ESL Reading Accuracy: The Inside Story

Rafizah Mohd Rawian
Universiti Utara Malaysia
Email: rafizah@uum.edu.my

Ahmad Azman Mokhtar (Corresponding author)
Universiti Utara Malaysia
Email: a.azman@uum.edu.my

Abstract:
Accuracy has received countless and endless attention from language researchers due to its role in language learning. As such, a study is conducted to discover and understand the possible influence of accuracy in second language learning specifically in reading. Its findings will reveal whether accuracy does actually affect reading or vice versa. Simultaneously, the findings will then expose the extent of the possible influence as well as the aspects that may be affected. Its respondents are students who are taking Basic English Language course. Purposeful random sampling technique is used to single out the respondents in terms of their (1) gender and (2) academic semester. An in-depth interview protocol is used to gather data from the selected respondents. An interview checklist is used to ensure the smoothness of the data gathering. An interview guide is prepared beforehand to ensure all important issues are explored. The interview questions are prepared in two versions: English and Bahasa Melayu.
Keywords: *accuracy, reading, second language learning*

1. Introduction

Acuracy in reading has received vast attention since many studies have shown the influence of accuracy in reading comprehension (Hudson, Lane & Pullen, 2003; Rasinski, Blachowics, Lems, 2006; Rasinski & Padak, 2001). Although accuracy in reading has drawn tremendous attention, there is still a need to carry out a research on ESL readers especially in Malaysia to really understand the real scenario of this aspect in local English classrooms. Insights on reading accuracy are essential since many studies have found that L2 learners still have problems when dealing with L2 reading materials (Rasinski, 2004; Samuels, 2006; Kariuki & Baxter, 2011). The Matthew Effects Model (Stanovich, 1986) which highlights the individual differences in reading ability as well as in reading processes also inspire the writer to gauge some insights on reading accuracy among ESL learners in Malaysia.

2. Literature Review

Reading, in reality, involves taxing and complex processes. It deals with many subcomponent skills and abilities in order to make the information in a text meaningful. A successful reader, should be able not only to decode, but to comprehend and interact with text. In doing so, he/she has to process the text at the word, sentence, conceptual, topic and dispositional level (Munro, 2004).

Rumelhart's (1977) interactive model of reading explains the reading process in a simple analogy that starts with a reader having a set of expectations or hypotheses about possible information through visual input. As a reader reads a text, the visual information may strengthen or weaken his expectations or hypotheses. The stronger the expectations or hypotheses are made, the more specific predictions about the information in the text will be (Rumelhart & McClelland, 1981). As these expectations or hypotheses are confirmed, they will be further strengthened and facilitated. This model also explains several knowledge sources in word recognition. These sources operate independently but simultaneously and cooperatively when processing reading and comprehension (Rumelhart & McClelland, 1981).

Reading accuracy indicates the ability to pronounce written words in a form of spoken words (Adams, 1990). It deals with the ability to recognise or decode words correctly and this requires strong understanding of the alphabetic principle – able to blend sounds together (Ehri & McCormick, 1998). It is phonological recoding that involves phonemic recoding – recoding of letter sounds and recoding of larger phonological units – words, syllables, rimes and orthographic units (Galletly, 2004). Decoding unknown words at a fluent level requires knowledge of sound-symbol relationships, blending of sounds into words, recognition of reoccurring patterns across words (phonograms) and coordination of phonemic – orthographic and meaning information (Ehri, 2002). If any of the analytic or knowledge retrieval processes operate slowly or inaccurately, it will significantly affect both the speed and accuracy of text processing (Ehri, 2002). Based on Pazzaglia, Cornoldi and Tresoldi (1993), lower level word reading accuracy and fluency and higher level comprehension related linguistic and cognitive abilities are two important components in information processing. Inaccurate and/or laborious word reading

may affect the usage of the higher level processes (Grabe, 2009). As such, being handicapped in any of these levels may lead to reading difficulties which can affect comprehension.

Good reading accuracy is a must in order to develop at-a-glance word recognition since it needs repeated accurate readings of a word to make it into an at-a-glance word (Rasinski & Padak, 2001). As such, there is a strong possibility that a reader is confused over how a pattern of letters is pronounced each time a word is misread (Allington, 2009). A reader is considered as a fluent reader if his or her reading is at least 95 percent accurate - not more than 1 misread word in every 20 words read and 98 or 99 percent accurate in order to be considered as an independent reader (Allington, 2009). Readers with low level reading accuracy skills have high chances to experience difficulties not only in reading comprehension and independent reading (Knight & Galletly, 2005; Yovanoff et al., 2005) but also in spelling, writing, vocabulary and language skills (Adams, 1990; Chard, Simmons & Kameenui, 1998, Stanovich, 1986).

