Fluency: A Necessary Ingredient in Comprehensive Reading Instruction in Inclusive Classrooms

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Fluency: A Necessary Ingredient in Comprehensive Reading Instruction in Inclusive Classrooms

Kavin Ming
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Abstract

There is a large collection of students who experience difficulty with the development of reading fluency and comprehension. Many students receive little to no benefit from non-systematic instructional methods. In order to become proficient readers many students need explicit instruction in fluency to serve as a building block to comprehension. The creation of both inclusive schools and classrooms has lead to expectations for educators who must instruct all students regardless of ability levels to read fluently with appropriate corresponding comprehension skills. Until recently, a great deal of reading instruction has narrowly focused on comprehension with little attention paid to the direct teaching of fluency. This narrow focus may be an insufficient approach to reading instruction for many students. Instead, students with reading difficulties can benefit from a comprehensive empirically supported reading program in which teachers directly teach and ultimately enhance reading fluency skills. The aim of this article is to describe eight practices for developing fluency through empirically supported approaches appropriate for use in the inclusive classroom.

Keywords
reading fluency, inclusive classroom instruction, empirically-supported instruction

SUGGESTED CITATION:
Ms. Jones is absolutely in love with her 3rd grade class. The class is full of children with energetic personalities, and almost every student expresses a genuine interest in learning. The entire faculty at Cobblestone Elementary is committed to including students with varying abilities in general classrooms, including students with disabilities, and this makes for an often challenging, yet rewarding teaching experience. There is one issue that continues to weigh on Ms. Jones when she reflects on her reading program; she asks herself, “How can I help my students become more fluent?” She hesitates each time she has these thoughts, because her colleagues continuously convey the importance of reading comprehension. But each time her students read aloud and laboriously decode two or three words extremely slowly, the importance of fluency is confirmed. How can fluency be included in a comprehensive reading program without sacrificing a focus on comprehension? Is fluency an essential component of reading programs implemented in inclusive classrooms? The importance of reading fluency cannot be underestimated for the many students who receive reading instruction in general classrooms where teachers are faced with a student population with varying abilities.

Reading Instruction in Inclusive Classrooms

Increasingly, students with varying abilities, including students with disabilities, receive a majority of their reading instruction in general classrooms (Schmidt, Rozendal, & Greeman, 2002). This shift in educational placement necessitates both general and special education teachers to adopt effective teaching methodologies to ensure that these students make gains in the areas of reading, writing, computation, and science. Although the relationship has not been interpreted as casual, reading fluency and comprehension are clearly related (Therrien, & Kubina, 2006; Therrien, 2004; Allinder, Dunse, Brunken, & Obermiller-Krolikowski, 2001). The large number of students with disabilities who experience reading difficulties, as well as students who may not be eligible for special education services, but who also struggle, requires the creation of comprehensive reading instruction that includes a focus on reading fluency and comprehension (Speece, & Ritchey, 2005). Currently, the emphasis on reading comprehension is almost second nature to many educators, while the importance of fluency has emerged over the previous 10 to 15 years (Rasinski, 2003b; Zutell & Rasinski, 1991). It is unclear whether the significant empirical findings in the area of fluency research have been translated to classrooms (Hudson, Lane, & Pullen, 2005; Shaywitz, 2003). In short, fluency instruction can and should be a component of reading instruction in inclusive classrooms. What follows is a brief review of the meaning and significance of reading fluency followed by practical suggestions on incorporating reading fluency instruction in the classroom.

What is Fluency and Why is it Important?

