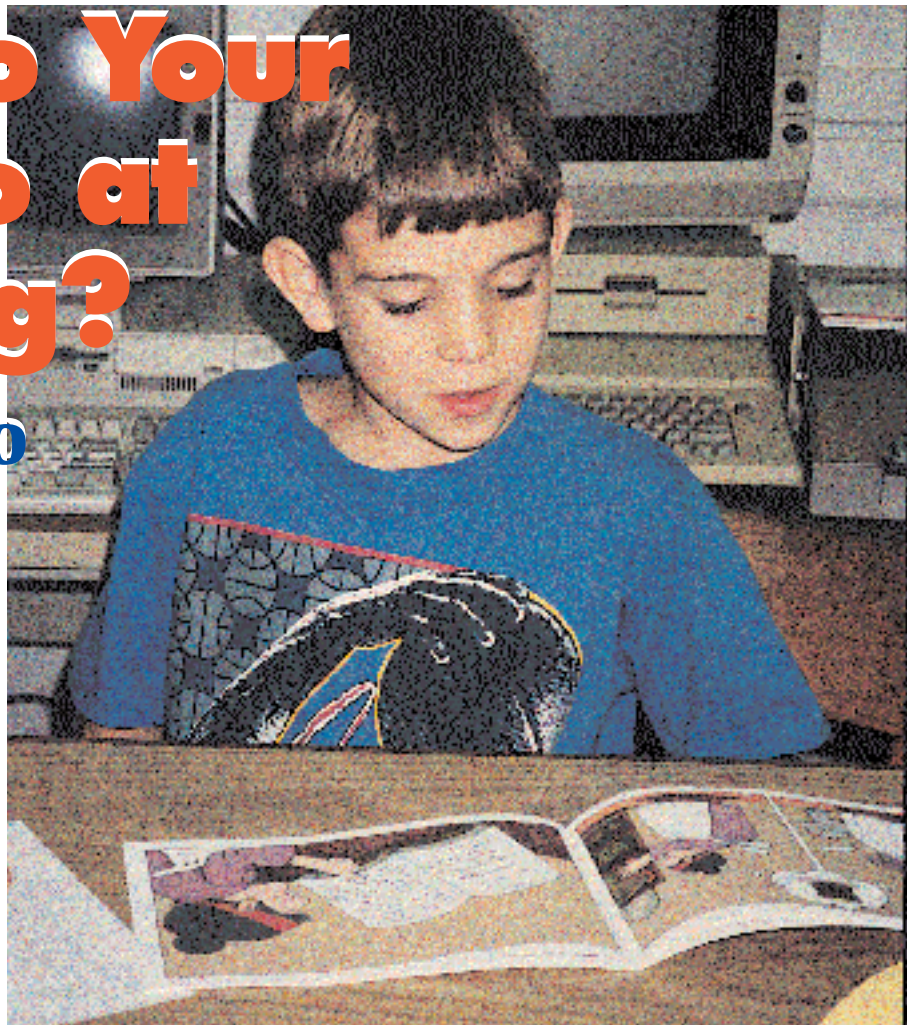
How Do Your Kids Do at Reading?

And How Do You Assess Them?



David L. Tucker

Jeffrey P. Bakken

A related question is "What steps has your school taken to more closely link assessment and instruction?" In fact, this question prompted this article.

In this article, we attempt to answer this question as it applies to oral reading and the difficult task of assessing how well students with learning disabilities read. We have found that answering this question has led us to reexamine our beliefs about learning—because these beliefs affect how we teach and how we evaluate what students are learning.

> *"To cure our 'epidemic' of learning disabilities, we need to begin by dispensing with the concept of learning disabilities itself. . . . "*
>
> **—Phi Delta Kappan**

The Question of Disability

There is a clear need to reexamine both instruction and assessment in reading within the field of learning disabilities. The November/December 1997 issue of *CEC Today* reported:

> The high number of students identified as having learning disabilities—50% of all students with disabilities—is causing speculation that the methods used to determine the presence of a learning disability are invalid. The problem centers around the approximately 80% of students with learning disabilities who have reading problems. ("Reading Difficulties," 1997, p. 1)

An article in *Phi Delta Kappan* followed in January 1998. The authors concluded:

> To cure our "epidemic" of learning disabilities, we need to begin by dispensing with the concept of learning disabilities itself could focus their time and energies on instruction, on consultation and collaboration with other practitioners, and on educationally relevant forms of assessment. . . .We would like to see learning disabilities specialists become, simply learning specialists. (Spear-Swerling & Sternberg, 1998, p. 401).