Informal reading inventories (IRIs), in use for decades, have used decoding word accuracy as one of their key benchmarks for marking reading achievement (Johnson, Kress & Pikulski, 1987; Pikulski, 1990). Accuracy is determined by the percentage of words a reader can read correctly; it has been shown to be a valid measure of reading proficiency (Fuchs, Fuchs & Deno, 1982).

Simply listening to oral reading and counting the number of errors per 100 words can provide invaluable information for the selection of appropriate text for various instructional purposes for an individual or group of learners. A running record and miscue analysis can provide more detailed information about learners' accuracy. Through careful examination of errors patterns, a language instructor can determine which strategies a learner is using and which strategies the learner is failing to use. For instance, observations of a learner's attempts to figure out an unknown word might yield evidence of phonemic blending, guessing based on context, or a combination of decoding and contextual analysis. These observations can provide information about areas in need of further instruction to improve word-reading accuracy.

3. Research Methodology

3.1 Respondents

Six ESL students were chosen as the respondents and they were labeled as S1, S2, S3, S4, S5 and S6. The respondents were students who were taking the university's Basic English Language Course. Purposeful random sampling technique was used to single out the respondents in terms of their (1) gender and (2) academic semester. Hence, more insights would be gained in terms of the respondents' reading accuracy particularly the possible differences or similarities between males and females as well as between Semester 1 and Semester 3 students.

The respondents were chosen based on their English proficiency levels (Good, Average and Poor) which were based on their English grade in SPM (Sijil Pelajaran

Malaysia or Malaysian Education Certificate). These grades were valid since they were acknowledged by the Board of Malaysian Examination Syndicate.

Table 1:   A Summary of Respondents for In-depth Interview Protocol

Responde nt	Gender	Semester 1	Semester 3	English Grade	Proficiency Level
S1	M		X	A	Good
S2	F		X	C	Weak
S3	M		X	B	Average
S4	M	X		C	Weak
S5	F	X		A	Good
S6	F	X		B	Average

3.2   Research Instrument

An in-depth interview protocol was used to gather data from the selected respondents. The main reason for using this research tool is because it provides rich and detailed information. An in-depth interview is a qualitative research technique that allows person to person discussion (Bogdan & Biklen, 2007). Its aim is to ask questions to explain the reasons underlying a problem or practice in a target group. It can also lead to increased insight into people's thoughts, feelings, and behaviors on important issues (Rubin & Rubin, 2004). In addition, an in-depth interview can provide a more relaxed atmosphere in which to collect information - people can feel more comfortable having a conversation with the interviewer than to filling out a survey (Boyce & Neale, 2006).

An interview checklist was used to ensure the smoothness of the data gathering. An interview guide was prepared beforehand to ensure all important issues on the interview guide were explored. The interview questions were prepared in two versions – English and Bahasa Melayu. A panel that consisted of two experienced lecturers had validated the translated version (Malay Language/Bahasa Melayu) in terms of its content and grammar aspects. English and Malay Language (Bahasa Melayu) were used as the means of communication throughout the interview sessions. Its rationale was to establish a comfortable and relaxed atmosphere during the sessions.

3.3 Research Procedure

A systematic research procedure was planned and followed throughout this research. This is crucial since a properly documented procedure may help to establish the reliability and validity of the research instrument (Rubin & Rubin, 2004). Internal reliability was established by having an "inquiry audit" in which two reviewers were appointed to examine both the process and the product of the research for consistency. According to Lincoln and Guba (1985), "inquiry audit" is an effective measure to enhance the dependability or reliability of a qualitative research.

The in-depth interview was conducted on one-to-one basis based on a prepared interview schedule. All the interview sessions were held in the researcher's office

outside the normal class hours. Before each interview session, every respondent was briefly explained about the purpose of the interview as well as the procedure used throughout the session. Each respondent was then asked to sign a consent form as an indicator of the respondent's agreement to participate in the session. Before each session, every respondent was told that he/she was free to use either English or Malay Language (Bahasa Melayu) or a mixture of both languages in his/her responses. All the interview sessions were tape-recorded and written notes were also used for reference purposes.