The National Institute of Child Health and Human Development (2000) in its Report of the National Reading Panel identified flu-
fluency as one of the five critical components necessary for becoming a proficient reader. These components include: a) phonics, b) phonemic awareness, c) fluency, d) vocabulary, and e) comprehension. For many teachers, reading instruction is primarily an exercise in meaning or comprehension (Rasinski, 2003a). Exclusive focus on one aspect of reading instruction may actually impede the development of reading and ultimately result in long-term reading difficulties for students in middle and high school (Archer, Gleason, & Vachon, 2003; Marston, Deno, Dongil, Diment, & Rogers, 1995). So what is fluency and why is it important? There are no shortages of available definitions of fluency. Many of these definitions emphasize the speed and accuracy of one’s reading. Fluency has been defined in the following ways: a) “It is the ability to read quickly and accurately, with appropriate and meaningful expression” (Rasinski, 2003a, p. 16); b) “reading fluency refers to efficient, effective word-recognition skills that permit a reader to construct the meaning of text” (Pikulski & Chard, 2005, p. 510); c) fluency is integral to comprehension and is a critical component of successful reading (Strecker, Roser, & Martinez, 1998); and d) “like music, it (fluency) consists not only of rate, accuracy, and automaticity, but also of phrasing, smoothness, and expressiveness” (Worthy & Broaddus, 2002, p. 334). The conceptual thread underlying each of these definitions is that fluent readers must be able to quickly (automatically) and accurately recognize words, read these words with adequate expression and phrasing (prosody), and draw the intended meaning from the text (comprehension).

**Figure 1: What Does the Literature Say About Teaching Oral Reading Fluency?**

Reading fluency is one of the defining characteristics of good reading, and a lack of fluency is a common characteristic of poor readers. Differences in reading fluency not only distinguish good readers from poor, but a lack of reading fluency is also a reliable predictor of reading comprehension problems (Hudson, Lane, & Pullen, 2005). Most children who are poor readers in elementary school experience difficulty acquiring the skills necessary to decode and comprehend words in print accurately. The most compelling reason to focus instructional efforts on students becoming fluent readers is the strong correlation between reading fluency and reading comprehension (Kame’enui & Simmons, 2001; Allington, 1983; Torgesen, 1998). There is an extensive body of research establishing measures of oral reading fluency as valid and reliable predictors of important reading outcomes on high stakes assessments (Good, Simmons, & Kame’enui, 2001).

In a study conducted by Buck and Torgesen (2002), the researchers investigated the relationship between oral reading fluency (ORF) measures and later performance on state-wide reading assessments. Third grade students were assessed from 13 different schools. Curriculum-based measures of ORF and state-wide assessment scores were compared. ORF scores were obtained in May 2002, and the state-wide assessment was administered in April 2002. Three one-minute ORF scores were obtained for each child, and each child’s median ORF score was used as an indicator of fluency competence. The results from this study demonstrated that there was a significant correlation between ORF scores and state-wide assessment reading scores. Thus, fluency is one of the key ingredients likely to promote better overall comprehension.
Reading comprehension has enjoyed a great deal of attention from teachers responsible for reading instruction in elementary as well as secondary schools. The importance of reading fluency is clearly evident in light of an information-processing approach to cognitive ability. Reading text is analogous to taking in information similar to a computer. When a computer processes information, the bits and pieces are transformed into a whole that is then used to contribute to a problem solution. In a similar vein, students take in or read words and phrases pieced together to constitute a fictional story or the account of an individual’s life. This information is processed and meaning is extrapolated from the text for some purpose. Many students have fundamental deficits in their “uptake process,” and this is where problems with fluency are most apparent, as students read so slowly, missing words, disregarding punctuation, and ultimately not comprehending the text. The importance of fluency cannot be understated for students who experience reading problems. In fact a large portion of students with disabilities experience reading difficulties resulting in problems that may have an impact on all aspects of their learning (Chard, Vaughn, & Jean-Tyler, 2002).

