examples of evidence-based instructional procedures that teachers can use to provide fluency instruction and practice.

Repeated Reading Procedures

Repeated reading is the practice of reading and rereading text to increase the rate or speed at which a student accurately reads a text. A benefit of repeated reading is that readers get more practice with the same text. It was developed to promote reading fluency and comprehension, incorporates best practices in fluency instruction (e.g., modeling and immediate corrective performance feedback), and can include other intervention components (e.g., a comprehension retelling component). Repeated reading can be conducted with an adult, peer, or audiobook model of fluent reading. Below is an example of procedures to follow for partner reading practice.

Step 1. Before beginning repeated reading, the teacher should strategically pair students, if possible. The goal is to pair a slightly more proficient peer with a slightly less proficient peer to provide a model of good reading in which partners are able to provide error-correction feedback. The following is one way to strategically pair students:

- Rank students from fastest to slowest reader based on a measure of WCPM when reading grade-level text.
- Split the class in half.
- Match the most fluent reader in the top half of the class with the most fluent reader in the bottom half of the class. The more fluent level reader should be Partner 1 (i.e., the first reader).
- Adjust the pairings based on any other known factors (e.g., behavior).

Sample Repeated Reading Partner Pairing Procedure

Student	WCPM
A	95
B	91
C	74
D	68
E	60
F	58

Partner 1	WCPM	Partner 2	WCPM
A	95	D	68
B	91	E	60
C	74	F	58

Step 2. Teach students the following partner reading procedures:

- Follow along while their partner reads.
- Underline any errors made by their partner.
- Circle the last word read when the timer sounds.
- Calculate WCPM. **Note:** Build in time for instruction and modeling in calculating WCPM. Use paraprofessional and teacher support as needed.
- Provide error-correction procedures (see below).
- Ask their partner for a summarization of what they read and provide feedback.
- Graph their "hot read" results (i.e., partner practices twice and receives corrective feedback before recording WCPM). Hot read results should be the best results because the student practiced twice and received error-correction feedback (see below).
- Start and stop with a signal from the teacher who controls the timer.

Step 3. Select an independent-level text and make two copies of it. Consider providing each partner a folder with one copy of the text, a fluency graph, and a copy of the error-correction procedures. They will also need three colored pencils: blue, green, and red. The blue pencil should be used to mark errors during the cold read. The green pencil should be used to mark errors during the warm (i.e., practice) read. The red pencil should be used to mark errors during the hot read.

Step 4. Once students have been adequately taught the procedures with teacher modeling and guided practice, it is time to begin! The teacher can control the timer and monitor students as they read and provide feedback to their peers.

Step 5. Determine whether students' rate and accuracy performance are within the norm for their grade by comparing their performance to available national norms (e.g., see **www.readnaturally.com/knowledge-base/documents-and-resources/26/386**). If a student is performing lower than expected, consider providing more word study instruction and/or fluency practice at the word, phrase (e.g., in a jar, in a jam, in a cage), and sentence level.

Repeated Reading Procedures

COLD READ: (BLUE PENCIL) P1 serves as a model of fluent reading (then roles reverse)	
1	P1 reads, and using a blue pencil, P2 does the following: • Follows along, underlining errors • Circles last word • Calculates WCPM
2	P2 reads, and using a blue pencil, P1 does the following: • Follows along, underlining errors • Circles last word • Calculates WCPM
PRACTICE: (GREEN PENCIL) Include opportunity to provide feedback during each read OR practice read only	
3	P1 reads, and using a green pencil, P2 does the following: • Follows along, underlining errors • Circles last word • Calculates WCPM • Provides **error correction**
4	P2 reads, and using a green pencil, P1 does the following: • Follows along, underlining errors • Circles last word • Calculates WCPM • Provides **error correction**
HOT READ: (RED PENCIL) Include a comprehension component (i.e., summarization)	
5	P1 reads, and using a red pencil, P2 does the following: • Follows along, underlining errors • Circles last word • Asks for summarization • Calculates WCPM
6	P2 reads, and using a red pencil, P1 does the following: • Follows along, underlining errors • Circles last word • Asks for summarization • Calculates WCPM
GRAPH: Students graph hot read results (student hot read will likely be their most fluent read due to repeated practice and feedback)	

Note. P1 = Partner 1; P2 = Partner 2.

