IMPLEMENTATION OF ANDROID APPLICATION TO SOLVE THE STUDENTS' PRONUNCIATION OF ENDING –ED

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Abstract: This research was done because of the students' problem of pronouncing ending -ed. To solve the problem, the researchers tried to implement the application on learning media in this gadget era. The purpose of the research is to improve the students' problem by implementing android application in pronouncing of ending -ed and to find the factors influencing the improvement. The method of this research was qualitative method. The research design was classroom action research of second-year-students in 2018/2019 academic year at STIBA (Foreign Language College) Persada Bunda Pekanbaru. The applications used were online and offline application English Pronunciation. The result showed that there is an improvement by implementing the android application of students' pronunciation of ending -ed. It can be seen that the increasing of the students' ability in pronouncing of ending -ed were at the level of "fairly good" category become the level of "good" category. Some factors influencing the students' ability in pronouncing endng -ed were they often practice and listen to the android applications whether online and offline English Pronunciation to obtain the understanding and the information how to pronounce the exact words of ending -ed. To conclude, the implementation of android application of online and android based can improve the ability of students' pronunciation of pronouncing sound /t/, /d/, and /ɪd/ of ending -ed. **Keywords:** android application; student's pronunciation; ending –ed; classroom action research; English Pronunciation.

INTRODUCTION

In using android as media learning, the teachers are easy to download and find many applications for teaching and learning process. However, the suitable applications are sometimes not easy to apply in the certain subject. It is in line with the statement based on Goh: 2009, the applications focusing on the students, the classroom, creation and the suitable material should be matched. The teachers in the classroom should know and apply first before using those applications to the students. It is for evaluating the positive and negative effect of those applications especially in pronunciation matter of applications.

Pronunciation are mostly hard to adopt by the students, since the limitation of time, the way of pronouncing, and other reasons comes from the role model. According to Abbas and Herdi (2017), one of the students' problems in English pronunciation is the sound of producing system in English as foreign language. English as foreign

language in Indonesia relates to the knowledge of phonetic and phonology which relates to oral or speaking ability (Chen and Gowsami, 2010).

To solve the problems, the researchers tried to use the application to solve the ability in pronouncing English. The applications used in this research are two applications, naming online *English Pronunciation* and offline *English Pronunciation*. These two applications are used in different purpose, which can be used in one time, or used one by one.

In accordance with the problem mentioned above, the researchers started to identify the pronunciation problem in making mistake in pronunciation of sound /t/, /d/, and /td/ of ending –ed. It is hardly for the students to pronounce the correct pronuncatian. It means that the students not should be like the native, at least not to far away from the certain sound of words of English. The researchers wanted to conduct a research especially in pronunciation of sound /t/, /d/, and

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/Id/ of ending -ed by implemention of android application to solve the students' pronunciation of ending -ed. Impelementation of certain android application will be effective to improve the students' interest and attention to pronunciation that they pronounce. There are some sources stated that implementation of media of learning by application in it as games will be interested to apply, easy to memorize, and easy to elaborate the brain and mental of the students by implementing the suitable application (Rofivarti & Sari. 2017: Kurniawan, 2008). However, the researchers wanted to limit to the application android based in pronunciation entitled "Implemention of Android Application to Solve the Students' Pronunciation of Ending -ed"

Based on the problem mentioned above, the formulations of the research can be seen as follows.

- a. How good the implementation of application in android application of online and offline English Pronunciation can improve the ability of students' pronunciation of sound /t/, /d/, and /Id/ of ending –ed of second year students at STIBA (Foreign Language College) Persada Bunda Pekanbaru?
- b. What are the factors influencing the improvement of students' pronunciation of sound /t/, /d/, and /td/ of ending –ed of second year students at STIBA (Foreign Language College) Persada Bunda Pekanbaru by implementing the application existed on *android application of online and offline English Pronunciation*?

Based on the formulation of the research above, the aim of the research can be seen as follows.