Table 1: Internet Resources for Building Fluency

<table>
<thead>
<tr>
<th>World Wide Web Resources for Teachers Who Are Interested in Building Reading Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following resources provide valuable information and products related to enhancing oral reading fluency in school-aged children.</td>
</tr>
<tr>
<td><strong>Current Oral Reading Fluency Norms for Grades 1-8</strong></td>
</tr>
<tr>
<td><a href="http://www.edformation.com">www.edformation.com</a></td>
</tr>
<tr>
<td><strong>One-Minute Reading Assessments</strong></td>
</tr>
<tr>
<td><a href="http://dibels.uoregon.edu">http://dibels.uoregon.edu</a></td>
</tr>
<tr>
<td><a href="http://www.scholastic.com">www.scholastic.com</a></td>
</tr>
<tr>
<td><strong>Repeated Reading Sites</strong></td>
</tr>
<tr>
<td><a href="http://www.aaronshen.com/rt">http://www.aaronshen.com/rt</a></td>
</tr>
<tr>
<td><a href="http://www.readers-theatre.com">http://www.readers-theatre.com</a></td>
</tr>
<tr>
<td><a href="http://www.storycart.com">http://www.storycart.com</a></td>
</tr>
<tr>
<td><a href="http://www.readinglady.com">http://www.readinglady.com</a></td>
</tr>
<tr>
<td><strong>Fluency-Building Software</strong></td>
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<tr>
<td><a href="http://www.readwritetype.com">http://www.readwritetype.com</a></td>
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<td><a href="http://rocketresder.com">http://rocketresder.com</a></td>
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<tr>
<td><a href="http://www.soundreading.com">http://www.soundreading.com</a></td>
</tr>
<tr>
<td><strong>Colored Overlays for Reading</strong></td>
</tr>
<tr>
<td><a href="http://www.crossboweducation.com/Eye_Level_Reading_Ruler.htm">http://www.crossboweducation.com/Eye_Level_Reading_Ruler.htm</a></td>
</tr>
</tbody>
</table>

After the primary grades, students are expected to read independently. As the volume and complexity of reading expectations and materials expand, students who are not developing fluency have a hard time understanding and keeping up with schoolwork and often find themselves facing increasingly difficult schoolwork even if they have previ-
ously done well (Worthy & Broaddus, 2002). Subsequently, this dysfluency causes these struggling readers to fall further behind every year—in reading as well as the content areas (Allington, 1999). Reading fluency is fundamental to students’ overall reading success and Table 1 provides several crucial websites for teachers interested in building reading fluency in students. See Table 1 for details.

**Developing Fluency through Research-based Practices**

Fluency instruction is not a reading program itself, but is part of a comprehensive reading program that emphasizes empirically supported practices. Creating a comprehensive reading instruction program is an essential goal for inclusive schools that serve large populations of students at risk for reading difficulties. There are several research-based general recommendations for how to provide reading instruction to build fluency with struggling readers (Hudson, Lane, Pullen, 2005). These empirically supported approaches can be integrated into inclusive classrooms that serve students with a varied abilities. By integrating strong instructional methods with some considerations for creating and maintaining a comprehensive reading program in an inclusive classroom, teachers can assist struggling readers in achieving proficiency in each of the three areas of fluency: reading rate, word recognition, and prosody, with the end goal of improving comprehension. Let’s explore eight of these practices and look at the area of fluency that is being developed by each practice:

