

# Miscue Analysis of Oral Reading Among Non-Proficient Malaysian ESL Learners

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**Abstract-** Reading is a vital skill. Research has shown that proficient learners usually have a greater comprehension of the reading material. This study focuses on non-proficient learners' oral reading as a direct method of assessing their reading ability. Miscue analysis is used as a tool to gather information and measure strategies used in reading and comprehending a given material. The study investigates the types and frequencies of miscues made by learners when they orally read texts and assesses learners' comprehension based on the oral reading through the use of multiple-choice questions. The number of miscues made and the scores for the multiple choice questions are patterned using Microsoft Excel program and are converted into percentages. This study found that when the number of miscues made by the learners reduced during the oral reading process, the scores on the comprehension section did not necessarily improve. The types of miscues made by learners were omission of words namely plural and past-tense endings of verbs, substitution of words such as the pronoun 'she' with 'he', and hesitation especially with complex words. The findings imply that learners have language problems in grammar, vocabulary, pronunciation, and the use of reading strategies.

**Keywords-** Miscue Analysis; Reading Comprehension; Oral Reading; Language Problems; Non-Proficient Learners; Malaysian ESL Learners

## 1. INTRODUCTION

A single-sentence definition of reading is that "reading is the ability to draw meaning from the printed page and interpret this information appropriately" (Grabe and Stoller, 2002: 9). The National Reading Panel (2000) note that the ability to do so (i.e. to derive meaning from print) requires, (a) the skills and knowledge to understand how phonemes, or speech sounds are connected to print, (b) the ability to decode unfamiliar words, (c) the ability to read fluently, (d) sufficient background information and vocabulary to foster reading comprehension, (e) the development of appropriate active strategies to construct meaning from print, and (f) the development of maintenance of motivation to read. These requirements subsume the skills or strategies which are necessary to become proficient readers.

As students read, it is discovered that they make miscues or errors (Goodman & Goodman, 2004). Non-proficient readers are more likely to make more miscues than proficient readers. Non-proficient readers are those who display problems while reading aloud. They are not able to identify certain words, omit selected words, do not have the capacity to use context clues to identify unfamiliar and

unknown words, are not able to emphasize commas when oral reading in series, and tend to omit punctuations (Ediger, 2005). In addition they tend to read slowly, haltingly, with little or no expression, which result in negative effect on text comprehension (Nes, 2003).

Reading disability is, in fact, a common learning disability. According to Hamilton and Glascoe (2006) at least one of five learners has significant difficulty learning to read. They define reading disability as a difficulty in sounding out words or acquiring sight word vocabulary. They point out that learners with this difficulty are not able to make sense of given text, and have delay in language and reading comprehension.

Despite reading disability being a problem among many learners, the issue is understudied. There is a scarcity of studies that investigate oral reading as an important skill for ESL learners and as a tool to gauge learners' reading disability. The present study is conducted to address this gap and provide insights into the reading disability of non-proficient learners in the context of Malaysia.

## OBJECTIVES

The aim of this study is on the reading disability of non-proficient learners by examining the miscues that they

make when reading. The objectives are to identify the types of miscues made by a group of Year 4 non-proficient primary school learners in Malaysia and to investigate how the miscues affect the reading comprehension of the learners. The research questions are:

1. What are the types of miscues made by Malaysian non-proficient Year 4 primary school learners during oral reading?
2. How do the miscues affect reading comprehension of the learners?

## 2. LITERATURE REVIEW

### 2.1 Miscue Analysis as an Assessment

A miscue is defined as an observed response that does not match what the person listening to the oral reading expects to hear (Goodman & Goodman, 2004). In the same vein, Davenport (2002) defines miscues as an unexpected response that a reader makes during his or her oral reading. Oral reading miscues are errors made by learners during the reading task. A miscue occurs when a learner produces a response which is different from the expected response. Miscues help to provide insights in understanding the reading process and can be utilized to measure learners' performance (Brown, Goodman & Marek, 1996). Miscue analysis is a method of diagnosing a readers' reading behaviour (Kelly, 2010). It involves reading aloud a complete text which is designed to be at a level of difficulty that is challenging yet not too demanding to the reader. Miscue analysis requires a good deal of time on the part of the teacher. Because of this time investment, a teacher may not select all of his or her students to do miscue analysis. Generally, this procedure is reserved for struggling readers. As there is a diagnostic quality to this assessment, miscue analysis is employed when a teacher is unsure of exactly why a certain student struggles with reading (Wilde, 2000). Suffice to say, less-proficient readers tend to make more miscues or errors when they read aloud.