Educators and researchers are calling for a change, not only in assessment and instruction, but also in a totally different belief system about learning, particularly as it applies to children receiv-

TEACHING Exceptional Children, Vol. 32, No. 6, pp. 14-19.

ing special education services and who need support in reading instruction. Thus, to address a change in assessment, particularly of reading, the first question a person needs to ask is, "What is my model of reading?"

Theoretical Models of Reading

Before the 1970s, most experts in the field of reading viewed reading as a visual-perceptual phenomenon. Focusing on words and pronouncing those words correctly was the underlying belief about reading instruction (K. Goodman, 1986). Children who were not successful with this *exact word-bound model* were often considered candidates for special help or services outside the regular classroom. Educators and researchers then designed programs that focused on correct word pronunciation to help children who needed more support in reading.

In the 1970s and 1980s, the relationship of language and reading began to emerge. "Written language has all the basic characteristics of oral language: symbols and system used in the context of meaningful language acts (literacy events)" (K. Goodman, p. 23). This finding also gave rise to the view that to help children who needed more support in reading, teachers needed to have a greater understanding of the development and role of language in the lives of young children. This newer view about reading as a *language-based activity* gave rise to two sets of assumptions about the two current, dominant views of reading instruction: first, that reading is *taught to* children, and second, that reading develops as part of children's *natural language development* (what Weaver, 1994, called "developing literacy").

The assumptions underlying efforts to teach children to read differ from those of teachers who believe in the natural language development of children as part of the reading process. Teachers of this latter belief try to help children *develop* reading and writing more naturally and easily. Differences in the assumptions are seen in two models of reading:

- *Transmission* model, supportive of "teaching reading."
- *Transactional* model, supportive of "developing literacy."

Table 1 contrasts the differences between the views that emphasize teaching to read and helping children develop literacy (Weaver, 1994).

To address a change in assessment, particularly of reading, the first question a person needs to ask is, "What is my model of reading?"

Shift in Curriculum-Based Assessment

In an attempt to move from the norm-referenced measures throughout the last few years, curriculum-based measures have emerged on the assessment scene. The intent of curriculum-based assessment (CBA) is to assess learning of students using instructional materials of the classroom. Although educators began to use CBA to assess reading, the model of reading, itself, didn't change; and schools retained a transmission model. In oral reading assessment, for example, teachers still counted the number of words wrong, as well as the number of words read correctly within a designated time. This type of assessment still focused only on the final *product*.

Table 1. Transmission and Transactional Reading Model

Transmission Model (teaching to read)	Transactional Model (developing literacy)
Concern for developing "reading readiness" prior to reading instruction	No division between readiness for reading and learning to read; emergent reading (writing, literacy) seen as continuous process, without division into stages
Significant time spent teaching, practicing, and testing skills	Significant time spent actually reading and writing and discussing literature
Worksheets and workbooks on reading and writing skills	Time spent on reading and writing for real world purposes and for enjoyment
Emphasis on pronouncing exact print	Emphasis on meaning first
Reading is taught as a subject, separate from writing and other subjects—"isolated skills"	Reading and writing strategies and skills are discussed and explained in meaningful context
Emphasis on stages of development across individuals	Emphasis on individual growth
The term *development* typically signals commitment to stage theory	The term *development* typically signals commitment to concept of emergent literacy

In contrast, teachers who use the transactional model of developing literacy need appropriate assessment tools that focus on the reading *process.* One such tool is called "miscue analysis."

Miscue Analysis

Miscue analysis helps teachers to assess reading and gain insights into the reading process, not the product. This type of analysis began as a research tool in 1963 as a way to describe the reading process. Subjects read orally a somewhat challenging story they had never seen before.

