

## Assessing Students' Reading Fluency

C. Prima Ferri Karma

<sup>1</sup> *Jurusan Pendidikan bahasa Inggris UNTIDAR  
Jl. Kapten S. Parman No. 39 Magelang 56116 INDONESIA*

### Abstrak

Memeriksa kelancaran membaca mahasiswa kadang menjadi sesuatu kegiatan yang terabaikan oleh Dosen. Pada kenyataannya, salah satu karakteristik menjadi seorang pembaca yang baik adalah kelancaran dalam membaca, ketidaklancaran dalam membaca merupakan salah satu ciri pembaca yang buruk. Kelancaran dalam membaca mencakup ketepatan bunyi, kecepatan dan intonasi. Seorang dosen dapat mengetahui tingkatan kelancaran membaca mahasiswanya dengan cara meminta mahasiswa membaca sebuah teks secara lisan. Sehingga, dosen dapat memeriksa ketepatan bunyi melalui rekaman lisan dan mencari kesalahan membaca yang dilakukan mahasiswa. Sedangkan untuk intonasi, dosen dapat memeriksanya dengan menggunakan daftar yang telah ditentukan sebelumnya. Untuk kecepatan membaca, dosen dapat memeriksanya melalui lamanya waktu yang dibutuhkan, waktu dihitung dengan menggunakan *Words per Minute (WPM)* atau *Correct Words per Minute (CWPM)*. Ini tergantung pada masing-masing individu, variasi teks, dan tujuan pembaca. Artikel ini selain bertujuan tidak hanya untuk mengetahui kelancaran mahasiswa dalam membaca sebuah teks tetapi juga pemahaman mahasiswa terhadap isi teks tersebut.

**Kata Kunci:** *assessing, reading, fluency*

### A. Introduction

People sometimes neglect someone's reading fluency. Usually they pay attention on the reading for comprehension. They pay attention on how to teach it and how to assess it without considering their students' reading fluency. In fact one of the defining characteristics of good readers is reading fluency, 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 (Stanovich, 1991). Once struggling readers learn sound-symbol relationships through intervention and become accurate decoders, their lack of fluency emerges as the next hurdle they

face on their way to reading proficiency (Torgesen et al., 2001; Torgesen, Rashotte, Alexander, Alexander, & MacPhee, 2003). This lack of fluent reading is a problem for poor readers because they tend to read in a laboured, disconnected fashion with a focus on decoding at the word level that makes comprehension of the text difficult, if not impossible. The speed with which text is translated into spoken language has been identified as a major component of reading proficiency (Adams, 1990; Allington, 1983; Fuchs, Fuchs, Hosp, & Jenkins, 2001; Hasbrouk & Tindal, 1992; Samuels, Schermer, & Reinking, 1992). Many struggling readers may not gain reading fluency incidentally or automatically. In contrast to skilled readers, they often need direct instruction in how to read fluently and sufficient opportunities for intense, fluency focused practice incorporated into their reading program (Allinder, Dunse, Brunken, & Obermiller Krolikowski, 2001).

Fluent reading comprises three key elements: accurate reading of connected text at a conversational rate with appropriate prosody or expression (Hudson, Mercer, & Lane, 2000). A fluent reader can maintain this performance for long periods of time, can retain the skill after long periods of no practice, and can generalize across texts. A fluent reader is also not easily distracted and reads in an effortless, flowing manner. The most compelling reason to focus instructional efforts on students becoming fluent readers is the strong correlation between reading fluency and reading comprehension (Allington, 1983; Johns, 1993; Samuels, 1988; Schreiber, 1980). Each aspect of fluency has a clear connection to text comprehension. Without accurate word reading, the reader will have no access to the author's intended meaning, and inaccurate word reading can lead to misinterpretations of the text. Poor automaticity in word reading or slow, labourious movement through the text taxes the reader's capacity to construct an ongoing interpretation of the text. Poor prosody can lead to confusion through inappropriate or meaningless groupings of words or through inappropriate applications of expression.

