ORAL READING FLUENCY: LEARNING ENGLISH AS A SECOND LANGUAGE IN MALAYSIA

Gan Hui Hong

Bachelor of Science with Honours (Cognitive Science)
2015
UNIVERSITI MALAYSIA SARAWAK

Grade: _____________

Please tick one
Final Year Project Report ☒
Masters ☐
PhD ☐

DECLARATION OF ORIGINAL WORK

This declaration is made on the 26 day of JUNE year 2015.

Student’s Declaration:

I, GAN HUI HONG, 36108, FACULTY OF COGNITIVE SCIENCES AND HUMAN DEVELOPMENT, hereby declare that the work entitled, ORAL READING FLUENCY: LEARNING ENGLISH AS A SECOND LANGUAGE IN MALAYSIA is my original work. I have not copied from any other students’ work or from any other sources with the exception where due reference or acknowledgement is made explicitly in the text, nor has any part of the work been written for me by another person.

26 JUNE 2015
__________________________________________
GAN HUI HONG (36108)

Supervisor’s Declaration:

I, DR. JULIA LEE AI CHENG, hereby certify that the work entitled, ORAL READING FLUENCY: LEARNING ENGLISH AS A SECOND LANGUAGE IN MALAYSIA was prepared by the aforementioned or above mentioned student, and was submitted to the “FACULTY” as a *partial/full fulfillment for the conferment of BACHELOR OF SCIENCE WITH HONOURS (COGNITIVE SCIENCE), and the aforementioned work, to the best of my knowledge, is the said student’s work

26 JUNE 2015

Received for examination by: ___________________________ Date: ___________________________

(DR. JULIA LEE AI CHENG)
I declare this Project/Thesis is classified as (Please tick (√)):

☐ CONFIDENTIAL  (Contains confidential information under the Official Secret Act 1972)*
☒ RESTRICTED  (Contains restricted information as specified by the organisation where research was done)*
☐ OPEN ACCESS

I declare this Project/Thesis is to be submitted to the Centre for Academic Information Services (CAIS) and uploaded into UNIMAS Institutional Repository (UNIMAS IR) (Please tick (√)):

☒ YES
☐ NO

Validation of Project/Thesis

I hereby duly affirmed with free consent and willingness declared that this said Project/Thesis shall be placed officially in the Centre for Academic Information Services with the abide interest and rights as follows:

- This Project/Thesis is the sole legal property of Universiti Malaysia Sarawak (UNIMAS).
- The Centre for Academic Information Services has the lawful right to make copies of the Project/Thesis for academic and research purposes only and not for other purposes.
- The Centre for Academic Information Services has the lawful right to digitize the content to be uploaded into Local Content Database.
- The Centre for Academic Information Services has the lawful right to make copies of the Project/Thesis if required for use by other parties for academic purposes or by other Higher Learning Institutes.
- No dispute or any claim shall arise from the student himself / herself neither a third party on this Project/Thesis once it becomes the sole property of UNIMAS.
- This Project/Thesis or any material, data and information related to it shall not be distributed, published or disclosed to any party by the student himself/herself without first obtaining approval from UNIMAS.

Student’s signature: ____________________  Supervisor’s signature: ____________________

Date: 26 JUNE 2015  Date: 26 JUNE 2015

Current Address:
Lot 81, MDLD 3212, Taman Fajar,
91100 Lahad Datu, Sabah.

Notes: * If the Project/Thesis is CONFIDENTIAL or RESTRICTED, please attach together as annexure a letter from the organisation with the date of restriction indicated, and the reasons for the confidentiality and restriction.
ORAL READING FLUENCY: LEARNING ENGLISH AS A SECOND LANGUAGE IN MALAYSIA

GAN HUI HONG

This project is submitted
in partial fulfilment of the requirements for a
Bachelor of Science with Honours
(Cognitive Science)

Faculty of Cognitive Sciences and Human Development
UNIVERSITI MALAYSIA SARAWAK
(2015)
The project entitled ‘Oral reading fluency: Learning English as a second language in Malaysia’ was prepared by Gan Hui Hong and submitted to the Faculty of Cognitive Sciences and Human Development in partial fulfillment of the requirements for a Bachelor of Science with Honours (Cognitive Science).