From the earliest research attempts, two insights became clear. First, oral reading is not the accurate rendition of the text that educators assumed it was. Readers, even good ones, make errors.

Second, language insights were appropriate for describing reading behavior. The errors that readers made were based on the three systems of language, not just random errors (K. S. Goodman, 1973). These systems are syntactic (sentence structure), semantic (meaning) and graphophonic (letter-sound relationships). The word *miscue* emerged and has been defined as "the deviation between the oral response of the reader and the expected response of the text" (Allen & Watson, 1976, p. 7). Miscue analysis was built on the assumption that the response that a reader makes while reading is cued in some way by the reading situation and the use of language. As a result, these responses, or rather miscues, vary qualitatively (Allen & Watson).

Miscue analysis, then, is a *qualitative analysis* that goes beyond the typical quantitative analysis of just looking at surface behavior—"correct" and "incorrect" words. Using miscue analysis, teachers evaluate why readers make certain responses to the text and assume that these "errors" derive from the language and thought that the reader brings to the written material in the attempt to construct meaning from print. This view is a positive view and recognizes that the reader needs support.

***Two current views of reading instruction are that (1) reading is* taught to *children and (2) reading develops as part of children's* natural language development.**

The use of the concept *miscue* differs from the traditional, transmission use of the word *error* or *mistake.* Error and mistake indicate that something is wrong and needs fixing; the words carry a negative connotation. In contrast, miscue analysis, from a more positive standpoint, allows teachers to plan reading programs and use instructional strategies that build on strengths, rather than on weaknesses (Y. Goodman, Watson, & Burke, 1987). Using miscue analysis, teachers focus on what the reader *can* do with print, as opposed to what the reader can't do.

Miscue analysis is truly curriculum-based because a student's reading of a passage or story serves as the assessment tool, with the focus being on how a reader constructs meaning. If student assessment is to be instructionally relevant, particularly from a transactional model, miscue analysis is the appropriate tool for both instruction and assessment. "The process of learning to do miscue analysis builds and extends many concepts about language that are needed to understand both the reading process and miscue analysis itself" (Y. Goodman, et al., 1987, p. 7). Understanding the procedures, however, do not require sophisticated language knowledge (Y. Goodman, et al.).

In this article, we present two examples to show how these beliefs can be transferred to the practical world of assessment. The two readers, Brett and Gary, in the examples were second graders who read a story orally at the end of the school year. Both readers had already received the label of learning disabled and were receiving special education services in reading instruction. Their reading had been assessed by the transmission model (that is, an educator had counted the "errors"). In each of our examples, we have reproduced a paragraph, showing the marked miscues, from each reader's oral reading.

In the transmission model of oral reading assessment, which is focused on the final* product, *teachers counted the number of words wrong, as well as the number of words read correctly.

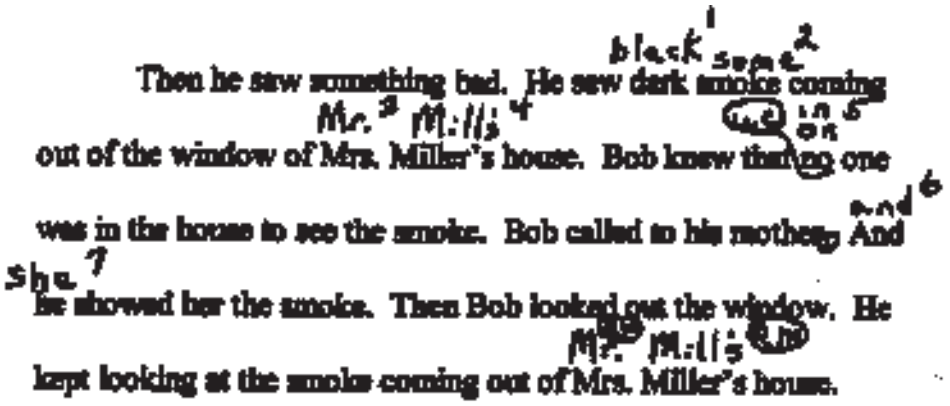
The paragraph in the first example (see box, page 17, "First Reader") was only one from a larger text; thus, we are limited in making complete conclusions about the strategies that the reader used to construct meaning. The seven marked miscues, however, did offer some insights. Typical of a younger reader, Brett was more *word bound,* which means that the miscues tended to be a one-to-one match with the word in the text. Still, though, he showed strong use of sentence structure in six of the seven miscues. Within the strong sentence structure, Brett maintained meaning or at least a sense of meaning. He knew when he was making print make sense. His use of the letter/sound relationship was obviously present. From a transactional model, this reader was beginning to show signs of the basis of effective reading strategies.