Upon the completion of the interview transcriptions, the respondents were called to the researcher's office to proofread their transcriptions. Once they were satisfied with the transcriptions, each of them was to sign a validation form as a sign of approval.

3.4. Data Analysis

This research used a content analysis to evaluate the data gathered from the in-depth interview protocol. The process of content analysis provided a rigorous structure for analyzing data (Kairuz, Crump & O'Brien, 2007). Data gathered during the in-depth interview protocol was carefully transcribed and analyzed using several themes and codes. An inductive process was intended to help the understanding of complex raw data through the construction of categories and summary of themes, a concept that Thomas (2003) defined as "data reduction".

Data was analyzed according to seven themes namely word omission, word repetition, word pronunciation, word-ending adding, word-ending dropping, word insertion and word replacement. The data was also analyzed according to situation and activity codes. Situation codes informed the researcher how the subjects defined the setting or particular topics while activity codes informed the respondents' regular occuring behaviours (Bogdan & Biklen, 2007).

4. Findings and Discussion

The in-depth interview protocol had revealed seven factors that affected the respondents' reading accuracy namely word omission, word repetition, word pronunciation, word-ending adding, word-ending dropping, word insertion and word replacement.

4.1 Word Omission

The first factor that influenced students' reading accuracy was word omission. Students' responses revealed that prepositions, articles as well as helping verbs are most commonly deleted in reading. Word omission was committed by the respondents due to several reasons. Firstly, it was due to the perception that the deleted word(s) was/were not important in the sentence(s). To some students, comprehension of main ideas was far more crucial than words like "*prepositions* and *articles* that they claimed did not have any main or key idea of the sentence" (S2, S5). In addition, some students stated that "*helping verbs (auxillary verbs)* could simply be deleted because without these words, the main idea of a sentence could still be understood" (S1, S4).

These findings clearly showed that the respondents were more concerned with their comprehension level of the reading text rather than the grammatical aspects of the syntax. Since the main focus of their reading was to understand the main ideas of the text, these students tend to disregard the importance of the function words (e.g. pronouns, articles, conjuctions and prepositions) used within the syntax and for these students, it was acceptable to ignore these words while reading. To these students, these words only meant to explain the grammatical or strucural relationships into which the content words may exist (Boquist, 2009).

To respondents S2 and S5, articles *a* and *an* were used in the sentences to refer to one general item/thing while *the* was used to refer to one specific thing/aspect. To these students, it was more important to understand the nouns that these articles referred to and it was not important to know whether these nouns were singular of plural (which would be indicated by the articles used in the sentences). Similarly, primary helping verbs *be* and *have* were commonly deleted in the respondents' reading. To respondents S1 and S4, these helping verbs only indicated tenses hence they were perceived as insignificant to the comprehesion of the meaning of a sentence. As a consequence, these verbs were ignored while reading.

Preposition deletion in this study reconfirmed Bram's (2005) study that highlighted ESL learners' difficulties with prepositions. One of the reasons why these learners have such difficulties is due to the fact that prepositions are such small words and frequently have direct equivalents in the mother tounge and the second language - L2 or the foreign language – FL (Nicholas, 2003). Hence, these students tend to use prepositions in their L1 in a similar way as in the L2 or the FL.

These findings reaffirmed the fact that when students were learning another language, they were either consciously or subconsciously changing the rules about the language (Fromkin, Rodman & Hyams, 2007). At this stage, most students would often create "interlanguage grammar" where they tend to apply some rules from their first language (L1) onto the target language (L2) and this is referred to as learning transfer (James, 2007). ESL learners often make mistakes while learning L2 but these mistakes are not random since they are rule-governed - sometimes the rules may not exist in the L1 or the L2 (White, 2003). This behaviour occurs due to the usage of Universal Grammar (UG) while learning L2 in which UG is used to "reset" the parameter of their first language.

Secondly, word deletion was resulted from carelessness and this was obvious when S3 and S4 revealed that some words were deleted because "they overlooked them". This finding clearly indicated that carelessness was one of the causes of errors among ESL/EFL students. According to Norrish (1983), carelessness is often closely related to lack of motivation.