Based on the statements above about the definition and the importance of reading fluency, the writer is interested to share idea about what factors can be noted or assessed in the reading fluency

## **B. The Role of Fluency in the Reading Process**

Samuels, (1988) states that good readers have large sight word vocabularies that include most of the words they meet these are words they have seen before. When they first met them, good readers may have analyzed the words by matching letters and sounds; now, however, having met them over and over again, they can identify them from memory. Even if good readers come across an unfamiliar word, they are so skilled at matching letters and sounds that they hardly pause. Because good readers do not have to think about word identification, and they can read at an appropriate rate of speed, they can direct their attention to meaning. This focus on meaning, in turn, allows them to read with proper intonation. Intonation involves reading at a rhythm that approximates natural speech, paying attention to punctuation signals, and using the rise and fall of the voice to make the text sound meaningful. This combination of qualities is often called prosody—projecting “the natural intonation and phrasing of the spoken word upon the written text” (Richards, 2000, p. 535). The fluent reader is a smooth and expressive reader and is enjoyable to listen to. Have you ever listened to taped books? These represent wonderful examples of oral reading fluency.

Achieving fluency is one of the stages that students move toward in their journey toward good reading. Ehri (1991) refers to this stage as sight word reading, and Spear-Swerling and Sternberg (1996) call it the stage of automatic word recognition. Nathan and Stanovich (1991) state that fluency “may be almost a necessary condition for good comprehension and enjoyable reading experiences” (p. 176). Kame’enui and Simmons (2001) suggest that oral reading fluency represents the automatic use of those early literacy skills (phonological awareness, alphabet understanding, and sound–symbol matching) and can be used to predict proficiency in later reading skills. Fuchs, Fuchs, Hosp, and Jenkins (2001) believe that oral reading fluency “may serve as an indicator of overall reading comprehension” because of the significant relationships between fluency and comprehension scores on standardized tests. However, they caution that this relationship may be stronger in elementary and junior high school than in high school.

In contrast to good readers, many students with reading problems lack fluency. They do not have adequate sight word vocabularies and are forced to analyze almost every word. Unfortunately, they often lack effective strategies for matching letters and sounds as well, so word identification becomes a laborious process. Because poor readers direct most of their attention to identifying words, they have few resources left for meaning. Their oral reading is slow and halting. They pause often and repeat words. Because they do not comprehend what they are reading, their voices lack expression, and they ignore punctuation signals. After reading, they have little comprehension of the meaning of the passage.

There are three requirements for developing and maintaining reading fluency. First, a reader must have a large store of sight words. Second, the reader needs efficient strategies for analyzing new and unfamiliar words. Third, the reader must focus on meaning. The interaction of these three elements forms the basis of reading fluency.

How does fluency develop? It seems simplistic to say this, but you learn to read fluently by reading. The National Reading Panel (2000) has recognized that reading practice is a critical contributor to fluency. In other words, the more you read, the more your sight word vocabulary grows. You meet some new words and efficiently analyze them by matching letters and sounds. As you meet them again and again, their identification becomes fixed in your memory, and your sight word vocabulary expands. This is certainly an argument for providing students with many opportunities to read. Unfortunately, many students who are experiencing reading difficulties tend to avoid reading. As a result, they do not develop large sight word vocabularies. In turn, this makes reading more difficult, and a vicious cycle develops (Stanovich, 1986).

Other factors influence the development of fluency (Allington, 1983). Students need models of fluent oral reading in the home and in the classroom. In too many classrooms, students of similar ability are grouped together for oral reading. This practice ensures that fluent readers listen to fluent readers. On the other hand, nonfluent readers, who are in most need of fluent reading models, are forced to listen to their peers stumble and hesitate their way through the text.

Students need to be aware of the importance of fluency. Many think that the

most important aspect of oral reading is accuracy, and they therefore emphasize avoiding pronunciation errors. Teachers and coaches should encourage students to focus on expression and on making the oral reading meaningful and enjoyable for their audience.