Received for examination by:

--------------------------------------
(DR. JULIA LEE AI CHENG)

Date:
26th June 2015

Grade
ACKNOWLEDGMENTS

My sincere gratitude goes first to my supervisor, Dr. Julia Lee Ai Cheng. Thank you for recruiting me to your FRGS research team and sharing your knowledge with me to complete my final year project. I wish to express my special thank to you for allowing me to adapt your research instrument. I appreciate your illuminating guidance and support throughout the journey, academically and personally.

To all the participants, the school administrators especially Mdm. Chew, the ministry officers, and the university staff, thanks for your best co-operations to facilitate my tasks.

To my former colleagues, Miss Liew and Miss Law, thanks for sharing your precious teaching experience with me. To Yee Yee, Thye Ti, Pei Nei, Bella, and all my university friends, thanks for your genuine friendship care throughout my undergraduate studies. The adversity and cheers we came across would be our best memory in the campus.

Another big thank you I would like to bid to the families of Mdm. Sim and Dr. Lily Jee for showing your hospitality since the very first day I am here for my studies. Many thanks for spending your joyous weekends with me. To my parents and sisters, thanks for the daily phone calls, your laughter blows my stress away.
# TABLE OF CONTENTS

ABSTRACT ..............................................................................................................................v
ABSTRAK ...........................................................................................................................vi
CHAPTER ONE INTRODUCTION ..........................................................................................1
CHAPTER TWO METHOD .....................................................................................................10
CHAPTER THREE RESULTS .................................................................................................15
CHAPTER FOUR DISCUSSION ...............................................................................................17
REFERENCES .......................................................................................................................28
APPENDIX A ERROR PATTERNS OF MISPronunciations AND EXAMPLES ........36
APPENDIX B HESITATIONS OF WORDS READ .................................................................38
APPENDIX C FREQUENCY OF OMITTED WORDS ...............................................................39
APPENDIX D FREQUENCY OF INSERTED WORDS .............................................................40
APPENDIX E SUPPORTING LETTER FROM THE FACULTY OF COGNITIVE SCIENCES AND HUMAN DEVELOPMENT .................................................................41
APPENDIX F APPROVAL LETTER FROM THE MINISTRY OF EDUCATION, MALAYSIA .................................................................................................................................42
APPENDIX G APPROVAL LETTER FROM THE SARAWAK STATE EDUCATION DEPARTMENT .........................................................................................................................43
APPENDIX H INFORMED CONSENT FORM ........................................................................45
ABSTRACT

Oral reading fluency (ORF) and comprehension are interrelated in early reading skills. This project studied the ORF and comprehension among Year 2 English as a Second Language (ESL) learners (N = 27) in a Malaysian National Type (Chinese) School (S. J. K. (C)), Kuching, Sarawak. Two ORF passages and one comprehension tests were assessed individually. The entire ORF procedure was audio recorded. The ORF-One Minute (ORF-60) and ORF-Full Passage (ORF-FP) were computed using the formula in terms of words correct per minute (WCPM). The results were compared to the benchmark goal in the United States (U.S.). There was a gap between the learners’ achievement in both countries. The reading problems were identified, classified, analysed, and elaborated. Mispronunciations top the participants’ oral reading problems. Negative transfer of other language was one of the factors of the problems. The findings of this project illuminate the importance of providing early remedial help for young participants in language and literacy.

Keyword: Oral reading fluency; learning English as a Second language; comprehension
ABSTRAK


Kata kunci: Kefasihan membaca secara lisan; mempelajari Bahasa Inggeris sebagai bahasa kedua; kefahaman
CHAPTER ONE

INTRODUCTION

In the Malaysian public elementary education system, the National Type (Chinese) Schools or Sekolah Jenis Kebangsaan (Cina) (hereafter S. J. K. (C)), is a part of the public schools where Mandarin is the main medium of instruction (Ali, Hamid, & Moni, 2011). Seven-year-old children begin their primary education (Year 1), right after they have completed their preschool education (Ali et al., 2011; Education Development Division, 2015). When they are in Year 6, the Primary School Achievement Test (Ujian Pencapaian Sekolah Rendah, hereafter UPSR) is employed to examine their academic achievement in areas such as reading comprehension, writing, numerical mathematical skills and scientific skills (Education Development Division, 2015).