1. **Ensure that students read appropriate level text.** Students need to practice and apply their growing word-identification skills to appropriate texts in order to build fluency. Appropriate texts are particularly important for students having difficulty with word-identification skills. Teachers should work with texts that are well within the reader’s independent instructional range (90%-95% success rate) (Welsh, 2006). Teachers can determine a child’s reading level by getting information about the student’s reading lexile. A child’s reading lexile is a numerical measure of his or her current reading performance, and can be converted to grade level performance. Students’ lexile levels can be determined by using commercial reading tools. One such tool is the Scholastic Reading Inventory, a computer-based reading test that is administered three to four times throughout the school year that gives a student’s current reading performance. Student reading performance should be monitored at the beginning (i.e., August), middle (i.e., January), and end (i.e., May) of the school year. This monitoring schedule provides teachers with the information needed to determine where instruction should begin as well as the direction of later instruction to enhance reading ability. If this tool is not available in a school site, teachers can encourage their administrators to purchase the tool, or use other lexile-measuring instruments available to them. If there is no access to lexile measurement assessment instrument(s) at the school site, teachers can use resources such as the Rigby PM Benchmarks, the Diagnostic Assessments of Reading, or Reading Running Records that will provide them with an approximate grade level reading performance for
their students. Once a student’s reading lexile or grade level reading performance is determined, a teacher can use the online resource at www.lexile.com to match books to the student’s reading level. At this site the teacher goes to the Lexile Book Database where he or she can search for the lexile levels of hundreds of books by title or author of the book. Therefore, in the inclusion classroom the teacher can: (a) ensure that the classroom library has books that include several reading levels, (b) teach students the five finger rule in choosing books by telling them that while reading the first page of a book, if the number of incorrect words exceed five, then the book is too hard for the moment, (c) group students for guided reading instruction based on their reading levels, and (d) use books that are commensurate with students’ interests and abilities to conduct instruction. General reading instruction should begin with the group. Teachers should assess all students to determine their reading level to provide students with the appropriate level text. For those students who may require more intensive support, additional assessments may be necessary in an effort to pinpoint specific need. For example, the 3-Minute Reading Assessment can be used to measure oral reading fluency. These frequent, easy to use assessment tools provide the information necessary to design the instructional support students need to become more proficient readers. Experiences with appropriate level text will help to increase students’ word recognition and reading rate skills. Table 2 provides a practical overview for using assessment data to help make instructional decisions.

2. Incorporate repeated reading into instructional practices. Repeated reading is the most familiar and researched approach to fluency training (Chard et al., 2002; Therrien, 2004). The basic method requires students to read a passage at the appropriate instructional level aloud several times until the desired rate of reading, measured in words per minute, is achieved. Allington (2001) suggests approximate reading levels. See Table 3 for details.

After reaching the criterion rate, the student reads another passage at the same level of reading difficulty until that rate is attained again. In some cases the teacher provides the student with feedback on word recognition errors, as well as on number of words correct (Meyer & Felton, 1999). In the inclusion classroom the teacher can: (a) start the week by providing students with 100-word passages at the appropriate reading level and allow students to tape-record themselves on a cold reading (reading with no prior practice) of the passage, practice the passage throughout the week, and rerecord themselves at the end of the week, (b) each week copy two to three different readers’ theater scripts and break students into groups, giving students in each group an appropriate script to practice for performance, and (c) pair proficient and struggling readers to work as partners as they take turns reading a teacher- or student-selected excerpt from the story of the week found in their reading series. Repeated reading activities will help to bolster students’ word recognition, reading rate, and prosodic skills.
### How Can Teachers Use Assessment Data to Make Instructional Decisions?

Assessment is one of the pillars of effective reading instruction. Teachers need to assess oral reading fluency frequently as a way to understand and monitor a student’s reading development. According to Stanford and Reeves (2005), an essential component of effective teaching is using assessment tools to help teachers select the most effective instructional methods by taking into account students’ strengths and weaknesses. Then, student progress is monitored in order to determine the effectiveness of instruction. Based on a collection of work in this area, a sequence of assessment and decision points has been provided below.

- **Assess:** Tool—One-Minute Reading Probe
  
  **Use**—Measures reading rate, word recognition, and prosody
  
  **Steps**—(1) Choose a passage appropriate for a student’s grade level and make a photocopy of the passage (you will make marks on this copy during testing) (2) ask the student to read the passage aloud to you for one minute. Place a check-mark above any word that is not self corrected or words that you must clarify after a pause of more than three seconds. In addition, words that are omitted, substituted, incorrectly pronounced should also be marked as incorrect using the check-mark. It is important to note that any errors due to dialect or accent variations should actually not be counted as an error. For formal names or unusual words, give credit if the student decodes them in a way that is appropriate for his or her reading level (3) at the end of 60 seconds, have the student stop reading and use a bracket to indicate the student’s stopping point (4) to determine the student’s reading rate, count the number of words read correctly within the minute.

  To determine the student’s word recognition, divide the number of words read correctly by the total number of words read within the minute.

  To determine the student’s prosody, use Zutell and Rasinski’s (1991) multidimensional fluency scale to rate student’s expression and volume, phrasing and intonation, smoothness, and pace (Rasinski, 2003).