Fluency development is also influenced by the kind of reading that students do. Fluency is best fostered if a student reads independent- or instructional-level text and text that is on familiar topics (Allington, 2001). Frustration-level text contains too many unfamiliar words and concepts to allow for fluency development. Perhaps an analogy will clarify this. Do you consider yourself a fluent driver—that is, a skilled driver who steers, brakes, and accelerates almost automatically in a variety of situations? I imagine you do. Think back to when you first learned to drive. Where did you practice? You probably began in a large parking lot and on relatively familiar and traffic-free roads in the country or a suburb. As you gained confidence and competence, you moved to city streets with more traffic and more signals to attend to. As you became more fluent in this arena, you ventured onto the expressway, possibly during the midmorning or early afternoon. Finally you tackled rush-hour traffic. Now think what would have happened if you had begun your driving practice on the expressway during rush hour! This may help you to understand why it is difficult to develop fluency in a frustrating and anxiety-fraught situation.

For many years the development of fluency was neglected in literacy classrooms, but now—perhaps in response to the report of the National Reading Panel (2000) and other research—its importance has been recognized. The assessment of fluency has become an important component of reading assessment, and various publications suggest ways to foster fluency development in the classroom (Caldwell & Leslie, 2005).

### **C. Fluency and Good Reader Behaviors**

The good reader behavior of accurately pronouncing unfamiliar words by using letter and sound patterns is one aspect of fluency. Two other good reader behaviors—accuracy and automaticity in pronunciation of words the reader has seen before, often called sight words—are further aspects of fluency. When readers

can do these things, they can turn their attention to meaning, and this allows them to read expressively. Many of the good reader behaviors are not separate; they tend to overlap, and this is clearly apparent with regard to fluency. Helping students to identify words is tied to fluency, as is guiding them to develop a large sight vocabulary.

#### **D. Purposes of Fluency Assessment**

A teacher or coach needs to know at what level a student demonstrates fluency and in what kind of text. A student may be at an instructional level for word identification and comprehension, but may still lack fluency. The informal reading inventory (IRI) process uses accuracy in word identification as one measure of determining reading level. However, accuracy is only one component of fluency; the other two components, as noted above, are speed and intonation. A student may be accurate but slow, or accurate but expressionless. Because of the importance of fluency as a good reader behavior, the teacher or coach needs to determine whether word identification accuracy at any level is tied to speed and intonation. Therefore, these components of fluent reading may need to be assessed separately. Finally, the teacher or coach must note student progress in fluency.

#### **E. Assessing Fluency Levels**

A teacher or coach can assess a student's general level of reading fluency simply by listening to the student read orally. It is easy to recognize lack of fluency. Wilson (1988) describes three types of nonfluent reading: choppy reading, monotonous reading, and hasty reading. In choppy reading, the student hesitates often and repeats words and phrases. It almost sounds as if the student is reading a list of unconnected words. In monotonous reading, there is little variation in the student's tone of voice. This lack of expression suggests that the student is paying little attention to meaning. In hasty reading, the student races through the text, ignoring sentence breaks and punctuation. Finishing the reading as quickly as possible seems to be the hasty reader's goal. Most nonfluent readers demonstrate a combination of these three patterns. They are very easy to recognize!

To assess fluency, simply ask the student to read aloud a selection at his or

her instructional or independent level, and use your judgment to decide whether the student demonstrates acceptable fluency. It is important that the selection be at an independent or instructional level, since all readers tend to be somewhat nonfluent in frustration-level text. (Think about your reading of an insurance policy or directions for filling out income tax forms!)

When can you find time to assess fluency? If you are using the IRI process to determine reading level, make the observation of fluency a part of your procedure. You can also assess fluency during self-selected silent reading time. For pleasure reading, students tend to choose books that they can read fairly easily (i.e., books at their independent and instructional reading levels). This makes silent reading time an appropriate opportunity to assess fluency. As you move around, ask individual students to read short segments of their books aloud, and make notes on their performance.