In 2013, 74.4% primary students scored a minimum of C in UPSR English, the percentage dropped from 77.3% in 2012 (“UPSR 2013: Better Results”, 2013). Low English literacy happens among Malaysian students even though they receive formal English as their Second Language (ESL) education in schools for years (Musa, Lie, & Azman, 2012). Organisation of Economic Cooperation and Development (OECD) warned that poor education policies will cause negative growth in national economy and Malaysian students ranked 52nd out of 76 nations in basic skills learning as reported (“As Singapore Tops World”, 2015). The education stakeholders were very concern with these alarming figures.

English is a lingua franca. English as a Second Language (ESL) learners are the population whose L1 is not English. They are also known as English language learners (ELLs). They require guidance and instructions in learning to speak, read and write in English, because English is not their dominant language (Deno, 2003). In Malaysian multilingual classrooms,
English is inclusively taught as a compulsory L2 subject, even though some of the learners speak English as their mother tongue (Darmi & Albion, 2013; Musa et al., 2012; Sidhu, Chan, & Sidhu, 2011). The national educational system neither specifically separates students into English as the first language (L1) learners and English as the second language (L2) learners nor is the English language curriculum tailored for L1 and L2 learners. Although being literate in the English language is a highly prized skill in the Malaysian community, using English in daily life is not in certain social situation and is nor norm (Ali et al., 2011).

**Problems Faced by the English as a Second Language Learners in Oral Reading in Malaysia**

Formative assessment of the School Based Oral English Test (SBOET) was implemented in Malaysian schools since 2002 (Sidhu et al., 2011). This learner centralised SBOET examines the students’ communicating skills. It evaluates the comprehension and production of spoken language.

Inevitably, Malaysian ESL learners speak like Malaysians thus reflecting their sociolinguistic backgrounds (Chitravelu, Sithamparam, & Teh, 2005). For example, Malaysian Chinese ESL learners usually speak Mandarin or other Chinese dialect (Cantonese, Hakka, etc.) as their L1 and use English as their L2. Educators (ibid) generalised the reading problems that are encountered by the Malaysian ESL learners according to their ethnicities. The native speakers of Chinese language struggle to articulate the initial consonant /r/. For example, they replace the sound /l/ for the word *rock*, so ‘lock’. The Indian learners drop the /h/ sound, for instance, they speak ‘arm’ for *harm*. Moreover, the Malays usually mistakenly say the sounds /f/ as /p/, such as ‘pin’ for *fin*. 
Hitherto, there has been only one study on oral reading fluency (hereafter ORF) among local Secondary 2 ESL learners \((N = 67)\) in Perlis (Khor, Low, & Lee, 2014). Their overall findings also supported that in ESL context, reading fluency had strong, positive correlation with reading comprehension, where prosody \((r = .86)\) had the strongest relationship with that of it. They discovered that all three sub-skills of ORF, namely, accuracy, rate, and prosody could be interchangeable in assessing ORF. The significant mispronounced words by the learners were the plural nouns, which end with \(-s\) or \(-es\), and the past tense verbs. These findings are quite similar with the research on oral reading among Year 4 ESL learners \((N = 30)\) in Putrajaya (Pillai & Paramasivam, 2014). They revealed that omission \((39.86\%)\) top the miscue during oral reading. The learners omitted the \(-s\) and \(-ed\) at the ending of verbs. Based on the two studies above, the two common oral reading errors made by Malaysian ESL learners were misreading the plural form and past tense verbs.

**What is Oral Reading Fluency?**

The definition of the term fluency varies from the researchers to researchers. Some researchers view fluency as prosody (i.e. the appropriate expression quality of a reader) (Allington, 1983; Klauda & Guthrie, 2008; Zutell & Rasinski, 1991), while the others consider it as a combination of reading accuracy and reading rate, in terms of words read correct per minute or WCPM (Hasbrouck & Tindal, 2006). Some scholars view it holistically and consider ORF as comprising three components, namely, prosody, rate, and accuracy (Hudson, Lane, Pullen, 2005; Kuhn, Schwanenflugel, Meisinger, Levy, & Rasinski, 2010; Rasinski, 2004).