- **Instruct:**
  
  (1) Reading rate—use table 1 to determine if your student is reading at the appropriate level for his or her current grade placement. If not, refer to the appropriate strategies to build reading rate (2) word recognition—if your student is recognizing less than 90% of the words in the assessment passage correctly, this indicates that the current reading requirement is too difficult for the student, and you need to provide instruction with less difficult passages (one or more grade levels below current grade). If your student is recognizing 90-95% of the words in the assessment passage correctly, provide word recognition instruction using reading materials from the child’s current grade. If your student is recognizing 96-100% of words in the assessment passage, provide word recognition instruction using more challenging materials than the student’s current grade level. Refer to the list of strategies on how to build word recognition (3) after using the multidimensional fluency scale to give you a numerical value for your student’s prosody, use the instructional practices in the body of the article to help build prosody.

- **Reassess:** For those students who are exhibiting appropriate development of reading fluency, one-minute probes can be administered three times a year to monitor their fluency progression. However, for students who show weaknesses in any or all of the areas of reading fluency, provide frequent administrations of one-minute probes to closely monitor their progress or lack of it. This will help you to determine what course your reading instruction should take, or decide if there is need for further in-depth reading analysis.
3. Engage students in choral reading. In this read along procedure, the teacher and students orally read the same passage once, preferably one with a distinct pattern, in unison. Before the reading, the teacher reminds the students to keep their voices in line with hers (Blevins, 2001). In the inclusion classroom the teacher can: (a) be sure to use materials for choral reading that students with reading difficulties are familiar with, e.g., pre-practiced passages from the reading text or other reading materials, (b) move around the room and listen carefully to students’ reading to ensure that students with reading difficulties are participating in the exercise, and (c) give students who have trouble with tracking, devices that can help keep them at the appropriate place on the page. Teachers can provide students with colored overlay text highlighters that both underline the text and highlight it in a colored tint. Choral reading exercises will help to improve students’ word recognition, reading rate, and prosodic skills.

4. Use classwide peer tutoring for fluency practice. The main objective of this approach is to increase the amount of time individual students are directly engaged in reading. Peer tutoring is a commonly reported way of providing additional practice for students (Scruggs & Mastropieri, 1998). With classwide peer tutoring, the teacher arranges the reading activity so that one half of all students can be reading at a particular time while the other half is actively engaged in monitoring their performance. Teachers can train student tutors to track their partners’ reading and provide corrective feedback when errors occur (Mastropieri, Leinart, & Scruggs, 1999). In the inclusion classroom the teacher can: (a) assign the proficient readers a letter, (e.g., “A”), and the less proficient students a number, (e.g., “1”); the teacher then tells the class that each week the members in each group (“A” or “1”) will be alternated to determine who reads or monitors first. Traditionally, teachers have used ability-based techniques like that previously mentioned, but there are alternatives to this method. For example, students can be grouped based on their interests in particular topics, books, pieces of literature, or based on the kind of reading assignment that is required (e.g., fiction versus nonfiction text) (b) make a schedule to determine the number of groups she will observe to provide weekly instruction or feedback during the peer tutoring activity, and (c) continually provide verbal praise to the partners who perform the activity appropriately. Classwide peer tutoring sessions will help to expand students’ word recognition, reading rate, and prosodic skills.

5. Use word drills. Single word training appears to be valuable for helping struggling readers develop reading fluency. With poor readers, reading words in isolation has led to an improvement in contextual reading fluency (Tan & Nicholson, 1997; Cunningham, 2000; Fisher, 1999). For primary aged students Fisher recommends a goal of reading correctly 30 wpm, gradually increasing to 60 wpm by the middle of grade three. In the inclusion classroom the teacher can: (a) set aside several minutes each day for students to independently practice high frequency words on word walls by allowing each student to go to the word wall(s) and repeat the words, (b) provide direct instruction to groups of students who need prac-
tice with high frequency words by allowing them to gather around the word wall(s) and take turns repeating the words then saying them as a group, and (c) print single words on index cards and place them in a Sight Word Center where students can practice the words independently, with a partner, or with partners. Word training drills will help to sharpen students’ word recognition and reading rate skills.

