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THE USE OF TEXT ALOUD SOFTWARE IN TEACHING STUDENTS' PRONUNCIATION

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Abstract

Pronunciation is often viewed as difficult English sub-skill for EFL students in Indonesia. Many of students did not know how to respond the problem of pronunciation they have in class. Moreover, many teachers or lecturers also did not support the students' pronunciation teaching and learning with a proper media. This situation happened in second semester students of English Department, FKIP UHAMKA Jakarta 2018/2019 Academic Year. In fact, there are plenty of technology applications that can support or assist them to practice pronunciation by their own. One of it is Text aloud Software. Thus, in this small-scale study, the researchers aim to reveal the use of Text Aloud Software as one of technology application that can help English as Foreign Language (EFL) students to mastery English pronunciation in the classroom. This study applies quantitative method with the use of quasi-experimental design and also added by close-ended questioners. The question of this research is; does Text Aloud Software help EFL students to master English pronunciation? To be able to answer the research question, this study involved 20 respondents who were selected purposively. The results showed that both data of pre-test and post-test in control class and experiment class was normally distributed and homogeny. The statistical test or t-test also showed that t observed ($t_o = 1.68$) was smaller than t table ($t_t = 2.02$) which was $1.68 < 2.02$. It can be concluded that H_o is rejected and H_i is accepted. Therefore, Text-Aloud Software is effective in helping students to master pronunciation.

Keywords: Text Aloud Software, EFL learner, Pronunciation

INTRODUCTION

For an English as Foreign Language (EFL) students in any levels, studying and mastering pronunciation is hard and challenging. There are number of reasons that lead to this matter, such as difficult accent to pronounce, do not know stress and intonation, lack of motivation and exposure, instruction problem or teacher's factor, mother tongue (L1) influence, and many more (See in Murcia, Brinton, & Goodwin, 1996:15-19; Gilakjani & Ahmadi, 2011:74). Moreover, at school, EFL students are rare to study pronunciation. Pronunciation becomes less priority or often neglected by English teachers to be taught (See in Hewings, 2004:19; Maniruzzaman, 2008:3). Compared to other sub-skills, for instance grammar or vocabulary, pronunciation is well-known as its "Cinderella" status in English

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Language teaching area (Levis, 2018:217). Therefore, pronunciation tends to be an English sub-skill which is tough and difficult to master by many learners.

If we speak about pronunciation, it is simply known as an English sub-skill which focus on action or way of producing sounds of language (See Roach, 2009:64; Szyszka, 2017:6). Learning to pronounce a sound of language, in this case English is closely linked to the use of psychical side of body, breath, vibration, and harmonic (Underhills, 2011:12). Ulrike (2014:13) added that technically, learning English pronunciation involves the use of three systems of speech organs, which are respiratory (such as lung and diaphragm), phonatory (such as larynx), and articulatory system (such as mouth, tongue, lips). All of the elements within three systems above work and participate together based on its function in speech production. Shortly, pronunciation is a study that covers how the techniques and production of English with the speech tools EFL students have. Their primary concern is only to focus on practicing those techniques and production.

As it is stated, learning English pronunciation is more about practicing. According to several experts, EFL students can start practicing English pronunciation at the area of segmental features and area of supra-segmental features (See Harmer, 2001:248; Kelly, 2000:1). The segmental features, such as phoneme vowels (monophthongs diphthongs, triphthongs) and consonants are most likely in the area of individual sounds which cover different sounds. In terms of English, Baker and Goldstein (2001) mentioned that there are seventeen types of vowels or vowels in English whereas in consonants there are twenty-six kinds or variations of consonant sounds. Meanwhile, the supra-segmental features, such as pitch and length of voices are in the area of stress and intonation. Pitch itself is a hearing sensation used to give stressing in words or phrases that made sounds change, elongated vocals, and volume increases (Gussenhoven, 2004:1). These three aspects; individual sounds, stress, and intonation become essential to be learned by EFL students if they want to master English pronunciation.