## **F. Assessing Components of Fluency**

Various means of assessing the first component of fluency, accuracy, have been described in previous chapters. The IRI process, the running record, and miscue analysis can all be applied to a student's oral reading to determine the student's accuracy level. For that reason, accuracy is not discussed further here. Our emphasis is on assessing the other two components of fluency—speed or reading rate and intonation.

### **1. Determining Reading Rate**

Reading rate indicates reading speed. It is one factor in fluency, but it is not the whole picture. Reading rate suggests automaticity of word identification. However, it says nothing about accuracy or intonation. Reading rate is measured in words per minute (WPM). As the student reads (either orally or silently), the teacher or coach times how long this takes. A stopwatch is the most accurate measure of reading time, but a watch with a second hand will also suffice. If you are measuring silent reading rate, you need to ask the student to look up the minute he or she has finished reading, so you can note the time. Multiply the numbers of words in the passage by 60, and divide this by the number of seconds it took to read the passage.

This results in a WPM score. For example, Sandie read a 288-word passage in two minutes and 40 seconds, for a total of 160 seconds. The number of words in the passage, 288, multiplied by 60, equals 17,280. This, divided by Sandie's 160 seconds, equals 108 WPM. Both oral and silent reading rate can be measured in this way.

Another way to measure fluency is to compute correct words per minute (CWPM), or WPM minus the number of errors or miscues made. Kame'enui and Simmons (2001) suggest that this is a more sensitive measure of fluency, in that it measures both speed and accuracy while WPM only measures speed. So, if Sandie read at 108 WPM but made six errors or miscues, her CWPM would be 102.

Once you have a WPM or a CWPM score, what does it mean? As a teacher or coach, you must realize that reading rate is extremely variable. Reading rate varies according to the passage read. More difficult and unfamiliar passages tend to be read more slowly than narratives. Rate also varies according to readers' purposes. Think about how your rate varies when you read a textbook or an editorial versus an adventure novel or some other form of escapist reading. Readers' interests can affect reading rate as well. Reading rate also varies within a single selection, with some sentences being read more slowly than others (Flurkey, 2006). Moreover, reading rate varies across individuals; students at the same instructional level often display very different reading rates. Carver (1990) suggests that some readers are just naturally faster than others, and this may be related to individual cognitive processing speed.

Silent reading is generally faster than oral reading. Huey (1908/1968) suggested a century ago that good readers read one and a half to two times faster silently than they do orally. This just makes good sense. In oral reading, people have to pronounce the words. In silent reading, they do not, and good readers can process words much faster than they can say them.

Because of this natural variability in reading rates, a teacher or coach should never compare the reading rates of two individual students. In addition, one-minute tests of rate should be regarded with some degree of suspicion. If a teacher or coach uses such a brief measure, it should be accompanied by other and longer samples of rate before any decision is made regarding a student's performance. But what

about choosing a specific reading rate as a goal for students at a certain grade level? Various assessment instruments, such as published informal reading inventories (IRIs), contain general guidelines for grade-level reading rates. These can be used to set a general goal for rate improvement, as long as the teacher or coach keeps in mind the variability of reading rate across individuals, different types of text, and different reading purposes. To put it simply, a teacher or coach should never interpret grade level rate guidelines as absolute goals.

Once you have a measure of rate for a grade-level passage, do not assume that this rate will carry over to other passages at that same grade level. It may or it may not. A student may read an expository passage more slowly than a narrative passage. If a student is interested in the topic of the selection, the student may read more quickly. It is best to compare the reading rate of an individual student in oral and silent reading of passages that are as similar as possible. This is most important at the end of second grade or the beginning of third grade, when students normally make the transition to efficient silent reading strategies. A student whose oral and silent reading rates are the same may not be actually reading silently, but may be mentally pronouncing each word—something that good readers do not do.

Reading rate is perhaps most valuable in identifying students who are extremely slow readers at their independent or instructional levels. Several things can cause such slow reading. The student may be mentally analyzing each word in the absence of an adequate sight word vocabulary. Or the student may be overly deliberate; slow reading can signal an undue focus upon word identification accuracy.