**Prosody.** Prosody comprises the verbal expression features such as pitch, stress, appropriate vocal tone (e.g., excitement, sadness, etc.), and appropriate pause at phrase boundaries (e.g., conjunction, punctuation, etc.). Several researchers have presented and
compared single dimensional fluency rating scales and multidimensional fluency rating scale (Allington, 1983; Rasinski, 2004; Zutell & Rasinski, 1991). For the single dimensional, there were six-point scales and four-point scales. In multidimensional scale, four dimensions were taken into account, thus, expression and volume, phrasing, smoothness, and pace.

**Rate.** Reading rate is also known as reading automaticity. Reading rate is equal to the number of words read correctly per minute (WCPM).

**Accuracy.** To measure reading accuracy, divide the WCPM by the total number of words read. Convert the number to percentage.

**Comprehension.** The Simple View of Reading (SVR) by Gough and colleagues (Bishop, McDonald, Bird, & Hayiou-Thomas, 2009; Gough & Tunmer, 1986; Lee, 2012; Tan, Wheldall, Madelaine, & Lee, 2007) claims that reading comprehension (C) is the product of decoding (D) and linguistic comprehension (L), where C = D x L. However, there are researchers debating that statement (Georgiou, Das, & Hayward, 2009; Lee & Wheldall, 2009). Scholars suggest that successful reading comprehension skill relies on an array of skills at inference making, and working memory embeds the integration of information (Cain & Oakhill, 1999; Cain, Oakhill, & Bryant, 2004). Hence, reading involves “multiple linguistic and cognitive challenges” (Hasbrouck & Tindal, 2006, p. 642).

**How to Measure Oral Reading Fluency?**

Generally, in ORF context, there are several common types of errors made by the students, including (Blevins, 2001; Jenkins, Fuchs, van den Broek, Espin, & Deno, 2003; Kim, Wagner, & Foster, 2011; Pierangelo & Giuliani, 2006; Rasinski, 2004; Shinn, Good, Knutson, Tilly, & Collins, 1992):

1. Mispronunciations. For example, bell for ball.
2. Substitutions. The student replaces the word(s) with his or her word(s). The replacement is either meaningful or meaningless.

3. Omissions. The student skips the word(s), or an entire line.

If the student asks for the meaning of the word, the test administrator instructs the student to continue reading (Fuchs, Fuchs, & Maxwell, 1988). Three-second rule is implemented during the test, as if the student does not attempt, struggles or hesitates when reading a word for more than three seconds; the test administrator tells the student the word, and counts it as an error. However, if the student self-corrects the error within three seconds, it is not counted as an error (Blevins, 2001; Jenkins et al., 2003; Kim et al., 2011; Pierangelo & Giuliani, 2006; Roehrig, Petscher, Nettles, Hudson, & Torgesen, 2008; Rasinski, 2004; Shinn et al., 1992). To my knowledge, there is no universally standardised guideline for the classification of the mispronounced words.

**Curriculum-Based Measurement.** In the United States (hereafter the U.S.), Curriculum-Based Measurement (CBM) in reading which was developed by Stanley Deno in 1985 is also highly recognised as ORF assessment because its procedure examines on the students’ reading fluency in terms of WCPM (Hasbrouck & Tindal, 2006; Kuhn et al., 2010; Rasinski, 2004).

Below are the summarised steps that are carried out by the test administrator for measuring rate and accuracy in ORF (Hudson et al., 2005; Jimerson, Hong, Stage, & Gerber, 2013; Rasinski, 2004; Shinn et al., 1992; Stage & Jacobsen, 2001):

1. Instruct the student to read aloud a passage, which is appropriate to the student’s grade. The student’s reading is audio-recorded.

2. During the reading, mark any errors made by the student.
3. At the end of one minute, tell the student to stop reading. Mark the point in the text where the student has come to. That ending point indicates the accumulation of the total number of words read.

4. Repeat steps 1 to 3 with other passages (optional).

5. To determine the reading rate, calculate the number of words read correctly per minute (WCPM).

6. To measure the reading accuracy, divide the WCPM by the total number of words read. Convert the number to percentage.

7. Compare the student’s rate and accuracy respectively against the target norms.

Generally, the traditional method of measuring fluency is by calculating the number of words correctly read in one minute (ORF-60). To bridge the gap between the ORF-60 and reading the full passage (ORF-FP), researchers (Barth et al., 2014) suggested that the latter is slightly more sensitive (ranging from .40 to .45 as compared to .36 to .40) in identifying the reading disabilities among the middle-grade students ($N = 1,472$). The reading rate for ORF-FP is equal to WCPM for the entire passage.

