



	Morning	Afternoon	N
Unemployed	59,567	55.2	15,749
Not Employed or Seeking Work	27,495	60.2	8,116

Fluency: Research and Teaching Strategies

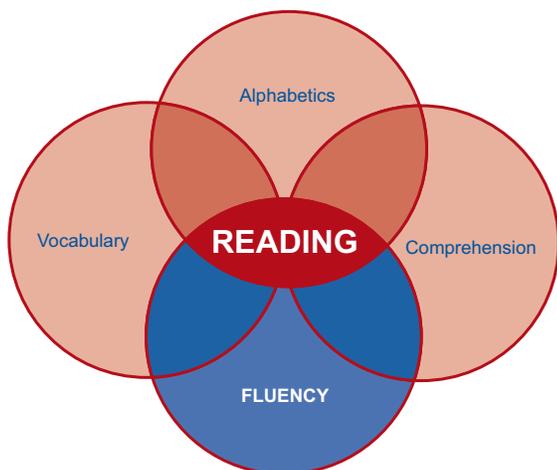
This research digest on fluency is one of a series that reviews four components of reading: alphabetic, fluency, vocabulary, and comprehension. The digest contains a discussion of current research, provides references, and suggests strategies for teaching adults to read with fluency.

Reading Fluency Defined

Fluency in reading is the ability to read with speed, ease, and appropriate expression when reading aloud. Learners' fluency skills are measured in terms of

- **accuracy**—the number of words read correctly in a text;
- **rate**—the number of words read in a set period; and
- **prosody**—a reader's phrasing while reading aloud, including the use of pauses, stress, expression, and intonation.

The Four Components of Reading



The Need for Fluency Instruction

Fluency is more than a matter of learners performing well when they read aloud; it is a key component of reading and affects comprehension—the ultimate goal of reading. According to several theories of reading, learners should strive for automatic word recognition to improve comprehension (Snow, Burns, & Griffin, 1998; Chall, 1996). For readers to direct their attention to comprehension, they must have the ability to read without expending too many cognitive resources on recognizing words. Readers who struggle with fluency move through text slowly. Inaccurate reading can tax short term memory, and by the time struggling readers are able to recognize unknown words in sentences, they may forget the substance of preceding sentences and paragraphs. Lack of fluency makes it difficult for readers to follow the flow of ideas and therefore comprehend the text.

According to Kruidenier (2002b), summarizing the work of McKane and Greene (1996), Meyer (1982), and others, it may be possible for Adult Basic Education (ABE) learners to increase their reading fluency and ultimately their reading achievement. Learners may see benefits when engaging in focused fluency instruction of as little as 10-15 minutes a day as an ongoing, long-term classroom learning activity (Kruidenier, 2002b). Building fluency skills can be rewarding and motivating for adult learners. Kruidenier points out that adult learners "should see improvement in their reading fairly quickly, at least over the passages that they are practicing."

Assessment of Fluency

Teachers sometimes seek to limit the number of assessments administered to their students out of concern about the possible negative side-effects of testing (Kutner, Webb, & Matheson, 1996). However, diagnostic assessment is critical to learners' success in reading because learners should read materials that are at an appropriate level for them. Without proper initial assessment, learners may be placed in classes that are too basic or too advanced. They may be unaware of their strengths and weaknesses in reading. Kruidenier (2002a) cites other benefits of assessing ABE learners, including measurement of individual growth, self-evaluation, and personal growth for learners.

To gauge fluency levels, teachers must use multiple measures of assessment, including ones for accuracy, rate, and prosody. Program administrators can promote fluency by assuring that fluency skills are assessed at intake and monitored throughout the school year. Grade-leveled texts and Informal Reading Inventories (IRIs) are helpful instruments for this task. Through assessment, learners can define their independent, instructional, and frustration levels of oral reading. As the learner reads aloud from a grade-leveled test, the teacher can score accuracy, rate, and prosody using the following methods.

Accuracy can be calculated by subtracting the number of words a learner misses from the total number of words read and dividing the remainder by the total number of words. For example, a learner who misses 10 words in a passage of 150 words has an accuracy rate of 93 percent:

$$\frac{\text{words read} - \text{mistakes}}{\text{words read}} = \frac{150 - 10}{150} = 93\%$$

Teachers and learners can calculate reading **rate** or speed by subtracting the number of errors from the number of words read, multiplying the remainder by 60 seconds, and dividing the result by the amount of seconds the learner takes to read the passage (Curtis & Bercovitz, 2004). For example, a learner reading 140 words correctly (out of a possible 150) in 75 seconds reads at 112 words per minute.

$$\frac{(\text{words read} - \text{errors}) \times 60 \text{ seconds}}{\text{number of seconds for reading}} = \frac{(150 - 10) \times 60}{75 \text{ seconds}}$$