Among three aspects mentioned above, practicing individual sounds particularly to pronounce or utter the English phoneme vowels and consonants in different words, phrases, or sentences are the main issue for EFL students. It is true that most Indonesian EFL students might take a lot of time to struggle practicing producing words, phrases, and sentences without any help to boost their ability to produce sound properly and correctly. It can lead to frustration. This issue encounters also teacher or lecturer to find the best solution to help learners to practice English phoneme vowels and consonants. To make them know the English sound systems by distinguishing phonemes in English can surely give effect to

their pronunciation practice. In this context, teacher or lecturer should use the improper media that can be functioned as easy practice tool of pronunciation.

This situation truly appeared in the second semester students of English Department, Faculty of Teachers and Education Studies, University of Muhammadiyah Prof. Dr. HAMKA, Jakarta who learned pronunciation practice in speaking subject. The researchers did pre-observe to the classes for highlighting this issue. The researchers witnessed one activity from the lecturer who just asked the students to pronounce words or phrase verbally following the native recording such as from Peter Roach materials without giving any advanced options or new technology support for them. To confront this, the researchers then asked lecturer and 2 samples of student formed in table below:

Table 1. Pre-interviewed

Questions		Answers
1. Are there any problems encountered in the pronunciation learning in class? What is your techniques?	-	Teacher 1 : usually in preparing students to learn, I just asked them to study native recording; how to pronounce the words.
2. What are the difficulties in learning pronunciation?	-	Students 1 : difficult to pronounce words or phrases. Students 2 : unfamiliar English sounds.

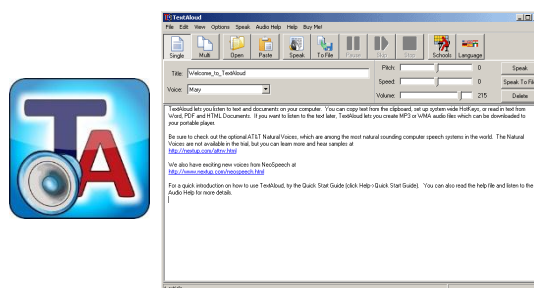
(data taken on 21th March 2019)

From the table above, it has been shown that students got issue in pronunciation mastery. They cannot pronounce English words or phrases well since the lecturer only provided students to some pronunciation recording which was limited to gain their pronunciation mastery. In fact, nowadays, there are plenty of technology applications that can support or assist them to practice pronunciation by their own (autonomous) without any barrier or limited words to study. Thus, the students can easy practice with pronunciation tool or media anytime they want.

What it means by easy practice tool of pronunciation is when EFL students can practice using perfect media that provides them with native like sounds of English phoneme unlimited in form of words, phrases, and sentences. This native like sounds are useful to support EFL learners in practicing as close as the real native sounds without any bother to watch pronunciation videos sample or any difficult way to learn pronunciation. There is one of technology that creates chance for EFL students to practice English pronunciation easier known as Text-Along Software. Text-Along Software is categorized as one of text-to-speech technology in which Agarwal (2010) described as a set of instructions used to obtain input and manipulate something to produce the desired output in terms of functions and

performance specified by the user of the software. The simple meaning of text-to-speech is imitating human voice. Baber and Noyes (1993: 25) defined text-to-speech is as a method of creating spoken output from inputted text; in this case a program to replicate human voice in speaking certain texts verbally through computer.

Specifically, Text-Aloud is a learning software that was originally developed by the NextUp Company (see more details at <https://nextup.com/>) as the most professional text-to-speech software and is capable of displaying more than 29 languages. Text Aloud has a massive range of sounds and has partnered with AT&T Natural Voices, Acapela Group, Ivona, and Nuance Vocalizer, so that it can give learners plenty choices of sounds within different English accents to choose. Text Aloud software is known as free software where learners can easily download it and can be easily used in learning pronunciation. Besides, the Text Aloud software operation feature is very easy for learners to use in learning pronunciation in class. Learners only need to type or copy words, phrases, or sentences in the program, then choose sounds or voices (male or female) and then press the "speak" feature. Then, the native voice will be heard. For example, if the learner is tested to learn pronouncing an English word "measure", then using this software, learner just need to type the word, then directly a native English speaker will emerge to say the word correctly.



Source: google.com and Text Aloud Apps

Figure 1. Logo and *Feature Display of Text Aloud Software*

Many literatures have discovered out the benefits of the use of Text Aloud software in either speaking or pronunciation. One of them is a study conducted by O'Malley (1990) early in the development of a text-to-speech program. O'Malley's study focused on providing information about text-to-speech program that were initially built in the form of audio to help blind language learners. The results of his study showed that text-to-speech applications can be developed and utilized in language learning context, such as for reading and pronunciation.