Should teachers or coaches be concerned about slow reading? What about a student who reads slowly but understands what he or she is reading? Should this worry a teacher or coach? I think it should. Think about the result of slow reading. A slow reader takes much longer to read assignments than his or her peers, and this affects homework as well as class activities. If the teacher or coach asks students to read something in class, the slow reader seldom finishes and is generally aware that classmates have all completed the selection while he or she may be only halfway through it. This easily leads to frustration. It is natural to avoid a frustrating situation, so the slow reader avoids reading whenever possible. Then what happens?

Because fluency is fostered by reading, and because the slow reader chooses not to read, the problem not only continues but probably worsens. For these reasons, teachers and coaches must evaluate reading speed even if understanding is in place.

If reading rate is so variable, how do we interpret it? A colleague and I (Leslie & Caldwell, 2006) examined the oral and silent reading rates of normal readers reading at their instructional level. We found a steady rise in oral and silent reading rate as reading level increased, and a drop in silent reading rate in upper middle school and high school passages, due no doubt to the increased difficulty of the passages. The accompanying chart summarizes our findings (Leslie & Caldwell, 2006). It is important to understand that these rates simply suggest typical reading rates and should only be used as rough estimates or general guide- lines of acceptable reading speed.

## **2. Curriculum-Based Measurement**

In curriculum-based measurement (CBM; Fuchs, 1992; Fuchs & Fuchs, 1999), students read aloud from grade-appropriate passages for one minute while a teacher or coach records the number of words read correctly. This occurs frequently throughout the year using passages of equivalent difficulty. The purpose is to evaluate the extent to which students can function in their classroom text. Thus a fifth grader reading on a third-grade level would read fifth-grade selections. This differs from the use of an IRI, which establishes student fluency in independent- or instructional-level materials. CBM functions as a screening device to identify students who are performing below the level of their class- mates, and, if administered frequently, it can be used to graph and document progress throughout the year (Davidson & Myhre, 2000). Hasbrouck and Tindal (1992, 2005, 2006) list typical CBM-derived CWPM scores for second through fifth grades. For example, in third grade, low-performing readers reading grade-level text progressed from 65 CWPM to 87 CWPM at the end of the year. Average readers progressed from 79 to 114 CWPM, and high-performing students improved from 107 to 142 CWPM.

## **3. Timed Administration of Word Lists**

A student's ability to identify single words automatically can be assessed through timed administration of a word list. Does the student identify each word immediately, or does the student pause? A pause may indicate that a word is not a

sight word, but a word the student must analyze in order to identify.

Take a graded word list and ask the student to pronounce the words. If the student correctly pronounces a word within one second, mark it A to indicate automatic identification. How can you time one second? Simply say to yourself “one thousand.” If the student pronounces the word before you have finished, it is probably within one second. If the student takes longer, mark the word as C if correctly identified. Of course, mark all incorrect responses. Count the total number of correct words. Compare this to the number of words that were identified automatically. If a student’s total number of words is greater than the number of words recognized automatically, the student may lack a sight word vocabulary appropriate to that grade level.

Take for example, a student named Donika read a list of second-grade words from a published IRI and scored at an instructional level for the total number of words that she recognized correctly. Of the 17 correct words, only 3 were identified automatically, which suggested that Donika was primarily analyzing words in instructional-level text. When Donika read a second-grade selection, her oral reading was very accurate, but her reading rate was only 35 WPM. It was not surprising that she remembered very little of what she read. All of Donika’s energies were taken up with analyzing words, and she did this quite efficiently. However, she needed to develop and expand her sight word vocabulary.

A different picture emerged with Jeffrey. His performance on a word list from a published IRI placed him at an instructional level for preprimer text. Jeffrey identified 14 words correctly, and all of them were identified automatically. However, he was not able to analyze words such as make, place, write, and other. Jeffrey either knew the word or he didn’t. If he didn’t, he had no word analysis skills to help him with unfamiliar words. Unlike Donika, Jeffrey needed help with word analysis.

