IMPROVING STUDENTS' VOCABULARY MASTERY THROUGH DUOLINGO APPLICATION AS MEDIA OF LEARNING IN CALL AT ELEVENTH GRADE STUDENTS OF SMA NEGERI 1 TELUKDALAM

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Abstract

The objective of this research aimed to Improving Vocabulary Through Duolingo Application as Media of Learning in CALL at Eleventh Grade Students Of SMA Negeri 1 Telukdalam.This research was conducted by using classroom action research design. The procedure of the research consist into two cycles. The cycle aimed to improve the students' vocabulary mastery through Duolingo Application in learning. The research findings that showed a significant improvement after the activity was over, in the first cycle there were 13 students' passed with the percentage 55 % and 23 failed or about 45%. On the post test in the last cycle increase whereby 23 students had been achieve the minimum competence criterion (MCC) with the percentage 80 % and 13 of students failed the test about 20%. Based on the data above the result of this researcher was indicated that there was improved the students vocabulary mastery by using Duolingo Application. The researcher proposes the following suggestion that the Duolingo Application can be applied the media as a strategies because it can enhance the vocabulary comprehence for students'.

Keywords : *Vocabulary; Duolingo; Learning*

Abstrak

Tujuan penelitian ini adalah untuk Meningkatkan Kosakata Melalui Aplikasi Duolingo sebagai Media Pembelajaran dalam CALL di Siswa Kelas XI SMA Negeri 1 Telukdalam. Penelitian ini dilakukan menggunakan desain penelitian tindakan kelas. Proses penelitian terdiri dari dua siklus. Siklus ini bertujuan meningkatkan penguasaan kosakata siswa setelah kegiatan belajar mengajar yang diubah dan ditingkatkan kemampuannya dalam kosakata. Hasil temuan dari penelitian ini menunjukkan peningkatan signifikan setelah kegiatan selesai, siklus pertama menunjukkan

sebanyak 13 siswa yang lulus dengan 55% dan 23 gagal atau dengan persentase 45%. Pada tes akhir di siklus terakhir terjadi peningkatan di mana 23 siswa mencapai kriteria kompetensi minimal (KKM) dengan persentase 80% dan 13 siswa gagal tes dengan persenta sebesar 20%. Berdasarkan data hasil penelitian diatas mengindikasikan bahwa ada peningkatan penguasaan kosakata siswa dengan menggunakan Aplikasi Duolingo. Peneliti mengusulkan saran supaya Aplikasi Duolingo dapat diterapkan sebagai media strategi karena dapat meningkatkan pemahaman kosakata untuk siswa.

***Kata kunci :** Kosakata; Duolingo; Pembelajaram*

A. Introduction

Learning English in the modern world is an obligatory for any prestigious person. English, French, and Chinese, is some language which almost using in the world, but among it English is become one of most important language because almost using in the whole of world especially in Indonesia (Harefa. D, 2025)..

In Indonesia English become of subject that include in curriculum and must learn in education by students, begin from kindergarten until college. As a way of Government to up capability of student's Indonesia to use English as a foreign language. In addition, other reason to using English on technology, social media, and network on this day (Harefa. D, 2025).

There are four aspects which could be master of English listening, speaking, reading, and writing. Among that the most important thing which have to master is Vocabulary before it. The all words are known, owned, contains of information about meaning, using cotinuous to convey ideas, and feelings by the person in English is called as Vocabulary. Without vocabulary person will be difficult to deliver what he will need and think about something (Harefa. D, 2025).

More over in the school vocabulary is the most needed as an elements to get the materials in English learning. Ulijn and Kempen, (1976) in Krashen, (1982) state that while knowledge of vocabulary may not be sufficient for understanding all

messages, there is little doubt that an increased vocabulary helps the acquirer understand more of what is heard or read. Vocabulary is an important element in language, because it is a basic to support four skills of English and have a big impact in communication. vocabulary is best acquired, and, most important, retained. There is some agreement among teachers that vocabulary should be taught in context, rather than by rote memorization of list Celce-Murcia and Rosenzweig, (1979) in Krashen 1982. If the students couldn't mastered the vocabulary well, their will be difficult to face English and make it bored. The interesting for the material will be decreased and the teachers in the trouble. So the Researcher think that's way vocabulary is important to become basic for English.

The Researcher has to said to hold vocabulary it's not easy for beginner in this case students. The first, English is not first language or L1 but foreign and if we compare with Indonesian completely different from structure and pronunciation. Beside that another problem was identify, according to the preliminary study who conducted by the Reseasrcher the way to teach of the vocabulary by teacher as educator is monotonous, tedious and still affected by local dialect (Harefa. D, 2025).