### Table 3. Reading Rates

<table>
<thead>
<tr>
<th>Grade</th>
<th>WPM</th>
<th>Grade</th>
<th>WPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60-90</td>
<td>6</td>
<td>195-220</td>
</tr>
<tr>
<td>2</td>
<td>85-120</td>
<td>7</td>
<td>215-245</td>
</tr>
<tr>
<td>3</td>
<td>115-140</td>
<td>8</td>
<td>235-270</td>
</tr>
<tr>
<td>4</td>
<td>140-170</td>
<td>9</td>
<td>250-270</td>
</tr>
<tr>
<td>5</td>
<td>170-195</td>
<td>12</td>
<td>250-300</td>
</tr>
</tbody>
</table>

6. *Call the students’ attention to phrase boundaries.* Appropriate placement of pauses around phrase boundaries can contribute substantially to meaning. Teachers can teach phrase boundaries by cueing pauses in text with slashes. Single slashes represent shorter pauses, such as commas, while double slashes indicate longer pauses, such as periods (Hudson, Lane, & Pullen, 2005). In the inclusion classroom the teacher can: (a) model appropriate phrasing by using transparencies on the overhead projector to simultaneously read text, voicing the appropriate phrasing and marking the text with single or double lines to indicate short or long pauses, (b) provide students with text that does not have punctuation marks to cue phrasing and allow students to, independently or with a partner, read the passage and indicate with single or double slashes where the appropriate short or long pauses would occur, and (c) choose a weekly poem and make students’ word recognition and reading rate skills.

7. *Explicitly teach intonation.* Blevins (2001) suggests a variety of ways to teach appropriate intonation. In the inclusion classroom the teacher can provide direct instruction to the entire group of students, then place students in pairs to: (a) recite the alphabet as a conversation, using punctuation to cue inflection (e.g., ABCD? EFG! HI? JKL. MN? OPQ. RST! UVWX. YZ!), (b) recite the same sentence using different punctuation marks (e.g., Dogs bark? Dogs bark! Dogs bark.), and (c) practice placing stress on different words in the same sentence (e.g., *I am* tired. *I am* tired. *I am* tired). These activities help students learn the importance of punctuation to meaning. Intonation training will help to enhance students’ prosodic skills.

8. *Facilitate practice through computer assisted instruction.* Teachers can increase the amount of practice to promote reading
fluency by incorporating computer-assisted instruction into daily reading sessions. Some software programs include game-like activities that promote reading speed by providing feedback on word-attack skills and reading comprehension (Mastropreri & Scruggs, 2002). Other programs emphasize recognizing words with different medial vowels and vowel combinations, while others consist of reading sight words from word lists as rapidly and accurately as possible (Mastropieri, Leinart, & Scruggs, 1999). In the inclusion classroom the teacher can increase the amount of practice to promote reading fluency by incorporating computer-assisted instruction in daily/weekly reading sessions in three ways: (a) making the computer a literacy center and incorporate its use into the reading block several times each week, (b) creating a daily computer rotation where students have set times to practice fluency-building activities, and (c) allowing students to use the computer with its fluency games and activities for independent practice in-between lessons. Computer assisted practice will help to raise students’ word recognition and reading rate skills.

**Final Thoughts**

Once teachers have a clear understanding of the population with whom they are working, they need to assess students who they determine are not making adequate progress in the area of fluency. Subsequently, direct teaching of fluency enhancing methods needs to be a regular part of reading instruction (Snow, Burns, & Griffin, 1998) for these students. Teachers of struggling readers need to realize that a common core problem for them is the ability to read sight words, decode words, and read phrases and sentences automatically and rapidly. Therefore, a multiple component approach to reading fluency (incorporating several practices into daily reading instruction) that addresses these deficits would most benefit them (Chard, Vaughn, & Tyler, 2002).
References


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