### 2.2 Related Studies

Lim (1989) categorizes miscues into five types for ESL learners:

- a. substitution (the reader replaces a word with another word)
- b. insertion (the reader adds in a word(s) which do not occur in the passage)
- c. omission (the reader omits reading a particular word(s))
- d. reversal (the reader reads the words in the wrong order)
- e. mispronunciation (the reader tends to pronounce certain word(s) is a different sound variation from the word in the text)

Tolistelfi (2007) says there are seven types of miscues in oral reading:



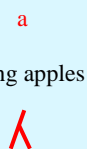






- a. substitution (occurs when the reader puts another word in place of the correct one)

- b. omission (occurs when the reader leaves a word out and it is done so quickly that it appears to be an accident)
- c. insertion (occurs when the reader adds a word that is not in the text)
- d. repetition (occurs when the reader repeats a word)
- e. refusal (occurs when the reader pauses on a word for 3 to 5 seconds but does not make any attempt to read it)
- f. hesitation (occurs when a reader pauses more than 5 seconds after attempting to read a word)
- g. self-correction (occurs when a reader has realized that he or she has made a mistake and immediately tries to correct it)

Juliana and Abosi (2011) categorized oral reading miscues as mispronunciation, substitution, insertion, omission, repetition, reversal, and refusal. From their study on Year 3 less proficient learners in Brunei Darussalam, they concluded that the most common miscue made by their students after reading four oral reading texts were substitution (8.51%), followed by mispronunciation (6.47%), and refusal (2.23%). Their students did not make any reversal miscue.

The types of miscues and their descriptors are tabulated in Table 1.

**Table 1: Type of Miscues**

Miscue	Signs/Symbols	Description
Substitution		Underline the word which has been substituted and write the word uttered by the learner on top of the original word.
Omission		Circle the word which has been omitted by the learner.
Insertion		A symbol  is put where new and non-existing words are created and inserted by the learner. The word that has been inserted is written.
Reversal		A symbol  is put on the words when two words are read in reversal manner.
Hesitation		Two lines are drawn under the word that the learner hesitates for 3 to 5 seconds while reading. After this period of time, the learner is prompted to continue reading without pronouncing the word entirely.
Self-correction		A symbol  is put when the learner self-corrects any and every mistake made during the oral reading process.

### 3. METHODOLOGY

A total of 30 non-proficient Year-Four Malay learners (10-year olds) from three schools around Putrajaya (a city, close to the capital of Malaysia, Kuala Lumpur) participated in this study. The learners' scores in the English Language paper of the mid-year examination of the schools were used to identify the less proficient learners. Although the learners are from three different schools, they took the same mid-year exam paper because the exam was a standard examination set by the local Department of Education. The exam concerned multiple-choice answers which involved computerised marking. Learners who scored 40% and less in the English Language paper were used for the study.

The instruments (see Appendix) used in this study were three selected reading texts of similar level of difficulty in English Language, followed by 3 multiple-choice questions for each text. Text A titled 'My Neighbour', Text B titled 'Rina, the pianist', and Text C titled 'The farm animals' all consisting of 150 words each.

The learners were referred as P1, P2, P3 and so on till P30. During the research, firstly, P1 read Text A and answered all three multiple-choice questions verbally. While this was going on, all miscues made by P1 on Text A were marked by the teacher and the answers for all three multiple-choice questions were taken down. The process for reading and comprehension of Text A was continued with P2, P3, P4, P5 and it went on till P30. Once all the learners from P1 till P30 had completed oral reading and comprehension of Text A, the whole rotation was repeated with oral reading and comprehension of Text B starting from P1 till P30. Upon completing Text B, finally the sequence was carried out from P1 till P30 for oral reading and comprehension of Text C. Oral reading of all three texts were completed by the learners on the same day.

The types of miscues done by the learners during the oral reading of the given text were identified using a checklist of miscues culled from the literature (see Table 1). As the learners orally read the given text, all the miscues done were noted down by the teacher using red pen with signs/symbols designed for easy and quick noting and referring.

Each text consisted of three multiple-choice questions. In each question, there were three options A, B and C to choose from. Learners had to choose the best answer and verbally read out the answer either as A or B or C. They had to choose only one answer from the choice of three. The questions were given to the learners in printed form after they had read the text and they had approximately ten minutes to answer all three questions. Learners were not assisted or guided in any way while answering the questions.

### 4. RESULTS

The results for this study are analysed based on the figures mentioned above. All the results are studied and examined

on two different categories, namely Miscue Analysis and Comprehension Check.

#### 4.1 Miscue Analysis

The percentage of miscues for Text A was 7.04%, Text B 7.98%, and Text C 4.82%. See Table 2. The miscues made on Text C were less than Texts A and B probably as a result of the readings of all three texts on the same day. The study shows that with practice or repeated readings, learners may make less miscues.

The number of miscues for all the three oral reading texts made by each learner ranged between 4 - 67 miscues. The highest number of miscues made is omission, 39.86% (353 miscues). This is followed by substitution, 35.33% (312) miscues and hesitation, 22.99% (203) miscues. Minimal miscues were made on insertion, 1.13% (10) miscues and self-correction, 0.68% (6 miscues). The reversal miscue did not occur in the data. See Table 3.