Another study by Sobkowiak (2003) and Kilickaya (2006) also revealed the pedagogical benefits of using the CALL media text-to-speech program for learning English, especially listening and pronunciation. The results showed that text-to-speech is excellent and useful in supporting English learning. Furthermore, González (2007) specifically examined the use of text-to-speech programs in the pronunciation area. His research used a text-to-speech program directly from the website of a text-to-speech conversion service provider. Students were asked to practice pronunciation every week. As a result, students became more assisted while making it easier for teachers without having to practice or train pronunciation individually.

In the Indonesian context, research around text-to-speech technology was conducted by Mulyono (2012) and Mulyono and Vebriyanti (2016) who explored the benefits of using text-to-speech technology for listening to English. However, the text-to-speech software he used is different, namely NaturalReader. The results of his research show that the use of NaturalReader's text-to-speech media was quite good, and the effects of using it can help students to develop English listening abilities. However, there is rare research on the use of text-to-speech media, especially Text-Aloud Software to study in the pronunciation area. This encourages researchers to find novelty by trying to compare and refer to existing research results.

In line with the issue found and the explanation above, this research explores the use of Text-Aloud Software in teaching second semester students of English Department FKIP UHAMKA. The researchers focus to answer one main question; does Text Aloud Software help EFL students to master English pronunciation? This study may reveal whether or not Text-Aloud Software provide positive outcome to improve Second Semester EFL Students' pronunciation competence at class. Hence, the hypothesis proposed in this study are: $H_0: \mu_x = \mu_y$ (There is no significant difference in material achievement between students treated using Text Aloud Software and students who are not treated anything) and $H_1: \mu_x > \mu_y$ (There is a significant difference in material achievement between students treated using Text Aloud Software and students who are not treated in any way).

RESEARCH METHOD

The method used in this research is quantitative with the design of quasi-experimental. Quasi-experimental (control and experiment classes) is useful design for measuring and comparing student outcome or achievement in learning English pronunciation material with or without using Text Aloud Software in class. In this study, the

location was in English Department, University of Muhammadiyah Prof. Dr. Hamka, Jakarta. The researchers took only 2 classes which are 2A (20 students for experiment class) and 2B (20 students for control class) purposively as sample from total 4 classes (2-A to 2-D) of Speaking Subject on second semester 2018/2019 Academic Year. Three instruments are applied in this research; pre-test, post-test, and questionnaires.

The procedures are; 2 classes were tested with pre-test first to know their pronunciation level. Specifically, in 2A (experiment), process of pronunciation learning of 20 students is to do a self-evaluation using the help of Text Aloud Software media. Self-evaluation or self-evaluation is a process where students can monitor and evaluate the quality of their thinking and behavior while learning and identify strategies that improve their pronunciation understanding and skills. Meanwhile, in 2B (control), the students learn pronunciation without Text-Aloud software treatment. At the end, they were tested with post-test.

The pre-test and post-test scores collected from two classes (2A and 2B), then its scores firstly tested with two pre-requisites analysis; Kolmogorov-Smirnov's Normality test (SPSS) and Fisher's Homogeneity test. Last, the hypothesis testing (t-test) was applied to find the significant differences between the post-test scores from both classes (Sudjana, 2005: 47). To add feedback or input to the use of Text Aloud software, the researchers added questionnaire of a Likert's ordinal scale. The criteria are as follows; 1= Strongly disagree (SD), 2= Disagree (D), 3= Neither agree nor disagree (Neutral/N), 4= Agree (A), and 5= Strongly agree (SA).