- a. to evaluate the ability of students' pronunciation of sound /t/, /d/, and /td/ of ending –ed of second year students at STIBA (Foreign Language College) Persada Bunda Pekanbaru by implementing the application existed on media of learning android based?
- b. to identify the factors influencing the improvement of students' pronunciation of sound /t/, /d/, and /td/ of ending –ed of second year students at STIBA (Foreign Language College) Persada Bunda Pekanbaru by implementing the application existed on *android application of online and offline English Pronunciation*?

By implementing the application existed on android application of online and offline English Pronunciation by focusing on pronunciation ending –ed, it will be valuable for university

students in using android in positif way to improve their English competency and also give benefit to the lecturers in teaching other courses in English Department as an effective media of learning while teaching-learning process.

In these related theories to support this research, the researchers explained the theory of the needs of technology or the application of android based, teaching pronouncing ending –ed. The researchers used the pronunciation theory by Dale and Poms to elaborate the findings and discussion of this research.

Information and Communication Technology or called as ICT, which has the application in order to share information from personal or group by time and spatial (Dettori & Persico, 2011). In using technology, the user should pay attention to these five principles. First, the technology should give the students opportunity to read, write and discuss; second the technology should make the students more focus; third the technology should give the time; fourth the technology should give the students correct the error; and fifth the technology should give the students chance to explore the students' pronunciation (Erben, Ban, & Castaneda, 2009). However, to avoid misleading while using technology, the user should outline some points that become attention before applying technology in the teachinglearning process. Firstly, it is better for the teachers to check certain application to make sure everything is understandable before conducting the class. Secondly, the teacher should make the rules while using this technology, for example forbidden words are banned, can not be accessed in that school (Mahmudah, 2015).

Pronunciation Ending –ed

The word "pronunciation" closely relates to English phonology. One of the important aspects in English phonology is International Phonetic (IPA) Association transcription. This International Phonetic Association (IPA) transcription is very needed and important because it is a tool to use to transcribe the alphabet in general (Ogden, 2009; Gut, 2009). Referring to the previous theory, the word 'pronunciation' defines the way or rules in spellings on vocal sound and consonant sounds (Alan, 2014).

Except explaining on the transcription, the researchers outlined a brief explanation on the pronunciation ending –ed. The problem of pronouncing –s always existed in pronunciation of plurals, third-person verbs, and contractions existing in the ends of words. According Dale and

Poms (2005) stated that there are the rules to avoid the problems in pronouncing plurals, thirdperson verbs, and contractions. It can be seen as follows. The first rule of pronunciation of ending -ed happens when someone tries to pronounce the plural of regular nouns, the verb form of the third person singular, and contraction, the sound will absolutely sound /t/ in the last sound of basic form of the words is voiceless sound. The second rule of pronunciation of ending -ed happens when someone tries to pronounce the plural of regular nouns, the verb form of the third person singular, and contraction, the sound will absolutely sound /d/ in the last sound of basic form of the words is voiced sound. The third rule of pronunciation of ending -ed happens when someone tries to pronounce the plural of regular nouns, the verb form of the third person singular, and contraction, the sound will absolutely sound /Id/ in the last sound of basic form of the words is sounding /t/ or /d/. These three rules should learn first deeply before conducting the research of pronunciation of ending -ed.

METHOD

In the research, the researchers used a classroom action research by Kemmis and McTaggart (2014, p. 11). The stages of the research were started at preliminary study, like gain the information of the ability of students' pronunciation of sound /t/, /d/, and /Id/ of ending -ed in the level of "fairly good". By implementing the android application of online and offline English Pronunciation, the researchers focused on the android application chosen based on the aim of this research. After that, the researchers prepared the planning to implement the android application of online and offline English Pronunciation. At this stage, the planning were teaching strategy, syllabus per semester, and the minimum score of achivement. Then, the researchers did the action. At this stage, the researchers applied teaching strategy by implementing android application of online and offline English Pronunciation that had already prepared before. Furthermore, the next stage was observation. At this stage, the collaborator of the research conducted observation in the classroom and wrote all activities during teaching-learning process. The last stage was reflection. At this stage, the researchers and collaborator did the reflection and evaluation of the implementation of android application of online and offline English Pronunciation in teaching English phonology to improve the ability of students' pronunciation of sound /t/, /d/, and /Id/ of ending -ed.