**Gray Oral Reading Test.** The Gray Oral Reading Test (GORT) is another alternative tool for examining ORF (Hudson et al., 2005; Keenan & Meenan, 2014).

In Gray Oral Reading Test–Fourth Edition (GORT-4), the students read the passage and then answered five multiple-choice questions (MCQ); every question is comprised of four response options. Hence, the students have a one-fourth probability of scoring it accurately even without reading and/or understanding the passage.

In 2006, Keenan and Betjemann conducted an experiment ($N = 77$) on the passage dependence of GORT-4. In this Comprehension subtest, the participants did not read the
passages before answering all the MCQ. Surprisingly, 86% of the MCQ were answered correctly. This finding prompted the researchers to raise the question on the validity of the MCQ to assess reading comprehension assessment. Allen et al. (2012), replicated Keenan and Betjemann’s experiment by extending the sample size ($N = 292$). The results of latter study justified the findings of the former study.

To date, Gray Oral Reading Test–Fifth Edition (GORT-5) assesses five components: Rate, Accuracy, Fluency, Comprehension, and Oral Reading Index (ORI). Given the limitation of GORT-4, one of the main changes in GORT-5 is that the MCQ is replaced by the open-ended questions to assess student’s comprehension (Allen et al., 2012).

**Current Study**

This study contributes new findings to the advancement of ORF research in Malaysia. Besides acting as a progress-monitoring tool, ORF also screens and diagnoses reading difficulties (Hasbrouck & Tindal, 2006). Listening, observing, and systematically measuring the reading rate and accuracy enable the teachers to identify the problems that the students face, to examine students’ progress in ORF and to decide their instructional methods (Betts, Bolt, Decker, Muyskens, & Marston, 2009; Hudson et al., 2005; Zutell & Rasinski, 1991).

In the view of behaviourists, when reading aloud, the verbal response is set up from the visual stimuli, regardless whether it is in handwritten, printed or in digital form (Skinner, 1957; Tunmer & Greaney, 2010). Because the ultimate goal of reading is to understand (Lai, Benjamin, Schwanenflugel, & Kuhn, 2014), fluency and comprehension are interrelated (Fuchs, Fuchs, Hosp, & Jenkins, 2001). To bridge the gap between fluency and comprehension in oral English language in non-native context, this study examined the ORF and comprehension among ESL
learners. As aforementioned, the shortcoming of inspecting participants’ comprehension using MCQ, the comprehension questions that were employed by this study were in cloze format.

The Critical Period Hypothesis (Lenneberg, 1967) states that the L2 acquisition will become relatively difficult once the learner reaches puberty. This statement has been debated for several decades; a number of studies conclude that learners in older ages, for example between 12 and 15 years of age, acquire L2 better than those who are younger (McLaughlin, 1992; Snow & Hoefnagel-Höhle, 1978). Another study reported that limited English proficient students between age 8 and 11 are the fastest achievers in comparison to other age groups (Collier, 1987). Critical period for L2 learning depends on the maturity of the neural structure that is responsible for the learning and memory process (Gruart, 2014). Several scholars (as cited in Gruart, 2014) objected to the concept that critical period because sufficient training could achieve the learning in different points in time of an individual life. Gruart (2014) argued that there would still be difference in degree of mastery for an individual L2 learning if it began in childhood or in adulthood. To date, this hypothesis is still yet to be proven.

Researchers (Christo, Davis, & Brock, 2009) reported that children show improvement if they had undergone early identification and intervention. Children are expected to master reading by seven years of age (Norton & Wolf, 2012). In Malaysia, according to the National Early Childhood Intervention Council (NECIC), 0 to 8 years old are the crucial years for early detection and intervention of learning and development disabilities (2013). Early identification and intervention are needed to prevent and reduce the negative impact as they may arise as the result of delayed remediation. Given the report by the NECIC that 8 years old is the window of critical period. Year 2 were intentionally selected to be the participants of this study as their average age is approximately 7.5 ± years of age.
**Research Questions**