RESULT AND DISCUSSION

Result

The results of pre-test and post-test scores of 20 students were shown in form of tabulations below:

Table 2. The Score of Pre-test and Post-test from both classes

Symbol Respondent	Control Class		Experiment Class	
	Pre-test	Post-test	Pre-test	Post-test
r.1	47	43	55	62
r.2	53	50	54	74
r.3	57	55	52	62
r.4	38	42	63	74
r.5	43	43	45	56
r.6	45	40	52	69
r.7	55	56	48	59
r.8	60	55	60	76

r.9	54	52	47	60
r.10	48	45	65	76
r.11	67	59	65	78
r.12	50	50	42	54
r.13	54	48	58	72
r.14	51	50	46	64
r.15	65	63	65	75
r.16	48	47	62	75
r.17	46	50	57	65
r.18	53	50	61	74
r.19	63	58	58	70
r.20	55	52	46	60
N	20	20	20	20
\bar{X}	52.6	50.4	55.05	67.75
s ²	51.06	35.78	54.93	56.57
S	7.34	6.09	7.46	7.60

Based on the table 2 presented above, it can be known that the pre-test scores from two classes (control and experiment) are different. Pre-test scores of control class shown with mean (\bar{X}) 52.06 turned or decreased onto mean (\bar{X}) 50.4 in post-test scores. Meanwhile, the post-test scores of experiment class showed improvement which are mean (\bar{X}) 67.75 from mean (\bar{X}) 55.05 in the pre-test scores. It can be understood that post-test scores of the 2A class (experiment) tend to be superior than 2B class (control).

Next, two pre-requisites analysis; *Kolmogorov-Smirnov* test and *Fisher* test were applied to crosscheck the normality and homogeneity of the both pre-test and post-test scores. The hypothesis was H_1 (The data of control/experiment class is not normally distributed if < 0.05) and H_0 (The data of control/experiment class is normally distributed if > 0.05). The results were shown in table 2 and 3 as follows:

Table 3. The normality test results of control class

Unstandardized Residual		
N		20
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.43275412
Most Extreme Differences	Absolute	.096
	Positive	.091
	Negative	-.096
		.096
		.200 ^{c,d}
Test Statistic		
Asymp. Sig. (2-tailed)		

Table 4. The normality test results of experiment class

Unstandardized Residual		
N		20
Normal	Mean	.0000000
Parameters ^{a,b}	Std.	3.16642581
	Deviation	
Most Extreme	Absolute	.122
Differences	Positive	.122
	Negative	-.078
		.122
		.200 ^{c,d}
Test Statistic		
Asymp. Sig. (2-tailed)		

From the calculation of *Kolmogorov -Smirnov* Normality test using SPSS above, it was found that absolute score (0.096) of pre-test and post-test in control class was smaller than Z table of 20 sample (0.294), and the significance value of pre-test and post-test in control class was also $0.200 > 0.05$ which was bigger than alpha (α). It can be concluded that the residual value is **normally distributed**; thus, H_0 was accepted. The same outcome also appeared in pre-test and post-test of experiment class which was absolute score was smaller than Z table of 20 sample ($0.122 < 0.294$), and the significance value of pre-test and post-test in experiment class was also $0.200 > 0.05$ which was bigger than alpha (α). Again, it can be concluded that the residual value of the experiment class was found **normally distributed**, and H_0 was accepted.

Next, the researchers tested and compared the pre-test and post-test of control and experiment classes through the Fisher's homogeneity test. The hypothesis was H_0 (The variance data between control and experiment classes is homogeneous if $F_{\text{observed}} < F_{\text{table}}$) and H_a (The variance data between control and experiment classes is not homogeneous $F_{\text{observed}} > F_{\text{table}}$). The results were shown in table as follow:

Table 5. The Homogeneity test results from both classes

C	T	Fisher		
		F	Sig.	Remarks
Co	Pre. Post.	1.07	2.17	Homogenous
Ex	Pre. Post.	1.58	2.17	Homogenous

Based on the table 5 above, it was obtained that the pre-test variance (s^2) score of control and experiment classes showed that $F_o < F_t$ which was smaller was $1.07 < 2.17$. Meanwhile, from the post-test variance (s^2) score of control and experiment classes showed

that $F_o < F_t$ which was smaller was $1.58 < 2.17$. Hence, both variance data of pre-test and post-test scores are **homogeneous**, and H_o is accepted.