According to the explanation above, the researchers created 6 meetings for one cylce of the research. The researchers divided into 4 meetings for teaching-learning process by implemention of android application of online and offline English Pronunciation, 1 meeting for pre-test and 1 meeting for post-test to evaluate the students' achievement and ability of students' pronunciation of ending -ed by implemention of android application of online and offline English Pronunciation of English phonology subject. The researchers only applied 1 cycle since it was already improvement of ability of students' pronunciation of ending -ed by implemention of android applications in English phonology subject and applied in higher education level with limited number of meeting.

This research was conducted at STIBA (Foreign Language College) Persada Bunda Pekanbaru located at Diponegoro street number 42 Pekanbaru, Riau. The participants of this research were the second year students at STIBA Persada Persada Bunda in academic year 2018/2019 attending English phonology subject. The researchers focused on the pronunciation of ending –ed.

The research instruments of this research in order to collect the data by using test, fieldnotes, checklist, observation and interview. To obtain data related to understand the pronunciation of ending -ed, the students were asked to answer a 30 question of multiple choice questions by implementing the pronunciation application on media of learning of android based relating to the pronunciation of ending -ed. It aimed to evaluate the improvement of the students' ability in understanding pronunciation of ending -ed by implementing of android application of online and English Pronunciation. offline Then, the researchers and collaborator wrote all activities in English phonology subject by using fieldnotes and obeservation checklist in accordance with the activities done in classroom. After that, the researchers conducted interview to all students to obtain additional information in order to find out the students' feeling, the students' response while the teaching-learning process by implementing the pronunciation application on media of learning of android based in pronunciation of ending -ed. The aim of this interview to obtain data about the factors affected the improvement of the ability of students' pronunciation of ending -ed by implementing of android application of online and offline English Pronunciation.

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After collecting the data, the researchers evaluate and analyze post-test by counting the number of correct answer and calculating it to the final score (post-test) of each student. There minimum score was about 65. In short, if the post-test got by students were higher the minimum score or even much better than the pretest, it meant that there would be an improvement of students ability in pronouncing of ending –ed by implementing of android application of online and offline *English Pronunciation*. To find the final score of each student, the researchers used this formula below (Fathira, 2017).

 $M = \frac{X}{N}$

Notes:

M = mean score

X = correct answer

N = Number of all items

Then, the score will be converted to the level of category based on the STIBA (Foreign Language College) Persada Bunda range score. If the range score is about 100-80, it means that the level of category is in "very good" level; If the range score is about 79-65, it means that the level of category is in "good" level; If the range score is about 64-55, it means that the level of category is in "fairly good" level; If the range score is below 55, it means that the level of category is in "poor" level.

RESULTS AND DISCUSSION

In this point about results and discussion, generally, the researchers described the stages that had been mentioned before as planning, observation, reflection, and action. Since the aim of this research was to improve the ability of students' pronunciation of sound /t/, /d/, and /td/ of ending -ed by implementing the pronunciation application on media of learning of android based. This is due to the ability of students' pronunciation of sound /t/, /d/, and /Id/ of ending -ed was still categorized below standard. The researchers explained the stages that were done in the teaching-learning process in the classroom of 4 meetings as described below. In addition to, there was 1 meeting for pre-test and 1 meeting for post-test.

Meeting for pre-test

In this meeting, the researchers did a pre-test to the students. It was for gaining the information about the ability of students' pronunciation of sound /t/, /d/, and /id/ of ending –ed by implementing android application of online and offline *English*

Pronunciation. The information of the ability of students' pronunciation of sound /t/, /d/, and /td/ of ending –ed by implementing the pronunciation application on media of learning of android based was in the level of "fairly good" by score 53,75. Since the students' ability was indicated below standard, the researchers tried this pronunciation application on media of learning of android based to improve the ability of students' pronunciation of sound /t/, /d/, and /td/ of ending –ed.