As with the first reader, the paragraph that Gary read was also only one from a larger text that limits complete conclusions about the strategies that the reader used to construct meaning (see box, page 18, "Second Reader"). Although Gary made more miscues than Brett, Gary demonstrated a stronger development of strategies and took more risks in his attempt to construct meaning.

First, Gary was not as word bound because when he self-corrected, he went back farther than just the one word to correct (indicated by "c" by the teacher), as noted in Miscues 1 and 4, even though Miscue 4 is an overattention to print. This reader also showed a strong sense of the value of self-correcting. He interrupted his reading and did

First Reader (Brett)

A second grader has read this passage orally, and the teacher has marked his "miscues" on the text. The numbers to the right of the miscues correspond to the following discussion:



***Miscue 1. Substituted* black *for* dark.** Brett retained the adjective slot with this meaningful substitution. He also showed some graphophonic (letter/sound relationship) awareness as both words contain "a" and "k" along with similar letter configuration of the "b" for the "d." The meaning was not interrupted.

***Miscue 2. Substituted* some *for* smoke.** This miscue did not fit the sentence structure of the entire sentence but made some sentence structure acceptable with the last part of the sentence. Overall, the meaning was interrupted, but Brett showed use of the graphophonic system through the use of four of the five letters, as well as some sound similarity.

***Miscue 3. Substituted* Mr. *for* Mrs.** Brett retained the notion of a title, and the substitution was meaningful. The substitution definitely showed strong letter/sound relationship. Some meaning was lost as the switch in gender occurred, although a question could be raised as to how much of an impact on the story the change in gender created.

***Miscue 4. Substituted* Mill's *for* Miller.** Brett retained the name slot with a proper noun and even showed further language and graphic strength by putting the " 's " on the name. In the previous paragraph, the reader had substituted "Mill" for "Miller." So, this miscue showed that the sense of language dictated the necessary attention to print. The miscue had high sound similarity, and meaning was not interrupted.

***Miscue 5. Substituted* in *for* on.** Brett first pronounced the word as "on" and then tried to correct the word to "in," as noted by the "u c," which means "unsuccessful correction." Although the sentence structure of the entire sentence was interrupted, reading the miscue from the beginning and stopping at "in" showed that some sentence structure was maintained. While perhaps minimum letter/sound relationship, the attempt to self-correct demonstrated that the reader probably knew that he wasn't making sense. Overall, the meaning was interrupted.

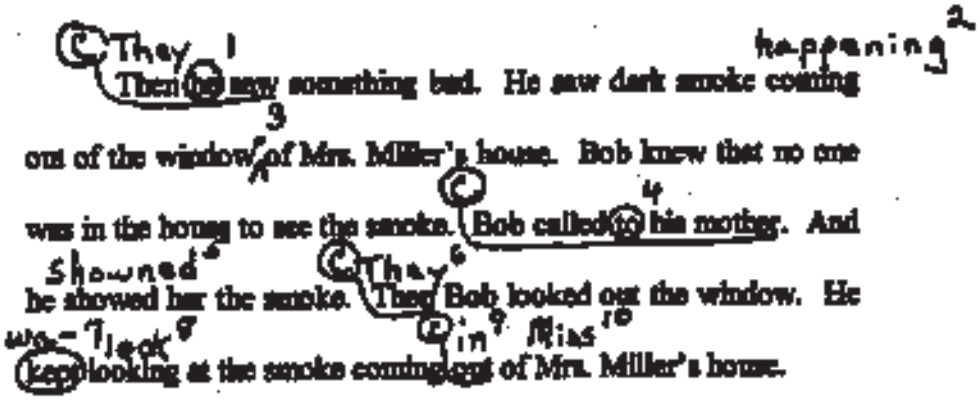
Miscue 6. Omission of the period and joining the two sentences together. Contrary to popular opinion about writing, "and" *can* begin a sentence. In this case, Brett showed appropriate sentence structure by eliminating the period and logically joining the two thoughts together. Meaning was certainly maintained.