This project studied the ORF among ESL learners and analysed the problem that they faced. The main objective of this project was to identify the ORF among Year 2 ESL learners. Specifically, this project answered two research questions: Firstly, how fluent are the ESL participants in English oral reading, in terms of words correct per minute (WCPM)? Secondly, what are the oral reading problems that the ESL participants face? This project highlighted the ORF and comprehension ability and disabilities of the participants.
CHAPTER TWO

METHOD

Participants

As previously mentioned, this study intentionally selected Year 2 participants from an S. J. K. (C) in the city of Kuching. There was only one class of Year 2 consisting of 28 participants in the selected school. The rationale of sampling all the participants in the class was to ensure that the participants would vary in degree of reading fluency and represented of a mixed distribution of poor, average and excellent participants in the English language as L2 learning. However, one participant was absent during the days when the tests were conducted. As a result, there were 27 participants ($M = 7.74$ years, $SD = .11$; 51.9% boys, 48.1% girls; 77.8% Chinese, 14.8% Bidayuh, 7.4% Iban; 6% spoke English at home; 50% attended English language tuition after school) in this study.

Of the audio data collected from the 27 participants, 7 participants and 3 participants were excluded for the ORF-FP and ORF-60 respectively, because of two reasons. First, they did not respond to the reading instruction. Second, the audio recordings had unsatisfactory quality to carry out a metalinguistic analysis.

All the participants attempted the comprehension questions, but only those whose ORF-FP data was available were taken into account for comprehension results. Hence, 20 participants were used to study the ORF and comprehension.

Instruments

The instruments used were two ORF passages and a set of reading comprehension items. The instruments were supported by a larger study, which runs from 2013-2015, led by Dr. Julia Lee Ai Cheng, entitled “Development of a comprehensive diagnostic instrument for the
identification and classification of language and literacy skills in primary school children with reading disabilities” that was conducted with the funding from the Fundamental Research Grant Scheme, by the Malaysian Ministry of Higher Education. The instruments were developed regarding the current curriculum.

Two passages were adapted to assess ORF-FP and ORF-60. ORF-FP was designed for the participant to read aloud the entire passage and also served as a comprehension test. The first passage, Sally’s Birthday Party (91 words), was used to assess the participant’s ORF-FP. Then, five items based on this passage were utilized to examine the participant’s comprehension. In order to avoid fatigue and cognitive overload, the second passage, Pak Karim and His Animals (94 words), was used to assess participant’s ORF-60 on the next following day. The same procedure was taken upon all participants, except there was one participant who was only available on the second day.

The words in the passages contained the vocabulary such as birthday, cow, duck, father, goat, mother, present, red, and yellow which were developmentally and culturally appropriate for Malaysian young participants (Phoon & Abdullah, 2014).

To delve deeper, the passages also contained a variety of speech sounds, which were suitable for reading aloud assessment (Chitravelu et al., 2005). For instance, labiodental fricatives /f/ in fat and farm, that block the airstream and at the same time produce the sound by the friction between the airs being pushed through the slight oral opening (Yule, 1996).

Diphthong is the combined vowel sounds, such as cake /keɪk/ and like /laɪk/ (Trask, 2007; Yule, 1996). Approximants or semi-vowel, for the English y-sound, as in yam, the articulation of /j/ is strongly influenced by the following vowel sound (Chitravelu et al., 2005; Trask, 2007; Yule, 1996).
As previously mentioned, the comprehension items were in cloze format. There was one question presented on the top for each item to guide the participant to identify the exact missing word in the sentence provided in the next line. The items were not arranged in the ascending sequence of the passage to avoid guessing.

**Procedure**

The one-to-one interview ORF test and comprehension test were carried out during normal class hours. The interview was conducted in a distraction-free setting within the school compound that was arranged by the school administrators.

All the instructions were all delivered in Mandarin, which is the typical medium S. J. K. (C) uses. The participants had not read the passage and the questions prior to the interview.

As each participant was read aloud and he or she was timed; all the errors were marked on the test researcher’s copy of the passage. Every reading session was audio recorded and was assigned with numbers in order to maintain confidentiality. After finishing the reading, the sheet of comprehension items was presented to the participant. The participant answered in writing using pencil. The comprehension test was untimed. The participants were given sufficient time to answer and to recheck. Since it was not a memory test, the participants were allowed to refer to the passage, but neither assisted nor hinted in any way when answering the questions. The number of items that were correctly attempted, incorrectly attempted and not attempted were tabulated.