The result of first meeting

Before doing this first meeting, the researchers had been looking for information about the ability of students' pronunciation of sound /t/, /d/, and /td/ of ending -ed. Then, at the first meeting in the classroom, the teaching-learning process was preceded by an introduction to the students about the the pronunciation of ending -ed. The researchers asked the questions and asked opinion to the students about pronouncing ending -ed. The problem existed in pronouncing plurals, third-person contractions that verbs, and existed in pronunciations of ending -ed in the ends of words. There are some rules to avoid the problem in pronouncing those plurals, third-person verbs, and contractions based on the Pronunciation's book.

After that, the researchers gave the example of pronouncing ending –ed first then followed by the rules and examples of pronouncing ending –ed to the students. After that, the students were asked to pronounce other words or other examples of pronouncing ending –ed. The researchers asked students to write down everything that became the important point to the rules of pronouncing ending –ed. The rules can be learnt in these rules.

- 1. The first rule of pronunciation of ending –ed happens when someone tries to pronounce the plural of regular nouns, the verb form of the third person singular, and contraction, the sound will absolutely sound /t/ in the last sound of basic form of the words is voiceless sound.
- 2. The second rule of pronunciation of ending ed happens when someone tries to pronounce the plural of regular nouns, the verb form of the third person singular, and contraction, the sound will absolutely sound /d/ in the last sound of basic form of the words is voiced sound.
- 3. The third rule of pronunciation of ending –ed happens when someone tries to pronounce the plural of regular nouns, the verb form of the third person singular, and contraction, the

sound will absolutely sound /Id/ in the last sound of basic form of the words is sounding /t/ or /d/.

To know more about the knowledge of the rules of ending –ed, the students should learn about the sounds of voiceless, voiced, and sound /t/ or /d/.

The result of second meeting

After that, in the second meeting, the researchers explained more deeply by giving examples of voiceless, voiced, and sounding /t/ or /d/ by by implementing the application existed on media of learning of android based. The researchers introduced two applications used in this research. The researcher asked the students to download the online and offline application of pronunciation by sharing the internet acces from the researchers. The applications were pronunciation application, offline and online. After downloading the two application of pronunciation, the students were asked to used the application to ease them apply these in the following meetings. Before continuing to the next meeting, the researchers asked the students to practice at home by giving several words related to the pronunciation of ending –ed by implementing the application given to them.

The result of third meeting

In the third meeting, the students were asked to explain what they did at home as the the individual assignment given at the previous meeting, like explaining the way to pronounce the selected words of examples by implementing the two applications existed on media of learning of android based.

After that, the researchers gave response to the results of students' assignments by correcting the way to acces, the way to pronounce, and the reason of pronouncing ending –ed wheter the last sound of base form was voiced, voiceless, or sibilant sound. The researacher gave the detail information of voiced, voiceless, and sounding /t/ or /d/ of other examples. However, the researchers only described the limited example of voiced, voiceless, and sounding /t/ or /d/.

After giving comments and inputs due to the students' assignments of voiced, voiceless, and sounding /t/ or /d/, the researchers instructed students to think of their mispronouncing words by implementing the application existed on media of learning of android based again, paid attention to the last sound of base form, pronounced again ending –ed well. This process aimed to eliminate

misunderstandings in pronouncing ending –ed of the students to the last sound of base form.

The result of fourth meeting

After that, in the fourth meeting, the researcher focused on showing the results of the two applications existed on media of learning of android based in pronouncing ending -ed that had been observed previously. This activity could be an overview to the students' understanding of pronouncing ending -ed on what they did before. In this meeting, the students were asked to stand in front of the class and used their own android to implement the application existed on media of learning. The researchers asked the students read one by one of the selected words of ending -ed. In this meeting, the learning process was focused on showing the result of two applications on media of learning of android based that have been observed. Based on these points, the students had got the enough information regarding to the pronunciation of ending -ed by implementing the application existed on media of learning of android based.

Meeting post-test

In the last meeting, the post-test also known as cycle test was conducted by asking the students to complete the test regarding to the ability of students' pronunciation of ending –ed. They were asked to answer a set multiple choice questions about 30 question of ending –ed by implementing or using the applications given to the students. This test was held to measure the students' achievement in understanding the concept of pronouncing ending –ed. After giving the test, the researchers tried to evaluate the students' work that could be seen in Table 1.