***Miscue 7. Substituted* she *for* he.** Brett retained the appropriate pronoun slot with the substitution being somewhat meaningful. Rather than not knowing the sight words, Brett had just mentioned the word *mother,* which would make sense that the pronoun substitution would be *she.* Although the letter/sound relationship was high, the meaning was partially interrupted by the change in gender.

The two remaining miscues in this paragraph are repeated miscues ("r m") as Brett pronounced those same words with Miscues 3 and 4, respectively. Brett was showing consistency in the use of miscues, particularly with ones that probably made sense to him as he was attempting to construct meaning.

Second Reader (Gary)

Another second grader has read this text orally, and the teacher has marked his errors, or "miscues" on the text. In this case, Gary has made 10 miscues, as follows:



Miscue 1. A complex miscue, substituting **They saw *for* Then he saw.** The previous paragraph contained the names of three people that would cause Gary to naturally read "they" for "then," rather than not knowing the sight words. By omitting the word *he,* Gary maintained appropriate sentence structure and even meaning as the notion of seeing something bad was still present. He, however, realized that he had changed some of the print; so he self-corrected.

Miscue 2. Substituted **happening *for* coming.** Following the idea of something bad, Gary maintained sentence structure by substituting a verb for another verb. First, he left a partial word and made an unsuccessful attempt to correct but then used the first syllable of "hap" to predict *happening.* Although *happening* may not be the best choice of a verb in that slot, still he constructed meaning because he was aware of something bad occurring out of the window.

Miscue 3. Inserted a period. The insertion of a period at this point occurred not only at the end of a complete thought but at the end of a line in the original text. The insertion of the period did leave a prepositional phrase hanging, and he went back and reread, inserting the period. Before the self-correction, however, inserting the period at that point was a logical place and certainly appropriate language behavior for the developing reader.

Miscue 4. Omitted the word **to.** By omitting this word, Gary retained perfect sense. He showed overattention to print, and reread the *to* in its original place in the print.

Miscue 5. Substituted **showned *for* showed.** The first inclination was to say that the substitution was not a word or that Gary demonstrated unique language knowledge. First of all, he has retained the root, so the notion of "show" is maintained. The word *shown* is in the past tense, as is the word *showed,* depending on the use of the word. The reader probably knew intuitively that an "ed" was added for the past and that the "ed" ending was the more common means. Therefore, he added the "ed." In essence, he has created a "double" past tense. His letter/sound relationships were intact, and he has retained the root of the word because the notion of "show" was maintained. The meaning was only minimally interrupted, if at all.

Miscue 6. Substituted **They *for* Then.** The first inclination was to wonder if Gary knew his sight words, but this substitution was not really a sight word issue. He had just read about Bob and his mother. Based on this knowledge, the next logical thought that could follow was "they." Possibly in making the prediction of the next word, *Bob,* and seeing that sense was not being made, he self-corrected.

Miscue 7. Omitted the word **kept.** He pronounced part of a word that appeared to be the beginning of *was,* which would naturally follow the word *he.* Perhaps his attention to print told him that the word was incorrect and he just skipped it, which interrupted meaning and definitely affected Miscue 8.

Miscue 8. Substituted **look *for* looking.** With meaning being interrupted, he began to construct meaning by pronouncing the root of the word and appeared to begin to set up an imperative sentence, following the story line, when Bob looked out the window. He retained the verb slot and used his letter/sound relationships.

Miscue 9. Substituted **in *for* out.** With this substitution, the reader retained the adverb slot but realized that meaning was interrupted and quickly self-corrected.

