

Recent developments in miscue analysis

An important development in miscue analysis has been the increased involvement of students in reviewing audio-recordings of the miscues they have made during their reading (e.g. Wurr, Theurer & Kim, 2009). This is known as 'retrospective miscue analysis' (Goodman, 1996; Goodman & Marek, 1996). In working with quite advanced readers with English as a second language, Wurr, Theurer and Kim (2009, p. 332) recently concluded that:

We found RMA discussions changed all of the readers' perceptions of themselves; they benefitted from a more informed view of the reading process. In the process of discovering what real reading was, they discovered themselves as readers.

Conclusion

Miscue analysis is just one tool that has proved useful in diagnosing possible reading problems. There are factors, though, that impinge on people's reading, particularly their reading aloud, that need to be considered.

1. The first consideration is the familiarity of the content of the text and the discourse more generally in which that text is located. There is no doubt that, if the concepts and vocabulary in the text are known to the reader, then its level of difficulty is likely to be easier for that reader than would be the case for another reader who is not in this position.
2. A second factor is the comfort of the relationship between the reader and the diagnostician. I have used miscue analysis in initial interviewing but only where some rapport had been established and the reader did not appear to be particularly anxious.
3. Finally, miscue analysis works well in a tutor-student situation but is difficult to manage in a class where there are many students. One partial way around this in a diagnostic frame of use is to dispense with the audio-recording of the reading and to record directly onto a copy of the text that has been prepared with wide line spacing for comments. With practice, this can be effective and may be sufficient to give a preliminary indication of a student's reading behaviour.

References

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TUTOR TIPS

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Miscue analysis: A method of diagnosing a student's reading behaviour

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Miscue analysis was a method developed in the 1960s as a way of understanding people's reasoning when they read. It was based on the reading aloud of a complete text that was designed to be at a level of difficulty that was challenging to the reader but not too demanding.

The notion of miscues related to the three language cuing systems of **graphophonics**, **semantics** and **syntactics** on which it was believed that reading was based. The graphophonic system derived from the relationship between the written forms of letters and letter combinations and their sounds, while semantics was based on the meaning of words, phrases and sentences, and syntactics on grammar. It was understood that these three systems worked together when a person read a text. This interaction is shown below in Figure 1, an image cited by Turbull (2002) and reproduced from the Reading K-12 Curriculum (1978). These three cueing systems are still important today.

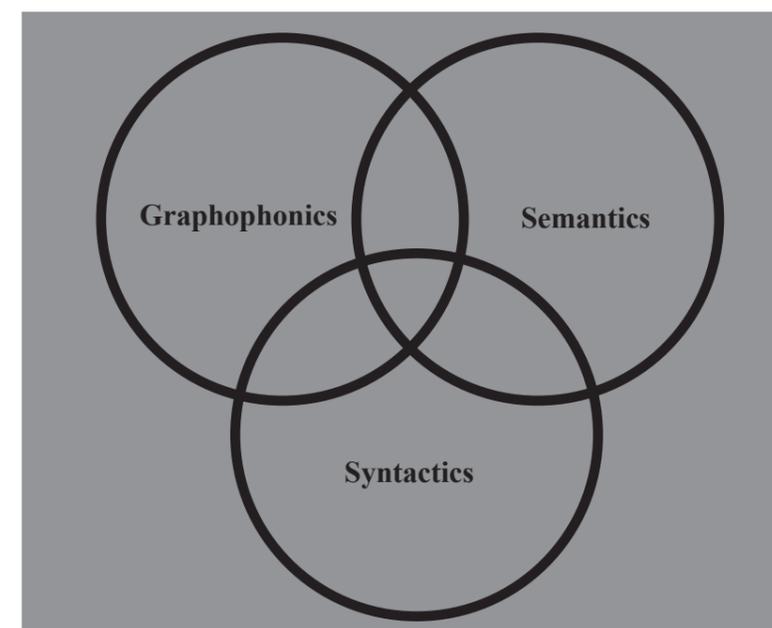


Figure 1: The three intersecting cueing systems for reading



In addition to these cueing systems, the additional reading strategies that learners employ while reading aloud (e.g. **'sampling, inferring, predicting, confirming/disconfirming and correcting'**) (Martens, 1998, p. 177) can also be identified and used to help diagnosticians to see through the 'window' (Goodman, 1970) that becomes available through miscue analysis to a learner's reading behaviour.