Thirdly, S3 explained that word deletion was resulted by the "the close gap between the lines" (the gap between the sentences of the assigned text). S3 explained that the "narrow lines had affected his focus" hence the tendency to delete words in several sentences was high. This finding revealed that interlinear spacing did affect the respondent's reading accuracy (the interlinear spacing used reading text used in this

research was 1). The feedback from S3 indicated that such interlinear spacing was inappropriate since it affected the reading accuracy. This finding confirmed that the single spacing required a few more fixations per line, slightly fewer words were read per fixation and total reading time was slightly longer (Kolers, Duchnicky & Ferguson, 1981). As such, double spacing is marginally superior to single spacing. Bouma (1980) described the optimal interlinear spacing as "The angle of the return sweep should not be too small".

Finally, word deletion occurred due to the notion that some words were merely a repetition hence it was worthless to read them. S6 confirmed this view:

> "I feel that some words should be deleted because
> they have appeared before in the sentence(s). So,
> why should I repeat reading these words?"

This finding might be due to lack of understanding of the concept of anaphora and cataphora. Both anaphora and cataphora denote the act of referring and also serve as rhetorical devices that add rhythm so that reading becomes pleasurable and easier to remember (Cutting, 2002). Due to the limited understanding of this concept, the respondent did not fully realize the importance and the functions of anaphora and cataphora in the sentences. As a result, the respondent simply regarded these words as mere repetition and functionless and deliberately deleted them.

4.2 Word Repetition

Another factor that affected students' reading accuracy was word repetition. Word repetition was found to be the most conventional technique used by the students whenever they missed reading a word. Word repetition typically occurred to ensure good comprehension of a reading content since "it allowed the students to understand links of ideas" (S3, S5) and this "enabled the students to understand the following ideas in other paragraphs" (S2). Additionally, S5 reported that by repeating a word (the last word that she read before pausing), S5 claimed that she could remember the main idea better. These findings clearly indicated that repetition occurred when the readers had little understanding or limited recall of what was read orally especially when dealing with unfamiliar topics (Rasinski, Blachowicz & Lems, 2006).

Word repetitions were also committed to ensure correct pronunciations of words that were considered as difficult to pronounce. According to Levine (1983), repetitions aid recognition of difficult words. When encountering word difficulties, the reader is likely to "back up" to an earlier portion of the sentence in an attempt to trigger recognition or decoding of an unfamiliar word.

4.3 Word Mispronunciation

Mispronunciations were noted to influence students' reading accuracy and based on the students' feedback, mispronunciation was seriously committed. Several respondents (S1, S3, S5, S6) claimed that their mispronunciation was closely related to their confidence level while reading the assigned text. These students further explained that being confident allowed them to be calmed and relaxed and these

feelings had ultimately affected their pronunciation particularly when pronouncing difficult words. S5 and S6 further added that mispronunciations could decrease their confidence level especially when someone commented or corrected their mispronunciation. Besides that, mispronunciation could also lead to embarassment while reading orally (S1, S2 and S3). Feeling less than adequate about their performance while reading orally not only lowered students' confidence but also affected their cognitive abilities (Johnson, Freedman anad Thomas, 2008).

Another possible reason for the mispronunciation was the complexity of English spelling. Some students claimed that although they had encountered words like "colleagues", "uncertainty", "civilization" and "contour" several times in their reading, they still could not pronounce them correctly. This finding was similar with Khor, Low and Lee (2014) where they discovered that ESL students had problems reading low frequency words. They concluded that such problems could be due to two possible reasons – either the students had limited phonemic awareness or these students simply did not know the words.

Based on S3, S5 and S6, the mispronunciation was triggered by the differences in phonological aspects between Malay Language (first language - L1) and the English Language (second language – L2). These students claimed that "most Malay Language words could be pronounced according to their syllable but not with most English words". Due to phonological differences, these students claimed that English spelling was "confusing" and difficult. S3, S5 and S6 further clarified that they pronounced some English words according to Malay Language phonology and most of the time their pronunciations were wrong.

This finding clearly indicated that difficulties in L2 occured when there were dissimilarities at any linguistic levels (Bialystok (2001). Pronounceability of a word would depend on the similarity between individual sounds and supra-segmentals like stress and tone in the first language and second languages, the ways in which these sounds combine with each other - 'phonotactic grammaticality' (Scholes, 1966), and the relationship between the spelling and sound systems. Numerous contrastive analysis studies have shown that predicting the pronunciation difficulty of individual sounds is not a simple process (Nation, 2006; Hammerly, 1982). L2 sounds that are only slightly different from L1 sounds may be more difficult than learning some sounds that do not occur at all in the first language (Nation, 2006).