Last, the t-test was conducted to determine the significant differences between the two classes (control and experiment). The hypothesis was H_o is rejected if t_{observed} is higher than t_{table} . The degrees of freedom (df) was 38, and t_{table} was 2.02. The result was shown in table below:

Table 6. The t-test results from two classes

Symbol	Score	t-test			
		df	t_o	t_t	Decision
\bar{X}_1	67.75	38	1.68	2.02	H_o Rejected / H_i Accepted

The result of table 6 above clearly showed that that t observed ($t_o = 1.68$) was smaller than t table ($t_t = 2.02$) which was $1.68 < 2.02$. It can be summarized that H_o is rejected and H_i is accepted. In conclusion, the Text-Aloud Software is truly effective and help students in pronunciation learning, the researchers visualized the result into curve below:

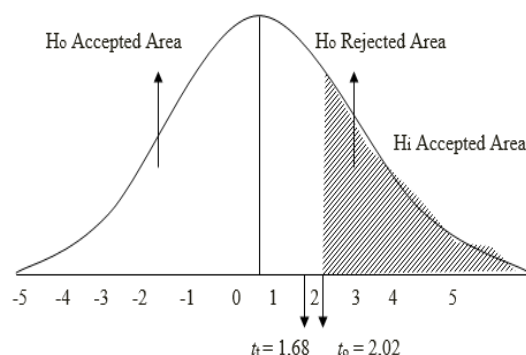


Figure 2. The curve of t-test

As it is stated previously, in terms of gaining feedback or input to the use of Text Aloud Software for students' pronunciation learning, the researchers distributed questionnaire in 3 forms. The results showed in table 7, 8, and 9 as follows:

Table 7. The Questionnaire 1 of Text Aloud Software Features

Questionnaire 1	\bar{X}	SA	A	N	D	SD
Text-Aloud Software Features						
1. Text Aloud Software is very easy to use in class.	4.4	5 25%	10 50%	5 25%	0 0%	0 0%
2. I can understand the application of features in Text Aloud Software.	4.5	6 30%	8 40%	6 30%	0 0%	0 0%

3. Native Voices in Text Aloud Software are clear and good.	4.4	13 65%	7 35%	0 0%	0 0%	0 0%
4. Native voice choices in Text Aloud Software are greatly vary.	3.9	7 35%	12 60%	1 5%	0 0%	0 0%
Total		31 38.75%	37 46.25%	12 15%	0 0%	0 0%

Based on 4 questions (1-4) shown above, it can be seen that there were total 68 responds or 85% students who confirmed strongly agree (31 responds or 38.75%) and agree (37 responds or 46.25%) in terms of Text-Aloud Software features. They responded positively that its features were easy to use also applicable, and native voices sounds were clear, good, and the greatly vary. Only 12 students or 15% who responded neutral and no one answered disagree or strongly disagree (0%) in the questionnaire. Below is the visualization:

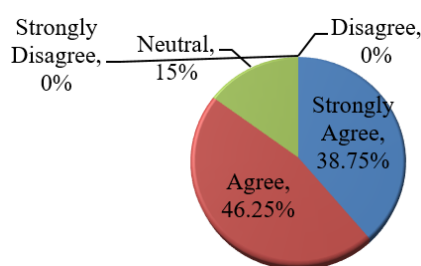


Figure 3. The percentage of questionnaire 1

Then, in the questionnaire 2, the result was found as follow:

Table 8. The Questionnaire 1 of Text Aloud Software and Its Impact to Pronunciation

Questionnaire 2	\bar{X}	SA	A	N	D	SD
Text-Aloud Software and Its Impact to Pronunciation Mastery						
5. Text Aloud Software helps me to learn pronunciation.	4.2	8 40%	11 55%	1 5%	0 0%	0 0%
6. Native voices in Text Aloud Software speak English accurately.	4.2	10 50%	7 35%	3 15%	0 0%	0 0%
7. I feel that my pronunciation competence is improved by using Text Aloud Software.	4.7	10 50%	8 40%	2 10%	0 0%	0 0%
Total		28 46.7%	26 43.3%	6 10%	0 0%	0 0%

Based on 3 questions (5-7) shown above, it can be known that there were total 54 responds or 90% students who confirmed strongly agree (28 responds or 46.7%) and agree (26 responds or 43.3%) in terms of Text-Aloud Software and its impact to pronunciation

mastery. The students stated that Text-Aloud Software was helpful, and it can give effect to their pronunciation competence. Only 6 students or 10% who responded neutral and again, no one answered disagree or strongly disagree (0%) in this second form of questionnaire. Below was the visualization:

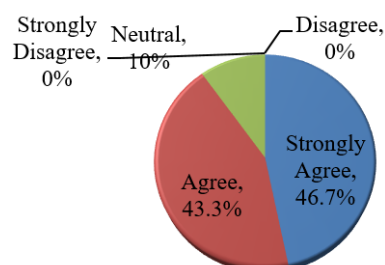


Figure 4. The percentage of questionnaire 2

Last, in the questionnaire 3, the result was found as follow:

Table 9. The Questionnaire 3 of Text Aloud Software and Students' Motivation

Questionnaire 3	\bar{X}	SA	A	N	D	SD
Text-Aloud Software and Students' Motivation						
8. I like and enjoy learning pronunciation by using Text Aloud Software.	4.3	11 55%	9 45%	0 0%	0 0%	0 0%
9. I am passionate and motivated to learn pronunciation with the help of Text Aloud Software.	4.3	9 45%	8 40%	3 15%	0 0%	0 0%
10. I will continue to use the Text Aloud Software for learning pronunciation.	4.4	10 50%	8 40%	2 10%	0 0%	0 0%
Total		30 50%	25 41.7%	5 8.3%	0 0%	0 0%

From 3 questions (8-10) shown above, it can be obtained that there were total 55 responds or 91.7% students who confirmed strongly agree (30 responds or 50%) and agree (25 responds or 41.7%) in terms of Text-Aloud Software and its effect to students' motivation. The students stated that Text-Aloud Software was fun to be used. They wanted to use the software as much as they need in order to master pronunciation competence. There were only 5 students or 8.3% who responded neutral in this questionnaire. Meanwhile, there was none to answer disagree or strongly disagree (0%). Below was the visualization:

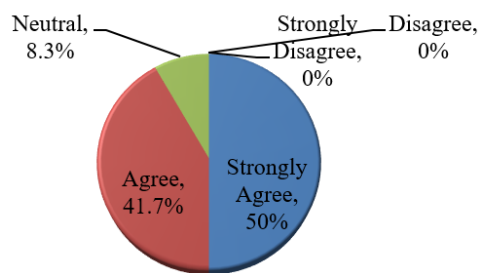


Figure 5. The percentage of questionnaire 3

Discussion

Due to the results or findings of this study, it was known that there is a significant difference or an increase in the average score of 20 students' pronunciation pre-test and post-test of experiment class. This is a signal that there is a change and improvement in students' pronunciation competence after using the Text-Aloud Software. The t-test results which was $1.68 > 2.02$ in alpha (α) 0.05 showed that this research successfully rejected H_0 . Therefore, Text-Aloud Software is effective in helping students to master pronunciation. The researchers believed that this positive result was based on the features of text-to-speech program that were highly sophisticated machine, easy to use by students, helping them to practice to imitate native-like pronunciation correctly and accurately. As González (2007:10) supported in his study that text-to-speech program can make students to practice the pronunciation of vocabulary they have failed to pronounce. They become expert-like, finding how to solve pronouncing a new word by using this program.

The benefits of Text-Aloud software as a text-to-speech program was proven also from the 3 questionnaires given to 20 students of experiment class. The Text-Aloud was successfully help students to enhance the students' pronunciation capability through its easy features to apply, clear, good, accurate, and correct native-like voices, also the most crucial one was creating and boosting students' motivation to learn pronunciation. Mulyono and Vebriyanti (2016) supported in their study that text-to-speech program can be utilized easily, and the students or pupils felt that they were more motivated when studying pronunciation with this technology.

CONCLUSION AND SUGGESTION

In brief, it can be concluded from some experts and studies mentioned above that Text-Aloud software created positive outcome and effect to the English students' pronunciation mastery. The t-test had shown transformation between standard students' pronunciation pre-test score to high students' pronunciation post-test score. From additional

questionnaire distributed to provide feedback, the percentage were around 85% to 91%. The students responded more on strongly agree and agree criteria towards Text-Aloud software, thus this software was categorized as positive media to help them learning pronunciation. There was not found any students who selected disagree or strongly disagree towards Text-Aloud software application in class. This means, the students' truly felt enjoy, and they liked the software a lot.

To enclose this research, the researchers recommended for others who might interest in studying Text-Aloud software or any text-to-speech application to focus on comparing between the use of its software. Also, the further study can discover the effect of Text-Aloud software or any text-to-speech application in the different form, such as mobile learning base (android). Last, the results of this study hopefully can be a worthy reference in EFL context of study.

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