

Miscue Analysis as a Diagnostic Tool: Exploring English Reading Challenges among Chinese Middle School Students

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Abstract: With the increasing importance of English, Chinese middle school students face significant challenges in developing English proficiency. This study explores the English reading abilities of Chinese middle school students through the innovative method of miscue analysis, which examines the deviations from the expected response during the reading process to reveal their underlying reading strategies and shortcomings. Pioneered by Ken Goodman, miscue analysis has provided valuable insights into reading behaviors across diverse populations. This research involves 40 junior high school students from Tianjin Foreign Language School, analyzing the types and causes of miscues in their reading process. The findings indicate that these students mainly face challenges such as having a limited vocabulary, making grammatical errors and experiencing comprehension difficulties. The result emphasizes the potential of miscue analysis as a diagnostic tool in second-language education, offering educators a deeper understanding of students' reading processes, guiding the development of targeted interventions to enhance the quality of second-language education. Future research should focus on expanding the sample size, developing specific scientific interventions to increase credibility, and applying miscue analysis to broader student populations and contexts to provide a comprehensive understanding of factors influencing English language learning in China.

Keywords: English learning, miscue analysis, education, TESOL

1. Introduction

Reading is a fundamental cognitive process that involves the complex interaction of linguistic, cognitive, and social factors. Researchers believe that it can play a critical role in immersing students in the new language they're learning since both school and classroom libraries are integral parts of this process [1-4]. In the context of second-language acquisition, understanding the intricacies of the reading process is crucial for educators and researchers aiming to improve language proficiency and literacy among learners. One innovative method for examining the reading process is to analyze miscues, which are deviations from the expected response during reading.

This method, pioneered by Ken Goodman, offers a unique window into the strategies and thought processes employed by readers, particularly those learning English as a second language (L2). According to Brown and Marek, miscue analysis has gained significant attention in the field of reading research, providing valuable insights into the reading behaviors of diverse populations, including native speakers, bilinguals, and multilinguals [5]. However, despite its potential to enhance our understanding of L2 reading, this method has been underutilized in the study of English reading

abilities among Chinese students. Given the importance of English as a global language and the challenges faced by Chinese middle school students in acquiring English proficiency, exploring the application of miscue analysis in this context is both timely and necessary.

This study aims to fill this gap by examining the English reading abilities of middle school students in China through the lens of miscue analysis. By analyzing the types and causes of miscues, this study seeks to identify the key challenges these students face in their reading process and provide recommendations for improving their English language education. Specifically, this research will employ miscue analysis to investigate the reading performance of 40 junior high school students from Tianjin Foreign Language School. The study will focus on identifying common miscue patterns and their underlying causes, such as vocabulary limitations, grammatical errors, and comprehension difficulties. This research not only contributes to the existing body of literature on miscue analysis but also offers practical insights for educators working with L2 learners in China.

2. Literature Review

The term “miscue” was coined by Ken Goodman to describe an observed response in the reading process that does not match the expected one. Goodman uses the term “miscue,” rather than “error” or “mistake” to avoid value implications. He states that the departures from the text are not necessarily a negative aspect of the reading process but rather “windows on the reading process” [6].

Miscues are seen by a lot of researchers as revealing insights into a reader’s understanding and thinking processes during reading. According to these researchers, miscue analysis is a diagnostic tool that helps them gain insight into the reading process. Existing miscue analysis research has included native English speakers studied by Y. M. Goodman and colleagues in 2005 as well as Ken Goodman and Y. M. Goodman in 2004, monolingual and bilingual speakers of other languages researched by Coll and Osuna in 1990 as well as K. Goodman and his colleagues in 2012 [7-10]. Besides, following the miscue analysis, Mikulec in 2015 and Wurr, Theurer, and Kim in 2008 respectively explored proficient non-native speakers of English [11,12]. All in all, researchers have suggested that all readers, including bilinguals and multilinguals, can make use of the same cueing systems because the effect of miscue analysis is holistic. Furthermore, Goodman argues that ELs may miscue in both syntactic and semantic meaning making [13]. So, it is a critical tool to understand ELs’ miscues so their reading capabilities can be better assessed. Goodman’s article illustrates the significance of miscue analysis, especially in second-language learning, in enhancing our comprehension of the ELs’ grading system and guiding educational methods.