Having insufficient phonemic knowledge was also said to be the reason for the mispronunciation. Every time a word is misread there is a strong possibility for lingering confusion over just how that pattern of letters is pronounced (Allington, 2009). S2 for instance noted that she could not read phonetic symbols in a dictionary thus she failed to know the correct pronunciations of English words. Due to this, S2 claimed that "what was unknown would remain unknown" and she would continue mispronouncing English words.

S2, however, confessed that she was not willing to learn the phonetic symbols though she admitted that being exposed to such symbols would improve her pronunciation. Similarly, S6 asserted that "she did not bother to learn correct

pronunciations of English words" and "she just continued her reading regardless the correctness of her pronunciations".

Referring to a dictionary was regarded as "a tedious task" (S2, S4, S5) and "asking friends" (S3, S4, S5, S6) to teach the correct pronunciation was considered the best option though all the respondents admitted that their friends' pronunciations could be incorrect. All the respondents confessed that laziness, time constrain and ignorance were the reasons for not wanting to learn the correct way to pronounce English words.The respondents' feedback evidently showed that they had low mastery goals in L2 learning. Based on the Goal Theory, mastery goals reflect the desire to better oneself and learn (Grabe, 2009). Having mastery goals encourage L2 learners to learn relevant strategies and skills that support their goals. Learners who have mastery goals engage in better cogitive monitoring and strategy processing for learning as well as having a hgher self-efficacy (Grabe, 2009).

4.4 Word-ending Adding

Students' reading accuracy was also affected by occasional word-ending adding and several possible reasons were documented. S2, S4 and S6 stated that by adding endings like "s" "ed" and "ies" to some words, some rhythms were "injected in" or "given to" the sentences and this eventually would make the reading text more interesting to read and hear.

> [I add endings] to make the sentences sound good.
> For example this sentence, when I add "s" to this
> word [behavior] instantly the sentence sounds nice.
> (S2)

> This word [retire]… I always say it as "retired"
> because it sounds nicer. (S4)

> [I add endings] to make the sentence sounds good.
> (S6)

Some students regarded word-ending adding as "their habit" and it was quite "difficult for them to overcome this habit while reading":

> I just simply add [the endings]. Maybe because I'm
> so used to add endings to certain words. More to
> slip of the tongue. Difficult to avoid. It's a habit.
> (S2)

> [I add endings] because it's a slip of my tongue.
> Frequently does it. It's a spontaneous response. It's
> a habit and it's hard to change. (S5)

These findings affirmed the existance of errors of addition made by ESL students in L2 learning. These findings were aligned with Wee's et al. (2010) on Malaysian students' verb form errors in which they had concluded that Malaysian students had made the most errors for addition of –s/-es/ies to verbs after the plural nouns (26

times), addition of the "be" verb (23 times) and addition of the -ing forms (16 times).

The present findings clearly indicated the needs to have effective instruction on subject-verb recognition so that the ESL students would have a strong basis in understanding grammatical concepts. Thus, this would help the students to develop a sense of when to use the –s/-es/ies inflections at the end of the verbs (Wiener, 1981).

4.5 Word-ending Omission

Apart from that, reading accuracy was also affected by word-ending omission and this activity was done more often than the word-ending adding. In fact, all the students agreed that they frequently omitted word-endings while reading. According to S1, S3 and S5, "Malay Language did not have endings that indicated tenses and part of speech" hence with the notion that word-endings in English words were not important, they just ignored reading the word-endings. Furthermore, S2 and S3 affirmed that they were often confused with word-endings like "s", "es", "ed" and "ies" when reading English texts because "Malay Language words did not have such endings". Thus, "for the benefit of doubts", they simply ignored such endings. Besides that, word-ending omission was committed because some students believed that "it was one of the means to finish their reading at a quicker pace" (S1, S2, S4). S3 admitted that his language handicap was due to his minimal exposure to English reading texts. Majority of the students agreed that word-ending omission was the result of bad habit. These students claimed that they were familiar with the rule – "must read the endings" but still disregarded the rule while reading.