Furthermore based on the preliminary study with School Teaching Practice (PLP 2) at Eleventh Grade of SMA Negeri 1 Telukdalam year 2024, the students still lack in mastering vocabulary for majority. That could be measured when the Researcher asked them for opinion related to the material and no answered. Then the researcher tried to make treat them with some simple words as a way relate to them and only two can answered. The researcher begin think another way to overcome this.

Interesting is a main thing that could be up their motivation for English and not to bored. The Researcher think to improve it with the material in CALL is the acronym for computer-assisted language learnin. According to Hairunnisa, (2023)

explain that most of students like and enjoy using mobile application to learn English. Computer-Assisted Language Learning (CALL) is defined as "the search for and study of applications of the computer in language teaching and learning. Computer-Assisted Language Learning (CALL) is defined as the search for and study of applications of the computer in language teaching and learning, Levy, (1997) in University of Pakistan. Furhermore, Felix, (1998) in University of Pakistan state that Technologies allow computers to do multimedia applications, incorporating video, sound, and text, and this capacity allows the learner to interact with both the program and other learners.

The computer offers great flexibility for class scheduling and pacing of individual learning, choosing activities and content to suit individual learning styles, Oxford and others, (1998) in University of Pakistan. In this day digital of era that must need to adapt by educators in whole of Indonesia, but the fact that almost 85 % are using traditional style and it is became challenge to transformation of education in our country.

Spesifically the researcher will use Duolingo for school, so the students could be learn with playing in this application (Harefa. D, 2025). Duolingo application is a practice of media that provide English exercise in another time, place with easy and of course the students can study fun. Duolingo is a language learning company with a mission to lower barriers to education for everyone. For that reason, "test prep" for the Duolingo English Test may be a a little different than what you're used to, Duolingo Guide, (2024:6).

Duolingo Applications is one of example Digital Game Based Language Learning (DGBLL). DGBLL concerns into design and use of a diverse array of digital games for the purpose of learning or teaching a second or foreign language that the part of Computer-Assisted Language Learning (CALL) as the applications of the computer in language teaching and learning. According to Duolingo Guide (2024:4)The Duolingo English Test uses the

latest technology to make the test accessible, accurate, and secure. The test was developed by language testing experts using artificial intelligence (AI) to offer a modern testing experience built on research.

Duolingo for school is an application game based learning from United States in 2012 by Luo Von Anh for support learner easier to learning language. The teacher just registered, make a room and assignment that can be acces

B. Research Method

This research was conducted by using classroom action research design (Harefa. D, 2025).. Action research in education is any systematic inquiry conducted by teachers, principals, school counselors, or other stakeholders in the teaching learning environment to gather information about the ways in which their particular schools operate, the

C. Research Finding and Discussion

The Result of observation paper of the research activity after conducted in

for students to do it together in a server. After that, the students and teacher can be known the statistic of result of their together.

Based on the background of explain that above, the Researcher are interesting to conducting research entitled "**Improving Vocabulary Through Duolingo Application as Media of Learning In CALL at Eleventh Grade Students Of SMA Negeri 1 Telukdala**

teachers teach, and the students learn Gay, Mills, and Airasian (2012:20).

According to Pelton, (2010:3) It is a powerful mindset for teaching because it emphasizes your role as a reflective practitioner who is continually observant, thoughtful, and willing to examine personal actions in the light of the best possible practices for your studen

cycle I. activities in first meeting and second meeting activities were observed by teacher collaborator, as follows.

Table.1 The Result Observation of Researcher's Activities in Cycle I

No.	Indicator	First Meeting			
1	The Researcher's Activities	Done	Pecentage	Undone	Percentage
		8	80%	2	20%
		Second Meeting			
		Done	Pecentage	Undone	Percentage
		8	80%	2	20%

Source : The observation Paper of Researchers' Activities in Cycle I

Based on the table .1 above, it showed that the result of researcher activities in the first meeting were done 8 or 80%, the activity undone was 2/20%, in the second meeting were done 8 or 80% and the activity undone was 2/20%.

1) The Result Observation of Students' Activities in the Cycle I

Learning process is an activity among the teacher and students', so inside observing the researcher activities during the teaching and learning process, the students activities also observed during learning process by using the observation paper. There were some activities done and undone by the students from first and second meeting there were 13 activities. The result of observation paper for the students' activities was provided in the following table.