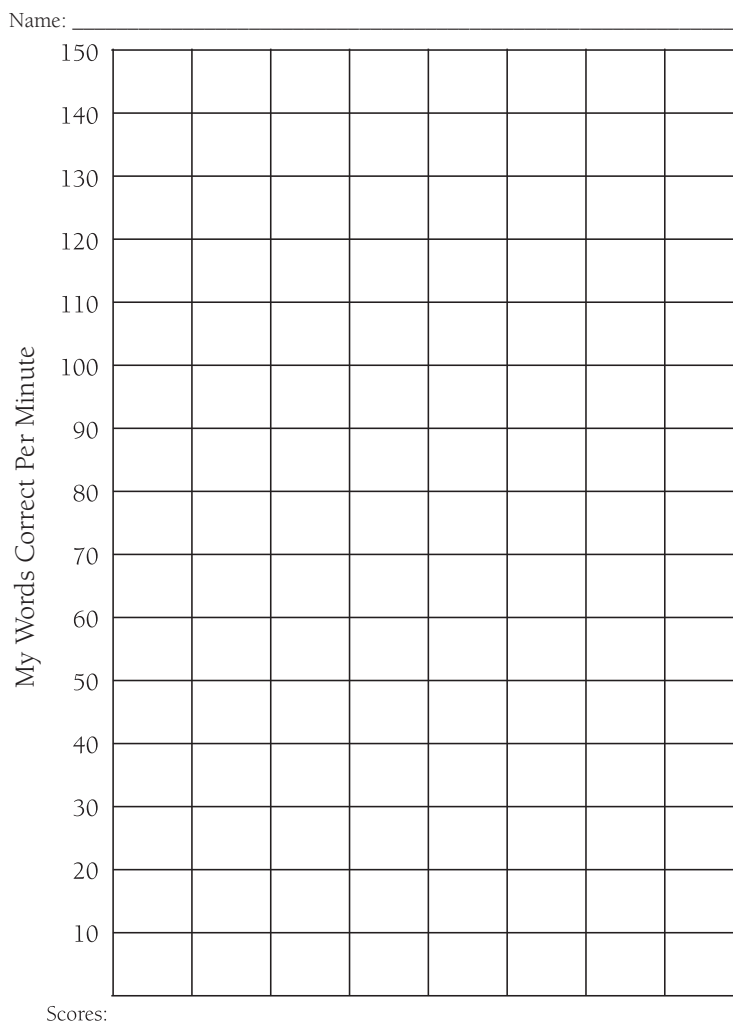## Common Student Errors and Miscues

Skipping or omitting a word

Adding a word

Mispronouncing a word (miscue)

Waiting longer than 3 seconds to read a word (i.e., decoding)

Error-Correction Procedures

Partner: "Here are the words I underlined. Let's read these together."

Students then read the underlined words together.

Partner: "Are there any other words you would like to review?"

If yes, students review words.

If no, students move on.

Figure 5. Fluency Chart

Name: _____

My Words Correct Per Minute

150
140
130
120
110
100
90
80
70
60
50
40
30
20
10

Scores: _____ _____ _____ _____ _____ _____ _____ _____

Wide Reading Procedures

The goals and procedures of wide reading are almost identical to repeated reading. Wide reading procedures can be used to provide students with exposure to more content, vocabulary, background knowledge, and text structures (Wexler et al., 2010) because in wide reading, students read a different text each time (see Passages A through F as described in the procedures below). For this reason, students can mark errors with just one pencil instead of a different color each time. A teacher may choose to alternate between repeated reading and wide reading.

Wide Reading Procedures

COLD READ 1: Passages A and B

P1 reads Passage A while P2 does the following:
- Follows along, underlining errors
- Circles last word
- Calculates WCPM

Then P2 reads Passage B while P1 follows the procedure above.

COLD READ 2: Passages C and D
These wide reading procedures include a performance feedback component. A teacher can have students provide feedback during each read or during the second cold read only (as displayed here).

P1 reads Passage C while P2 does the following:
- Follows along, underlining errors
- Circles last word
- Calculates WCPM
- Provides **error correction**

Then P2 reads Passage D while P1 follows the procedure above.

HOT READ: Passages E and F
These wide reading procedures include a comprehension component.

P1 reads Passage E while P2 does the following:
- Follows along, underlining errors
- Circles last word
- Asks for summarization
- Calculates WCPM

Then P2 reads Passage F while P1 follows the procedure above.

GRAPH: Students graph their best read because each read is essentially a cold read.

Note. These procedures include a performance feedback component (implement during cold read 1 or cold read 2, as indicated above). These wide reading procedures also include a comprehension component (i.e., summarization).

Multicomponent Intervention Procedures

Combining fluency interventions (e.g., repeated reading and wide reading) with other intervention components (e.g., phonics and word study, comprehension, vocabulary) is especially useful as increasing demands are placed on students for comprehending complex text. Consider combining fluency instruction with the following practices:

- Preteach difficult vocabulary embedded in the text that students will practice reading fluently (Morgan & Sideridis, 2006).