= 112 words per minute

To assess **prosody**, a tool that is easy to administer and widely used is a qualitative scale from the NAEP, or National Assessment of Educational Progress (U. S. Department of Education, 2002). The scale ranges from 1 (awkward or halting reading) to 4 (fluid and informed reading). The teacher assesses the learner for prosody by judging how conversational the reading sounds, how well the learner reproduces the rhythm that the author intended, and the quality of expression the learner uses, using the following ratings:

1	Word-by-word reading with no attention to phrasing, punctuation, or expression
2	Primarily two-word phrases; little attention to punctuation or expression
3	Frequently conversational in tone; occasional lapses in phrasing or expression
4	Conversational; phrasing and expression indicate understanding of what is read

Learning and Teaching Fluency

Learners benefit from 10-15 minutes of daily instruction in fluency. Strucker (1997) suggests that learners should receive direct instruction without interruption of fluency activities to focus on other components of reading, such as alphabetics.

To improve fluency skills, learners need to use texts that are at the appropriate level of difficulty. Once the teacher has determined the correct reading level through assessment, learners require active monitoring and guidance from teachers to maintain the correct levels.

Repeated fluency practice with the same passage of text has been shown to be an effective way to improve fluency (Kruidenier, 2002a). Learners benefit from reading and re-reading text as the teacher provides feedback on their pronunciation, pacing, and expression. Learners also benefit from hearing their teachers model smooth, accurate, and relatively fast reading of the passages the learners are practicing. English language learners benefit from hearing native-speaker-like readings of short segments that highlight English stress and intonation (Burt, Peyton, & Duzer, 2005).

Teaching Strategies

A reading activity used in many ABE classrooms is *round-robin* reading, in which one learner at a time reads aloud while the other learners listen. Although this is a familiar classroom activity, teachers may want to consider whether or not round-robin reading is worth their instructional time. The more time learners read aloud, the more they improve their fluency levels. But in round-robin reading, each learner spends much of the time waiting for a turn (Stahl, 2004). Learners can spend more time reading aloud when they participate in the type of activities described below.

Guided oral reading

Using a text that is at the learners' current reading level or one level below it, the teacher begins this whole-class activity by presenting an overview of the passage and pre-teaching potentially difficult vocabulary. The teacher then reads aloud with emphasis on prosody and at a pace learners can follow. After the teacher models reading the passage, learners practice independently several times and then read for a classmate who gives them feedback. The teacher circulates and offers individual help with pronunciation, vocabulary, and intonation and pacing. Teachers can also provide the readers' their accuracy and rate scores. Learners may read the same text repeatedly or until they have reached a plateau.

Echo reading

The instructor reads a sentence aloud, modeling good pace and prosody, and then asks learners to repeat the sentence with the same speed and expression. Depending on learners' skills, teachers may begin echo readings with parts of sentences rather than whole ones. Teachers and learners work toward echo reading of longer passages, going over each sentence several times before reading a group of sentences (McShane, 2005).

Read along

Rather than waiting to repeat the reading after the teacher has read (as with echo reading), with this strategy, the learner reads aloud simultaneously with the teacher. Learners can also listen to pre-recorded tapes of passages and read along with them.

Pair reading

After choosing a text, the learning partners decide how many sentences each will read. While one learner is reading, the other follows along reading silently. Partners are urged to pay attention to prosody and reflect on their own reading.

Reader's theater

The instructor chooses a reading from plays, poems, short stories, or other materials adapted for dramatic reading. The class selects one or more character roles for each learner. Before the actual performance, learners prepare by reading their roles silently, aloud, in groups, and with feedback from the teacher. They do not need to memorize their parts. The primary focus of reader's theater is building prosody; therefore, the teacher should choose materials that are at the class's independent reading level. Learners' rate and accuracy also improve through reader's theater because of the repeated reading of the script during rehearsal.

Professional DevelopmentWorkshops

CALPRO offers two 4-hour *Research-Based Adult Reading Instruction* workshops in which adult educators examine the definitions and research basis of the four components of reading and practice instructional and assessment strategies for each component. In *Session 1*, participants explore alphabets and fluency, and in *Session 2*, vocabulary and comprehension. For workshop information, visit the CALPRO Web site, www.calpro-online.org, and click on the "calendar," or contact your local CALPRO Professional Development Center.

Study Circles

CALPRO promotes site-based professional development on adult reading instruction by training teachers to facilitate study circles at their agencies. Study circles offer teachers an opportunity to develop their knowledge base in reading instruction as they read about, discuss, and explore the latest research on reading. For information on study circle facilitator training, visit the CALPRO Web site or call 800-427-1422, toll-free in California.

Additional Resources on Fluency

The Adult Reading Components Study (ARCS)
www.nifl.gov/readingprofiles/arcs.htm

Applying Research in Reading Instruction for Adults: First Steps for Teachers
www.nifl.gov/partnershipforreading/publications/adult.html

National Center for the Study of Adult Learning and Literacy
www.ncsall.net

National Institute for Literacy
www.nifl.gov

Reading and Adult English Language Learners:
A Review of the Research
www.cal.org/caela/research/raell.pdf

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