 Overgeneralization and a simplification strategy were the possible reasons for these morphological errors. Overgeneralization could be the result of the students reducing their linguistic burden (Richard, 1985). A simplification strategy "enhances the generality of rules by extending their range of application and dropping rules of limited applicability" (Wee et al. 2010). The overgeneralization and the simplification strategy could probably caused by the confusion of the verb stem. In English, a verb must agree with the subject in which a singular subject should use singular verb and a plural subject and pronoun should use the stem form of the verbs. In contrast, in Malay Language, the stem forms of the verbs are often used in all contexts regardless the tenses or numbers. Wee et al. (2010) documented that Malay students often used the stem forms of the verbs to simplify their L2 rules in order to lessen the linguistic burden/learning load. These students simplified English grammar rules and omitted any redundancy that these students perceived as insignificant to the communication (Wee et al. 2010). By doing this, the burden of having to remember both the singular and plural verbs was lessen but this caused them to committed mistakes as the stem form was the one most likely to be used (Rashid et al. 2004).

4.6   Word Insertion

Students' reading accuracy was also affected by word insertion in the reading text. Word insertion was committed "to make sentences in the reading text sound nicer" (S4) and most of the time, familiar words were inserted in the sentences. These

inserted words were also claimed to have helped the students to understand the original sentences. However, S2 and S4 admitted that this technique could sometimes change the original meanings of the sentences, depending on types of words that they inserted in the sentences. For example, if the inserted words were prepositions or articles, their comprehension of the original sentences would not be affected but if the inserted words that had opposite meanings from the original words, the original meaning of the sentences would be affected. Word insertion could be resulted by the students' false hypothesized whih was due to poor gradation of teaching items (Hasyim, 2002). False concepts hypothesized occur when learners do not completely understand a distinction in the target language. (Ellis, 1996). For instance, the form "was" could be regarded as the past tense marker in "*It was happened previous years ago*".

4.7 Word Replacement

Word replacement was another factor that had influenced students' reading accuracy. Word replacement was due to "the students' fossilized habit" (S1, S2, S4, S5). Most often "familiar words" (S6), "synonyms" (S1), words that have similar base words/root words (with the original words) but with different tenses (S2, S4) or part of speech (S5) and also different types of prepositions (S5) were used to replace the original words. The main reason for the word replacement was to understand main ideas of the sentences used in the reading text. Such errors could be due to overgeneralization in which the students used one form or construction in one context and extended its application to other contexts where it should not apply (Touchie, 1985). The findings also revealed that the respondents' main priority was to comprehend main ideas of the reading text and in doing so, several strategies were used to assist them in gauging the ideas. However, these students had forgotten about the significant role of accuracy in the reading process. Poor accuracy may seriously hamper students' reading comprehension (Rasinski & Padak, 2001). A reader who reads words incorrectly will have some difficulties understanding the ideas in a reading text since more attention will be given to decode words correctly rather than to the author's intended message.

The findings also explained the respondents' metalinguistic processing while reading in the L2. Metalinguistic processing includes a high level of awareness of how language systems work and this awareness can be used to assist the completion of language tasks (Nagy, 2007). This process also include metalinguistic analysis - knowledge about language systems and structures, analysis processes - knowledge about language systems and structures, metalinguistic-control processes - the ability to use metalinguistic knowledge to carry out tasks and metalinguistic awareness - explicitly recognizing the need and directing attention to act on that need (Bialystok, 2011). Successful L2 readers are able to use their vocabulary knowledge and syntactic knowledge effectively. Hence, these readers are capable to perform effectively their metalinguistic and metacognitive processes especially when dealing with comprehension difficulties (Grabe, 2009). In contrast, less successful readers may not have the requisite metalinguistic knowledge or they are incapable of using this knowledge to support L2 comprehension (Grabe, 2009).

5. Conclusion

This research had evidently discovered some factors that had impeded reading accuracy of ESL learners at the tertiary level. As such, effective reading accuracy instructions are very much needed in training these learners to become more accurate in their reading. Interesting, engaging and extensive reading accuracy activities may help the learners to improve their accuracy skills. Embedding technology in reading accuracy instructions may also be another way to enhance the learners' accuracy abilities.

Acknowledgements

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Authors:
Rafizah Mohd Rawian
Ahmad Azman Mokhtar (Corresponding author)
School of Languages, Civilization, and Philosophy
College of Arts and Sciences, Universiti Utara Malaysia,
06010, Sintok, Kedah, Malaysia
E-mails: rafizah@uum.edu.my
a.azman@uum.edu.my