- Combine repeated or wide reading with comprehension strategies such as making predictions, summarization, and retelling. Combining these strategies can yield moderate to large effects on student reading outcomes (Fuchs, Fuchs, Mathes, & Simmons, 1997). In addition, combining repeated reading with vocabulary interventions may lead to improved reading outcomes.

Implications for Practice

- Incorporate fluency instruction for students who are struggling with reading fluency (i.e., speed, accuracy, and proper expression).

- Ensure that fluency instruction provides a model of fluent reading and a performance feedback component.

- Provide vocabulary and/or comprehension strategy instruction along with fluency instruction to enhance comprehension outcomes.

Conclusion

Fluency instruction is associated with improved reading comprehension (Stevens et al., 2016). When students are able to read text with speed and accuracy, they do not have to struggle at the word recognition level, making it more likely that they will be able to comprehend text. Practices such as repeated reading and wide reading of text can provide fluency practice while incorporating features of effective fluency instruction such as modeling and performance feedback. Teachers should also consider providing vocabulary and/or comprehension interventions along with fluency practice to enhance comprehension outcomes.

References

Archer, A. L., & Hughes, C. A. (2011). *Explicit instruction: Effective and efficient teaching*. New York, NY: Guilford Press.

Boardman, A. G., Roberts, G., Vaughn, S., Wexler, J., Murray, C. S., & Kosanovich, M. (2008). *Effective instruction for adolescent struggling readers: A practice brief.* Portsmouth, NH: RMC Research, Center on Instruction.

Chard, D. J., Vaughn, S., & Tyler, B. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities, 35(*5), 386–406.

Fuchs, D., Fuchs, L. S., Mathes, P. G., & Simmons, D. C. (1997). Peer-assisted learning strategies. Making classrooms more responsive to diversity. *American Educational Research Journal, 34*, 174–206.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*, 81–112.

Homan, S. P., Klesius, J. P., & Hite, C. (1993). Effects of repeated readings and nonrepetitive strategies on students' fluency and comprehension. *Journal of Educational Research, 87*, 94–99.

Morgan, P. L., & Sideridis, G. D. (2006). Contrasting the effectiveness of fluency interventions for students with or at risk for learning disabilities: A multilevel random coefficient modeling meta-analysis. *Learning Disabilities Research & Practice, 21*(4), 191–210.

National Reading Panel. (2000). *Report of the National Reading Panel: Reports of the subgroups*. Washington, DC: U.S. Department of Health and Human Services, National Institutes of Health.

Perfetti, C. A. (1985). *Reading ability*. New York, NY: Oxford University Press.

Rashotte, C. A., & Torgesen, J. K. (1985). Repeated reading and reading fluency in learning disabled children. *Reading Research Quarterly, 20*, 180–188.

Saenz, L. M., Fuchs, L. S., & Fuchs, D. (2005). Peer-assisted learning strategies for English language learners with learning disabilities. *Exceptional Children, 71*(3), 231–247.

Shaywitz, S. E., & Shaywitz, B. A. (1996). Unlocking learning disabilities: The neurological basis. In S. Cramer & W. Ellis (Eds.), *Learning disabilities: Lifelong issues* (pp. 255–260). Baltimore, MD: Paul H. Brookes.

Shinn, M. R., & Good, R. H. (1992). Curriculum-based measurement of oral reading fluency: A confirmatory analysis of its relation to reading. *School Psychology Review, 21*, 459–479.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*, 360–407.

Staubitz, J. E., Cartledge, G., Yurick, A. L., & Lo, Y. (2005). Repeated reading for students with emotional or behavioral disorders: Peer- and trainer-mediated instruction. *Behavioral Disorders, 31*(1), 51–64.

Stevens, E. A., Walker, M. A., & Vaughn, S. (2016). The effects of reading fluency interventions on the reading fluency and reading comprehension performance of elementary students with learning disabilities: A synthesis of the research from 2001 to 2014. Advance online publication. *Journal of Learning Disabilities.*

Therrien, W. J. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education, 25*(4), 252–261.

Torgesen, J. (2000). Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research & Practice, 15*(1), 55–64.

Vaughn, S., & Linan-Thompson, S. (2004). *Research-based methods of reading instruction in grades K–3*. Alexandria, VA. Association for Supervision and Curriculum Development.

Wexler, J., Vaughn, S., Edmonds, M., & Reutebuch, C. K. (2008). A synthesis of fluency interventions for secondary struggling readers. *Reading and Writing: An Interdisciplinary Journal, 21*, 317–347.

Wexler, J., Vaughn, S., Roberts, G., & Denton, C. A. (2010). The efficacy of repeated reading and wide reading practice for high school students with severe reading disabilities. *Learning Disabilities, Research & Practice, 25*, 2–10.