Table 1. Re	sult of the	post-test in	pronouncing

ending –ed				
No.	Student's Score	Category of Ability		
1	96,67	Very good		
2	90,00	Very good		
3	90,00	Very good		
4	80,00	Very good		
5	76,67	Good		
6	70,00	Good		
7	70,00	Good		
8	66,67	Good		
	Mean = 80,0	Very Good		

Students' achievement

Based on the data collection from the pre-test above as the cycle test, it was found that the mean

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score was significantly increased and categorized as very good with score 80,0. It can be seen as the previous test in the pre-test was 53,75 was very low and categorized poor. In conclusion, after conducting the research by implementing media of learning of android based for four meetings (1 cycle), the students' mean score was **80,0** and categorized as very good. It can be seen in the following Figure 1.

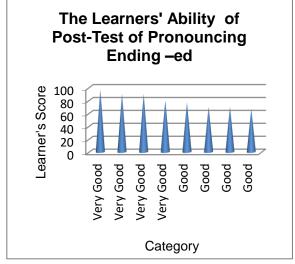


Figure 1. Result of post-test in pronouncing ending –ed

Moreover, the researchers found that the students still have lack of understanding of the rules in pronouncing ending –ed that could be seen from the resut of pre-test. Most students got low score that categorized as poor with 25%. Meanwhile, one student was categorized as fairly good with 12,5%. Then, one student was categorized as good with 12,5%. Last, two students were categorized as very good with 25%. It could be seen in the following Table.

 Table 2. The result of pre-test of pronouncing

ending –ed				
No.	Student's	ident's Category of		
	Score	Ability		
1	76.67	Good		
2	66.67	Good		
3	63.33	Fairly Good		
4	60	Fairly Good		
5	56.67	Fairly Good		
6	43.33	Poor		
7	36.67	Poor		
8	26.67	Poor		
Me	an =53.75	Fairly Good		

The scores from the Table 2 above were obtained from the calculation of the correct

answer divided by the total number of questions then multiplied by 100. From the data above, it showed that there are two students who got very good with score 93,33 and 83,33; one student who got good with score 66,67, whereas five students were categorized as poor, as Figure 2 below.

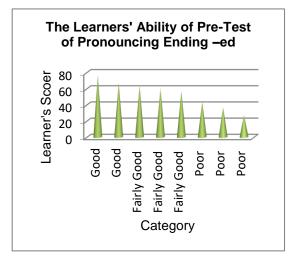


Figure 2. Result of pre-test of pronouncing ending -ed

From Figure 2, it showed that only 2 of 8 students got the highest level of category in very good level, one of 8 students got the high level of category in good level, and then the other 5 of 8 students got the lowest level of category in poor level. Then, the comparison from the pre-test and post-tes found that the students' mean score was increased in numbers. It showed that from the pre-test, there were only two students got good score at very good level of category increased become there were 3 students got good score at very good level of category; there was only 1 student got good score at good level of category increased become there were 3 students got good score at good level of category; there were 5 students got low score at poor level of category decreased become there were only 2 students got low score at poor level of category. It could be seen in Table 3.

 Table 3. The comparison of total of participants

 and the category obtained

No.	Test	The Number of Participant	Category
1.	Pre-test of	2	Good
	endinged	3	Fairly Good
		3	Poor
2.	Post-test of	4	Very Good
	endinged	4	Good

In line with the Table 3 above, to compare the increasing numbers of students improvement, it can be seen from the result of each part of questions in pronouncing ending –ed taken from pre-test and post-test. The result can be seen in these two Figures 3 and 4 below.

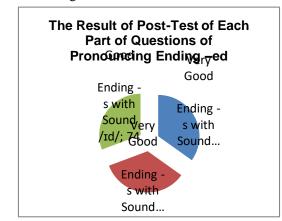


Figure 3. Result of post-test by students of each part of questions of pronouncing ending –ed

This Figure 3 showed that the result of students' post-test that assessed based on the three parts of questions was satisfactory. These three parts of questions were pronouncing sound /t/ of ending –ed, pronouncing sound /d/ of ending –ed, and pronouncing sound /Id/ of ending –ed. In Figure 3, it described that the score from these parts of questions was good. The post-test result from pronouncing sound /t/ of ending –ed was categorized at good level of score 80; the pre-test result from pronouncing sound /d/ of ending –ed was categorized at good level of score 74; the pre-test result from pronouncing sound /Id/ of ending –ed was categorized at good level of score 68.