This process, intended to provide some insight into how learners use print when reading, involves asking them to read a whole text aloud and, while this is occurring, recording this reading performance and replaying it to identify changes (or miscues) that were made by the reader and other aspects of their behaviour (such as hesitations, corrections, etc.) that were recorded during their reading. A markup system, shown in Table 1 below, was developed for recording these miscues.

In a traditional process of miscue analysis, immediately following the reading, learners are asked to retell the gist of the text to determine their comprehension of its key meanings. In my experience, though, I have found that often learners are so focused on their oral reading that they do not take much notice of the meaning. It is useful, therefore, to ask them to provide this information after they have read the text silently, either before or after their oral reading, to determine their understanding of what the author has written.

Table 1: Miscue markup legend (Adapted from Miscue analysis at <http://coe.fgcu.edu/faculty/ray/red/website%20pages/miscue.htm>)

Miscue	Markup
Substitution	Write substituted word/sound above the line of print.
Self-correction	Write and circle the symbol SC for successful self-correction. Write and circle the symbol UC for an unsuccessful self correction.
Omission	Circle words or punctuation that have been omitted.
Insertion	Use a carat (^) above the space where the insertion occurred and write the inserted text.
Reversal	Use an arrow to show how word parts were reversed.
Repetition	Underline the repeated text.
Hesitation	Use the letter h and a series of dots to indicate a hesitation and its approximate length.

Example of miscue analysis

The text below about learning to drive a car is one that I wrote years ago specifically for the purpose of miscue analysis. It is fairly easy but contains a number of multi-syllabic words likely to be in readers' vocabulary but that may need to be decoded (e.g. 'instructor' and 'accelerator') and some irregular words (such as 'scared' and 'sweating'). Even though it is short, I have found that it served its purpose quite well.



Getting a Driver's Licence

I was scared even before I booked the first lesson. On that Monday morning, when I first sat in the driver's seat, I was sweating. The driving instructor was very kind, though. He put me at ease by telling me jokes.

I gradually learned to use the accelerator and brakes and to steer properly around the winding roads of Mount Coot-tha. It was just as well the instructor changed the gears initially as I couldn't have coped with that as well.

Below is a markup of a hypothetical reading of this text. By examining it, we can begin to understand a reader's particular behaviour.

Markup of first paragraph of text

scarred

S...,scar....

I was scared even before I booked the first lesson. On that Monday morning, when I first sat in the driver's seat, I was sweating. The driving instructor was very kind, though. He put me at ease by telling me jokes.

Analysis of markup

An initial observation of the reader's response is that the text seems to be too difficult. There have been many miscues made in the light of the length of this paragraph. Another observation is that most of the miscues indicate that the reader has reasonably good symbol-sound knowledge but is not attempting to make much sense of the text. The retelling of its meaning after a silent reading would confirm or disconfirm whether this is the case.

If, after further investigation, perhaps through talk with him/her, it becomes clear that the reader is, indeed, not generally actively searching for meaning during reading, then this could be emphasised in a reading program.

Other types of readers

What is more common, however, than the behaviour that is marked above, is that adult readers know that texts make sense. In contrast, what many are not strong with are the decoding aspects of reading. For example, if the reader said 'sweating', instead of 'sweating', this might indicate that there was an attempt to find meaning but rather than match the letters with their sounds, a guessing behaviour was evident. Sometimes guessing can be acceptable (for example, when skilled readers skip over unknown names when enjoying a novel), but, generally, readers need to be able to decode words effectively. For example, they need to know that the word 'instructor' comprises three parts, namely 'in', 'struct' and 'or'. It is difficult to help adult students with decoding because they did not learn to match sounds and written symbols when they were young and it is hard to hear the differences in sounds when one is an adult. However, there are a number of useful programs available now (some free on the internet) that help readers to improve their decoding skills.