The total number of miscues made by all the 30 pupils for all the 3 oral reading texts is 6.54% (883 miscues of the entire number of words, that is 13,500 words read from the 3 texts by the 30 pupils).

#### 4.2 Comprehension Check

Answers given by the learners during the oral reading and comprehending session were immediately noted. Only correct answers were numerically tabulated.

The total number of correct answers for Text A was 56.67% (51) of the total correct answers. Text B was 57.78% (52) of the total correct answers, and Text C was 56.67% (51) of the total correct answers. See Table 2.

This totalled up to 57.04% (154) correct multiple choice questions from 270 multiple choice questions altogether.

**Table 2: Miscues and Reading Comprehension**

Text	Miscues (%)	Reading comprehension (%)
A	7.04	56.67
B	7.98	57.78
C	4.82	56.67

**Table 3: Types of miscues made**

Miscue type	%
Omission	39.86
Substitution	35.33
Hesitation	22.99
Insertion	1.13
Self-correction	0.68

### 5. DISCUSSION

The study shows that the learners committed less than 10% of miscues when reading. Accuracy of reading



comprehension however was only about 60% of the reading texts. The study reveals that 10% of miscues of the reading texts results in about 60% of reading comprehension. In other words, 40% of reading comprehension is lost.

The study also shows that with practice or repeated readings, the amount of miscues made can decrease. Reading comprehension scores, however, do not necessarily increase; they can remain the same. In short, the study reveals that although the number of oral reading miscues decrease, reading comprehension scores may not automatically improve. This finding supports the observation made by Juliana and Abosi (2011) that the number of miscues made is not necessarily the main factor that affects scores on oral comprehension questions.

As noted above in Findings section, Omission was the most highly miscued by the learners. The omission included omitting the '-s' and '-ed' at the ending of verbs. Examples are presented below. It is difficult to gauge the reasons why these endings of words were omitted. It could be as a result of negative transfer from the mother tongue (L1) of the Malay learners.

- a. -s endings of verbs were omitted.  
e.g. He *work* in Cyberjaya and *take* the bus from Putrajaya daily.

He *work* as a software engineer.  
...he *take* us to the playground.

Rina *love* to play the piano

- b. -ed endings of verbs were omitted.  
e.g. He *marry* on Merdeka Day...

We all *attend* his wedding dinner.  
...there *live* a rooster, a duck, a goat and a donkey on a farm.  
The duck *quack* loudly from the pond...

With regard to Substitution, the following were the common miscues:

- a. the word 'there' was substituted with 'they',  
e.g. One upon a time, *they* (there) lived a rooster, a duck, a goat and a donkey on a farm.
- b. the word 'she' was substituted with 'he',  
e.g. *He* (She) always makes us cupcakes.
- c. the word 'own' was substituted with 'won',  
e.g. She wants to make her *won* (own) music and be famous.
- d. the word 'every' was substituted with 'very',  
e.g. I wake my master up *very* (every) morning.
- e. the word 'I am' was substituted with 'I'm'  
e.g. *I'm* (I am) the most useful servant to my master.

Some substitutions were far from the original, for example 'neigh' was pronounced as 'nag' in '...the donkey would *nag* (neigh)'. This shows that the pupils are poor in their reading and do not have the capability of using the context to predict the words. The Substitution miscue may also be as a result of weak sight vocabulary and negative transfer from L1.

The next miscue most commonly made was hesitation. The common words hesitated by the pupils were 'engineer', 'attended', 'article', 'elegantly', 'pianist', 'functions', 'especially', 'bleat', 'neigh', 'grinned', 'thought', 'pounced' and 'quacked'. This shows that the learners have limited word attack skills and little idea on English word pronunciation. They rely on words visual approach; they are only able to pronounce words that they are familiar with. Other reasons maybe learners are unwilling to hazard a guess by using the context as aid. Learners may be anxious and reluctant to perform badly in public for fear of being labelled as a failure.

Although Insertions were of low frequency, they gave insights into learners' grammar problems. Some common insertions made by the learners were the preposition 'to', modal verbs such as 'can' and 'will', suffixes such as '-ly' and '-al', and the article 'a'. They could be overconfident in their oral reading assuming the language pattern to be as per their familiarity. Some examples are provided below.

- a. Preposition 'to'

e.g. Every evening, we can see him walk *to* back home from the bus stop ...  
She has *to* been going for piano lessons ...  
Every evening, we can see him walk back *to* home from the bus stop ...  
All adults and children like hearing *to* her play.

- b. Modal verbs 'can' and 'will'

e.g. ... servant *to* my master as I *can* carry him ...  
... she *will* sit elegantly at the piano and ...