However, few researchers have applied the method to study the English reading ability of Chinese students, which is of great importance to middle school students, accessing their vocabulary and grammar knowledge. Since a considerable number of middle school students have poor standards in English, with numerous mistakes in phonetics, grammar, and meaning making. This makes it difficult for them to keep up with the teaching progress, thereby affecting the learning of subsequent knowledge. In this situation, miscue analysis has become a significant way of finding their current English standards and problems of learning.

3. Method

3.1. Subjects

There are a total of 40 junior high school students in this study, all of whom are from Tianjin Foreign Language School, a junior high school specialized in language study in Tianjin. There were 40 students, including 20 boys and 20 girls. Five students were excluded from the data without providing qualified answers.

All the qualified participants in this study are physically and mentally healthy and have no experience of dropping out of school. All of them are proficient in Chinese, which is the daily language of their family members. While Chinese being their first language, their second language is English. In order to ensure the privacy of the subjects, all participants are treated anonymously in the study.

3.2. Material

In this article, one piece of work will be selected according to the topics in the 8th grade English textbook as the reading material for students. After selection, a text originally found in Renjiao version English textbook named “Beauty In Common Things”, after slight revision according to the requirements set by Goodman, was chosen as the reading material. This text meets the following requirements:

(1) The text should have 500 words or more, and produce at least 25 errors during one reading. This ensures that the length and difficulty of the text is suitable for in-depth reading analysis.

(2) The text should contain different types of language structure and vocabulary to facilitate the analysis of students’ reading strategies and comprehension abilities. This may include complex sentence structures, uncommon vocabulary, or culture-specific expressions.

(3) The text should be instructive, capable of sparking student engagement and involvement, and able to mirror various forms of misinterpretation students might encounter while reading [14].

3.3. Reading Analysis Procedures

Prior to reading, readers are told the purposes of the miscue analysis and informed that, after they finish reading, they will be asked to retell what they have read, record the whole process and send it to the researcher. During the reading process, the text is open to every student. After the reading, the student is asked to retell the storyline based on the text without it in sight.

Collecting the record of the records of each student’s reading and retelling. It then recorded all the students’ mistakes based on these records and carried out error analysis according to Goodman’s method to analyze the reasons behind the mistakes. Before the analysis, the researcher concluded that vocabulary and syntax are the most significant problems that impede middle school students’ English learning in China and are also the main reasons for the majority of mistakes.

4. Result

Table 1: The basic situation of miscue analysis

	Number of the Miscue	Number of People Who Make the Miscue
Substitution	143	32
Omission	35	18
Insertion	20	10
Refreshing and Abandoning a Correct Form	5	5
Regressions or Repetitions	36	12
Regressing and Correcting Miscue	63	25
Substitutions Often Called Reversals	1	1
Regressions and Unsuccessfully Attempting to Correct	22	9
Partial Miscues	35	20

Table 1: (continued).

Nonword Substitutions	71	22
Intonation Shift	1	1
Pauses	10	6
Repeated Miscues	13	5

Collecting the data from the qualified answers, it's clear to see from Table 1, the most significant miscues are caused by lack of vocabulary. The most common miscue in this study, the Substitution of Words, combines 143 miscues in total. Most of these kind of miscues happened between words with similar spelling or meaning. This can also happen because of some minor grammar mistakes, such as mistaking a noun as an adjective.

Another kind of miscue that happened because of vocabulary in this study is the Non-word Substitution, which is 71 in total. It is a kind of miscue provided by the reader who pronounces a word doesn't exist. This kind of miscue happened because of wrong pronunciation caused by a limited range of vocabulary. The reader who made this kind of mistake tried to pronounce the word by following the rules of pronunciation. However, in the process, they failed to anticipate the correct way.