**Data Analytic Strategies**

**ORF.** Rechecking both the audio and written data was to ensure the accuracy of the data. There were spacing between lines that enabled the researcher to jot down the word or the sound that had been articulated differently from the printed stimuli. If the word does not exist in
English, International Phonetic Alphabet (IPA) was applied to indicate the sounds that the participant generated. At the right end of every line, there was the number of words for that particular line. WCPM for each individual was computed using the formula as mentioned in the literature.

The reading mistakes were tabulated, classified, and elaborated. As there is no universally accepted standard guideline for the classification of the mispronounced words, classifying each ambiguous reading miscue was the most difficult and tedious part. Adapting from the literature (See Chapter One), the researcher designed and tailored a strategy to classify the reading mistakes based on the data collected. For classification, all the mistakenly read words were manually recorded based on the frequency and the frequency of each error was tabulated and presented in detail, except the mispronunciations, due to the big number of and the wide variety of its responses. The literature states that the major three types of errors are mispronunciations, substitutions, and omissions. Hesitations are only considered under the three-second rule.

**Mispronunciations.** The researcher defined the mispronunciations as the misarticulating of a word. If the mispronunciation of the word, even if it was one syllable, was wrong, it was counted as a mispronunciation. Since the characteristics of the substitutions were overlapping with that of the mispronunciations, the researcher decided to include the substitutions under the category of the mispronunciations. The reasons are when the participants substituted the printed word by their own word, mispronunciations happened, vice versa. The sound(s) of the exact word were misarticulated by the participants by replacing with other sound(s).

In this category, grammar is a complex linguistic component to be interpreted. There were plural and singular for nouns and verbs, tenses, personal pronouns, and the apostrophe s (’s).
Besides that, the speech sounds of vowel, vowel cluster (diphthongs), consonant, and consonant clusters are interfered by other language. Words that ended with –ve, -x, -w, or –y were taken into account. Lastly, the participants were also uncertain between the languages of English and Malay.

**Hesitations.** Hesitation is defined as the reluctance of the participants to read a word. They struggled in trying to sound the word, but failed and gave up. Then, they proceeded to the following word.

**Omissions.** The researcher classified the words, that were omitted by the participants under the category of the omissions (in the sentence *it was a big round cake*, the participant skipped the word *a*. The participant read it as ‘*it was big round cake*’). This was different from the word of the researchers’ (i.e., Pillai & Paramasivam, 2014) where omissions included the missing certain sound(s) within a word (e.g., *animals* read as *animal*).

**Insertions.** The researcher discovered that the participants added word(s) during reading. Hence, the insertions was a category created to tabulate the word inserted by the participants. Some of the inserted words were non-English words (e.g. */kɔɡe*/).

**Inaudible.** The researcher defined the inaudible words as the words that were difficult to be heard during the ORF test and even also during rechecking the audio data.

**Comprehension.** The correctly attempted item was awarded one mark each, while the incorrectly attempted or not attempted item was awarded zero marks. Synonyms were acceptable.
CHAPTER THREE

RESULTS

ORF-Full Passage

In terms of WCPM, the range was between 2 and 94. The average was 42.

ORF-60 Seconds

In terms of WCPM, the range was between 5 and 102. The average was 44.

Comprehension

The range score was between 0 and 5. The average was 2.05. Although the accuracy of ORF-FP was 68.39%, the comprehension questions were 41% correct. In the same vein, of the 59%, 24% were not attempted.

Oral Reading Problem

There were 670 mispronunciations (See Appendix A), 259 hesitations (See Appendix B), 59 omissions (See Appendix C), 19 insertions (See Appendix D), and 19 inaudible. Since there were 670 mispronounced responses, it was too much work to analyse each response.

Inaudibility. The external factor of inaudibility could be the background noise that degraded the recording quality, while the internal factor could be the lack of confidence of the participants to read aloud individually to the researcher. In addition, the participants whispered when they had to read certain unfamiliar words.

Other Findings

Prosody. The participants read word by word and seldom paused at the appropriate phrase boundaries. Participants tend to pause at the end of the line, taking their time to move their finger and eye to the next line. Most of the participants did not emphasise the punctuations,