- c. Suffixes '-al' and '-ly'

e.g. She get musical *notes* from the internet and ...  
Our parents trust*ly* Uncle Sam ...

- d. Article 'a'

e.g. She want *a* to make her own music and be *a* famous.

## 6. CONCLUSION

Classroom miscue analysis on language enables teachers to systematically examine oral reading behaviours that indicate learners' oral reading strengths and weaknesses in a focused and manageable way. Informed insights can be of assistance to teachers for making decisions about what to teach learners for instance grammar, vocabulary, pronunciation, and reading strategies. In the case of the present study, the learners displayed weaknesses in grammar (such as '-s' and '-ed' verb endings, pronouns 'she' and 'he', preposition 'to', modal verbs 'can' and 'will', suffixes '-al' and '-ly', article 'a', and word contractions), had problems in pronunciation of complex vocabulary items, and in the use of reading strategies (such as guessing words from the context and word attack skills). Future research on miscue analysis could involve further investigation into the link between miscues and reading comprehension since the study showed that lesser miscues may not necessarily result in better comprehension. Future research could also compare the miscues made by proficient and less proficient learners. Miscue analysis can

also be carried out in comparing the miscues made by learners of different schooling years to investigate the developmental pattern of oral reading and reading comprehension over time.

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## APPENDIX

### **Text A**

**Read the text aloud.**

### **My Neighbour**

Uncle Sam is my neighbour. He is very friendly. He works in Cyberjaya and takes the bus from Putrajaya daily. He works as a software engineer. Every evening, we can see him walk back home from the bus stop while we play in our garden. He will always smile and wave at us.

During weekends, he takes us to the playground. He will sit on the bench and watch us play. All our neighbourhood children will come out and play. Our parents trust Uncle Sam because they know he will take good care of us.

Last year, Uncle Sam got married. He married on Merdeka Day and there was an article about his wedding in the local newspapers. We all attended his wedding dinner.

Uncle Sam's wife, Auntie Liza can bake very well. She always makes us cupcakes. I'm glad Uncle Sam and Auntie Liza are my neighbours. I want to be just like Uncle Sam when I grow up.

**Answer the questions verbally.**

1. How does Uncle Sam go to work?
  - a) He drives to work.
  - b) He walks to work.
  - c) He takes the public transport.
2. Why do the children like Uncle Sam?
  - a) He is kind and friendly.
  - b) He can bake very well.
  - c) He is a software engineer.
3. Uncle Sam got married on
  - a) 1<sup>st</sup> January
  - b) 31<sup>st</sup> August
  - c) 25<sup>th</sup> December

### **Text B**

**Read the text aloud.**

### **Rina, the pianist.**

Rina loves to play the piano. Her parents sent her for piano lessons since she was six years old. She has been going for piano lessons for the past four years. She is in Grade 3.

When she plays the piano, she sits elegantly at the piano and moves her fingers gently. Sometimes she moves quickly over the keyboard. She loves to play classical music and latest songs on her piano. She gets music notes from the internet and plays them.

When there are family functions, Rina will always be there to play some music, especially after dinner. She enjoys playing it. All the adults and children like hearing her play. Her parents are very proud of her. Rina wants to be a great pianist when she grows up. She wants to make her own music and be famous. She says she feels very confident when she plays the piano.

**Answer the questions verbally.**

1. What musical instrument does Rina play?
  - a) The piano.
  - b) The drum.
  - c) The violin.
2. Rina has been taking piano lessons for the past
  - a) three years.
  - b) four years.
  - c) five years.
3. When does Rina usually play the piano at family functions?
  - a) Before dinner.
  - b) During dinner.
  - c) After dinner.

**Text C**

**Read the text aloud.**

**The farm animals**

Once upon a time, there lived a rooster, a duck, a goat and a donkey on a farm. The animals were fond of their master, a farmer. Every morning, the rooster would crow, the duck would quack, the goat would bleat and the donkey would neigh.

One day the proud donkey said, "I am the most useful servant to my master as I carry him around the farm".

The goat said, "I am the most useful because I provide milk for my master and his family".

The rooster said, "No, my friends! I am the greatest because I wake my master up every morning".

The duck just grinned and kept silent. It thought to itself, "Who cares? I can swim".

Suddenly a few hungry tigers pounced on the rooster and the goat. The donkey was chased to be eaten. The duck quacked loudly from the pond to warn the farmer.

**Answer the questions verbally.**

1. Who was the master for these animals?
  - a) The hunter
  - b) The gardener.
  - c) The farmer.
2. The rooster feels most useful to the master because it
  - a) provides milk for the master's family.
  - b) wakes the master up every morning.
  - c) carries the master around the farm.
3. Which animal was safe from the tigers?
  - a) The duck
  - b) The goat.
  - c) The donkey.