Except for the Substitution of Words and Non-word Substitution, there are still a variety of miscues caused by limited vocabulary. Two kinds of miscues—Regretting and Correcting the Miscue and Regression and Unsuccessfully Attempting to Correct—are both derived from the reader's wrong pronunciation with 63 and 22 in number respectively. In the process, students noticed their uncertainty in pronunciation and attempted to correct themselves according to the rules of spelling. Sometimes they could succeed, but sometimes not. Another example of this type is partial miscues, which is 35 in total. The readers who made this kind of mistake pronounce only a part of a certain word, leaving it unfinished, which is also caused by the same reason—lack of vocabulary.

Pauses and Regression or Repetitions are the group of miscues caused by meaning making or understanding. In this study, the subjects made 10 pauses miscues and 36 regression or repetition ones. Besides, about one fourth part of the Substitution miscues are also caused by understanding. All in all, there are 81 meaning making miscues in total. The number is the second largest, but much lesser than the number of the miscues concerning vocabulary. Take the results of the retelling into consideration, we find out that the general understanding of the whole passage is not a big problem for the students, but some complex sentence or words can be troublesome to them.

Last but not the least, the 35 omission miscues and 20 insertion miscues happen because of minor grammar mistakes. Many students more or less ignore several unimportant words, especially those articles and propositions when they are reading a passage slightly above their level. Sometimes they also add some words into the original text according to their own habits and understanding. These words are usually link verbs, adjectives and adverbs. This miscues happened because of students' misuse of grammar rules and anxiety when dealing with a challenging passage.

In miscue analysis, the quality of miscues is determined by the degree to which a miscue disrupts or enhances the meaning of the text. Miscues with high quality do not interfere with the construction of a meaningful text and usually result in semantically and syntactically acceptable sentences. Semantic acceptability means that the miscue results in a sentence that makes sense in the whole story or article. Syntactic acceptability means that the language of the sentence in which miscues is embedded are grammatically acceptable.

Very unfortunately, in this study, most of the miscues from the students in Tianjin Foreign Language School, which is specialized English language learning school, are of low quality.

Furthermore, the qualified answers contains a large amount of semantic and syntactic miscues, offering us a chance to delve into the problems of middle school students' English learning.

All in all, we found out three major problems of middle school students' English learning from the study. The most significant one is that most of the students haven't got a wide enough vocabulary to recognize words like "cherish", "structure", "sculpture" and so on. This hinders them to read the passage and retell it fluently, leading to hesitation and broken English as a result. The second one is the grammar misuse of the students, caused by unfamiliarity of this kind of knowledge. So, they omit or insert minor parts of a sentence, as well as other miscues like substituting a verb as a noun. Last but not the least, they have understanding problems when they are repeating and regressing. Most of them can reflect on the sentence and figure out the meaning by themselves.

5. Conclusion

This study has provided valuable insights into the English reading abilities of middle school students in China, particularly those from Tianjin Foreign Language School. Through the application of miscue analysis, this study has identified several key challenges faced by these students, including limited vocabulary, grammatical errors, and difficulties in comprehension. These findings highlight the importance of these issues, help to improve the overall reading educational proficiency in China. Specifically, expanding students' vocabulary and reinforcing grammatical knowledge should be prioritized to enhance their reading comprehension and fluency. Additionally, the findings which incorporate miscue analysis into teaching practices could offer educators a deeper understanding of students' reading processes and help adjust their instructional strategies to meet individual needs.

The study has several disadvantages in need of advancement in the future. Firstly, the number of surveyed students is limited and regional. Therefore, the representativeness of the survey results is insufficient. Secondly, the survey can be more professional with strict rules and appropriate guidance. Future research should extend miscue analysis to a broader range of students and contexts and develop the method of guidance during the process, which could provide a more comprehensive understanding of the factors influencing English language learning in China. Furthermore, they could also focus on developing targeted interventions to address the identified challenges and explore the effectiveness of these interventions in improving students' reading abilities.

In conclusion, this study underscores the potential of miscue analysis as a diagnostic tool in second-language education. By identifying and addressing the underlying causes of miscues, educators can better support middle school students in overcoming their reading difficulties and achieving greater success in their English language studies.

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