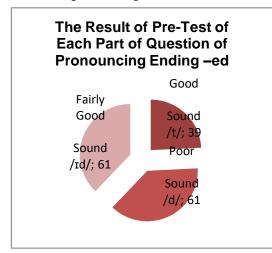


Figure 4. Result of pre-test by students of each part of questions of pronouncing ending –ed

This Figure 4 showed that the result of students' pre-test that assessed based on the three parts of questions was unsatisfactory. In Figure 4, it described that the score from these parts of questions was in different of level of category. The pre-test result from pronouncing sound /t/ of ending –ed was categorized as good level of score 78; the pre-test result from pronouncing sound /d/ of ending –ed was categorized at poor level of score 38; the pre-test result from pronouncing sound /id/ of ending –ed was categorized at poor level of score 38; the pre-test result from pronouncing sound /id/ of ending –ed was categorized at poor level of score 38; the pre-test result from pronouncing sound /id/ of ending –ed was categorized at fairly good level of score 55.

Based on the information presented in the paragraph above, it was clear that the scores from each part of questions showed significant increased. The increasing of the students' achievement can be seen from the result of pretest to the result of post-test. The students' posttest score was much higher than the pre-test one. It is concluded that there has been an improvement of the ability of students' pronunciation of sound /t/, /d/, and /Id/ of ending -ed by implementing the application existed on media of learning of android based. In other words, it can be argued that the implementation of media of learning of android based in pronouncing ending -ed can help students to better competency in pronunciation. This is in line with the factors influencing the improvement of implementing media of learning of android based that can be seen from the explanation below.

Factors influencing the improvement

Furthermore, based on observation sheet results, the researchers found that every stage of implementing media of learning of android based was well done by students. And then, during the interview, information was found that most students were active in gaining information of the application and enjoyed during the teachinglearning process. However, there was one student who got bored due to the access of the application existed on media of learning of android based since he used different types of android and so that it made him not enjoyed the teachinglearning process. It showed that there were other factors that influence the ability of students' pronunciation of sound /t/, /d/, and /Id/ of ending -ed and the factors that affected the students' activity during the teaching-learning process other than the result of the test.

Based on the results gained in this first cycle of each research instrument, the researchers stated that the students' ability of English Letters of second year students at STIBA (Foreign

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Language College) Persada Bunda in academic year 2018/2019 in pronouncing ending –ed by implementing the media of learning of android based in a English phonology class was categorized into good level with score 73,75. Therefore, the researchers decided not to continue the research into the next cycle since the students' score had reached over the minimum score and got specified successfull criteria.

The previous studies had done the research related to the implemention of media of learning of android based in pronunciation matter of ending -ed. Therefore, the researchers summarized the previous research that is separately detailed into the application used and the focus in pronunciation matter of ending -ed. For the pronunciation, the researchers found similarities in the analysis done by Anggraini, Novianti, and Bardadi (2018); Shah, Othman, and Senom (2017), and Mahmudah (2015). It is good to implement media of learning of android based in pronunciation. This is in line with the research conducted by Mahmudah (2015).

CONCLUSION

Based on analysis, it can be concluded that implementing android-based learning media in pronouncing ending –ed can help students to improve their pronunciation of skills. First, the students' mean score, which was 80.00, was categorized into very good level of category. This is based on range scores of 80-100 that categorized as "very good".

Second, factors influencing the implementation of android applications to solve the students' pronunciation of ending –ed are the students' interest in using these android application of online and offline *English Pronunciation*.

However, only few students get bad scores. This happened due to the different types of android used by the student.

Furthermore, generally, the application android-based learning media can be used by the other researchers. This is in line with the findings Anggraini, Novianti, and Bardadi (2018), Shah, Othman, and Senom (2017), and Mahmudah (2015). However, only the research conducted by Mahmudah (2015) is similar to this research.

In addition to this research, the researchers need to choose other applications dealt with other subject in English to be examined in the future.

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