Miscue 10. Substituted **Miss *for* Mrs.** Gary retained the feminine title slot and made a common miscue typical of young children. The meaning was not interrupted.

Teachers who use the transactional model of developing literacy use assessment tools that focus on the reading process, such as "miscue analysis."

something to construct meaning. Throughout the text, he demonstrated knowledge of sentence structure, of making print make sense, and of letter/sound relationships. From a transactional model, this reader definitely showed that he used effective reading strategies.

Comparative Analysis of the Reading Strategies of Both Readers

Let's look at our examples from the transmission-model viewpoint. We could make similar comments about both readers. Using the traditional, transmission model, we would recommend that both readers need practice with sight words. But remember—the transactional model in our examples demonstrated that the miscues went beyond mere word recognition and revealed students' understanding of sentence structure, recognition of letter sounds, and knowledge of previous text.

But, we might ask, don't we need to get students to pay more attention to print so they could focus on endings of words? From a transmission model, if the readers slowed down, they might get more words right. Does getting words right, however, give information on how readers are using strategies to construct meaning?

We also might ask whether both readers could use more phonics instruction to get words right. Yet, both these readers, within the actual context of reading classroom instructional print, demonstrated their knowledge of the letter/sound relationships. Within the context and attempt to construct meaning, they used their graphophonic knowledge.

The transmission model focuses on the product of reading, mainly that of getting words right. As a result, teachers assess surface reading behavior. In this model, educators assume that students will be able to understand the meaning of the text after they "get the words right"—or attain correct surface reading behavior.

The transactional model focuses on the process. Readers focus on meaning first with the belief that they will use background knowledge and sense of language to construct meaning as they are reading print.

Instructionally Relevant Student Assessment

Many students, particularly those who have received the label of learning disabled, have been "taught" to read based on the traditional, transmission model of instruction. Likewise, the content of typical courses in reading instruction for preservice teachers seeking certification in learning disabilities or mild disabilities has typically followed the transmission model. Are students with learning disabilities really learning to read well? Do we need to change our approach to ensure success for these students? Perhaps we need to view assessment and instruction from an integrated perspective and not as separate entities.

Because both special and general education teachers facilitate reading development, they should assess as they teach and teach as they assess. We hope our discussion about miscues will generate some thoughtful discussion on how to address the serious concern of reading instruction for students identified as learning disabled. At the heart of making student assessment in reading more instructionally relevant, is the crucial question, "What is your model of reading?" Let's explore that question and *then* develop instructionally relevant, practical assessment in reading.

References

Allen, P. D., & Watson, D. (Eds.). (1976). *Findings of research in miscue analysis: Classroom implications.* Urbana, IL: National Council of Teachers of English. [ERIC Document Reproduction Service No. ED 128 762]

Goodman, K. (1986). *What's whole in whole language?* Portsmouth, NH: Heinemann. [ERIC Document Reproduction Service No. ED 080 973]

Goodman, K. S. (1973). *Miscue analysis: Applications to reading instruction.* Urbana, IL: National Council of Teachers of English.*

Goodman, Y., Watson, D., & Burke, C. L. (1987). *Reading miscue inventory: Alternative procedures.* New York: Richard C. Owen. [ERIC Document Reproduction Service No. ED 280 009]

Reading difficulties vs. learning disabilities. (1997). *CEC Today, 4,* 1, 9.

Spear-Swerling, L., & Sternberg, R. J. (1998). Curing our "epidemic" of learning disabilities. *Phi Delta Kappan, 79,* 397-401.

Weaver, C. (1994). *Reading process and practice: From socio-psycholinguistics to whole language.* Portsmouth, NH: Heinemann.*

David L. Tucker *(CEC Chapter #648), Professor, Reading Education/Special Education; and* **Jeffrey P. Bakken** *(CEC Chapter #648), Associate Professor, Special Education, Illinois State University, Normal, Illinois.*

Address correspondence to David L. Tucker, Reading Education/Special Education, Illinois State University, Campus Box 5910, Normal, IL 61790 (e-mail: dltucke@ilstu.edu).

TEACHING Exceptional Children, *Vol. 32, No. 6, pp. 14-19.*