Remember that use of a word list is a “quick and dirty” way of estimating automaticity. Listening to a student read orally offers a far richer opportunity for fluency assessment. Also, fluency in reading a word list is not related to reading comprehension as strongly as oral passage reading is (Fuchs et al., 2001).

#### 4. Assessing Intonation

Good readers are accurate and automatic in their identification of words. Marking oral reading errors (as described in other chapters) indicates reading accuracy; determining reading rate and the timed administration of word lists suggest reading speed. But what about the third component of fluency, intonation? Good oral readers are expressive. Their performance pleases and delights their audience. Teachers and coaches can use a simple checklist (such as the one provided here) to assess intonation whenever students read orally during classroom instruction. Using a simple coding system such as “Yes,” “No,” and “Sometimes” on this checklist may be more informative than simply checking off the items.

#### G. Assessing Student Progress in Fluency

A teacher or coach can and should assess a student’s fluency at different points in time. One of the key purposes of CBM is continual assessment of CWPM across a school year. The teacher or coach can also compare reading rate before and after oral reading practice or after several months of instruction. Some students enjoy recording their reading rate and watching it increase as they become more fluent. Administering a simple checklist of intonation behaviors (as described above) at different points may be the most effective means of assessing this component of fluency over time.

Given the importance of fluency, it is a good idea to schedule regular oral reading practice. Asking students to engage in repeated reading of a selection has been found to increase fluency (Allington, 1977, 2001; Samuels, 1979; Rasinski, 1986; Stahl, Heubach, & Cramond, 1997). Students can practice part of a selection alone or with peers. They can tape their first reading and their last reading to note progress. They can use a checklist to evaluate their own and their peers’ intonation during oral reading. In fact, they can use the same checklist to evaluate their intonation as the teacher or coach uses. This provides a wonderful opportunity to assess the progress of each student. It is a time when instruction and assessment truly merge.

Should a teacher or coach group students according to their fluency? Probably not. First, it would be very difficult to do, given the variability among readers’

fluency in different kinds of text. Second, students profit from the modeling of their more fluent peers, as noted earlier. Consider what often happens when students of similar reading ability are grouped together for oral reading practice. The good readers and the more fluent ones listen to peers who are as skilled as they are. On the other hand, the poorer readers are subjected to repeated examples of slow, halting, choppy, or inexpressive reading. It makes more sense to group students of mixed fluency levels. If the practice activity is motivating enough, students will learn from each other and eagerly work together to improve their performance.

There are various instructional activities for practicing oral reading and for assessing student progress in developing fluency (Caldwell & Leslie, 2005; Johns & Berglund, 2006; Allington, 2001; Dowhower, 1991; Hoffman & Isaacs, 1991; Zutell & Rasinski, 1991; Rasinski, 1988; Maccinatti, 1985; Koskinen & Blum, 1984). Because students enjoy performing, teachers or coaches can foster repeated reading by assigning character and narrator roles to stories and having the students practice for the final performance. Or they can put on actual plays. Class choral reading can also promote fluency development. Older students can practice reading stories in order to read to younger students. All of these activities provide teachers or coaches with opportunities to evaluate their students' developing fluency.

## **H. Conclusion**

Fluency involves accuracy, speed, and intonation. It allows the reader to pay attention to meaning. A teacher or coach can assess general fluency level by listening to students read orally in instructional-level text. He or she can assess accuracy by recording oral reading errors. He or she can also assess students' intonation by using a checklist. If the teacher wants to assess the students' he can do it by determining reading rate and by timed administration of graded word lists.

Reading rate is measured as words per minute (WPM) or as correct words per minute (CWPM). Reading rate varies across individuals and texts; it also varies according to readers' purposes. Compare a student's reading rate in oral and silent reading or at different points in time. Of course measuring the students' reading rate is not only counting the numbers of words the students can read in one minute. It needs more than just counting the numbers. The teacher should also check the

students understanding or comprehension about the reading passage.

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