Table .2 The Result of observation Paper of Students' Activities in Cycle I

Indicators	First Meeting	
	Done	Undone
	73%	27%
Students' Activities	Second Meeting	
	Done	Undone
	82%	18%

Source : The observation Paper of Students' Activities Cycle I

In this steps, the teacher collaborator collaborator is observed the whole activities during the class. In the previous data above showed for the first meeting from 13 activities the percentage has done is 73% and 27% activities undone by the students. Furthermore, in the second meeting the percentage has done 82%.

2) Test Result of the Cycle I

After the researcher was given pre-test for the students' that relate to the material that had been learned. The test means to measure the ability of students about the material comprehence in travelling vocabulary. The result of test not showed a significant result, it could be seen the passed and not passed in the following table:

Table. 3. The Result of Test in Cycle I

Passed/Failed	Number of Students	Percentage	Score Average
Passed	13	55%	65 %
Failed	23	45%	

Source : The test Paper of Students' in cycle I

Based on the table above shown the percentage of students who passed the test about 55%, meanwhile the percentage of students' failed were about 45%. According the percentage of data the researcher decided to continued the research into cycle II.

a. The Cycle II

1) The Result Observation of Researcher's Activities in the Cycle II

The Result of observation paper of the research activity after conducted in cycle II. activities in first meeting and second meeting activities were observed by teacher collaborator, as following the table:

Table 4.The Result Observation of Researcher's Activities in Cycle II

No	Indicator	First meeting			
1	The Research er's activities	Do ne	Percen tage	Un done	Percent age
		9	90%	1	10%
		Second Meeting			
		Do ne	Pecenta ge	Und one	Percent age
		9	90%	1	10%

Source : The observation Paper of Researchers' Activities cycle II

Based on the table in the cycle II for the first meeting it was seen the improvement from the previous cycle that could be seen from the increase of the percentage about were done 9 or 90%, the activity undone was 1/10%, and in the last

meeting as the previous 9 or 90%, the activity undone was 1/10%.

2) The Result Observation of Students' Activities in the Cycle II

The Cycle I before was shown Students activity in the teaching and learning process. The researcher was decided to continue in the cycle II as previous by using the observation paper to analyzed how the students' activity improve more. There were some activities done and undone by the students from first and second meeting in cycle II with 13 activities. The result of observation paper for the students' activities was provided in the following table.

Table. 5 The Result of observation Paper of Students' Activities in Cycle II

Indicators	First Meeting	
Students'	Done	Done
Activities	85%	85%
	Second Meeting	
	Done	Done
	88%	88%

Source : The observation Paper of Students' Activities II

3) Test Result of the Cycle II

After the researcher finish all the material and the gave the post test for students that related that had been learned. The test means to measure the ability of the students about overall the material comprehence in travelling vocabulary. The result of test was showed the significant increase, and it could be seen the passed and not passed in the following table:

Table.6 The Result of Test in One Cycle II

Passed/Failed	Number of Students	Percentage	Score Average
Passed	21	80%	65%
Failed	15	20%	

Source : The test Paper of Students' in cycle II

Based on the table, depend on the data analysis who conducted by researcher the percentage of students who passed the test about 80%, meanwhile the failed was about 20%. Based on the previous data above the researcher concluded if the students' were got increase the progress for the learning.

4) Reflection of the Cycle

Based on the result of activity the researcher made the evaluated about the teaching and learning activity. Based on the result it was showed that in the cycle I and cycle II had been significant differences. The cycle I found that most of the activities undone, on the other hand in the cycle II that most of the activities has done. The observation researcher activities, showed the researcher almost done the activities. In addition the data also present the students could able to follow the activities as the result showed.

While the observation paper of students activities found the most of students able to participate on the learning process as the chart or table of analysis showed.

a. Research Finding

Based on the data above the result of this researcher was indicated that there was an increasing on the students vocabulary mastery by using Duolingo Aplication. The researcher conducted a Classroom Action Research (CAR) by applying the Computer assisted language learning (CALL) using Duolingo Aplication as the media of learning at the Eleventh grade students at SMA Negeri 1 Telukdalam.

The significant improvement on this research could be able seen before and after doing research and in the following graphic, it was provided the students' percentage improvement.

b. Discussion

Computer-Assisted Language Learning (CALL) is defined as the search for and study of applications of the computer in language teaching and learning, Levy, (1997) in University of Pakistan. Duolingo application is a practice of media that provide English exercise in another time, place with easy and of course the students can study fun. Duolingo is a language learning company with a mission to lower barriers to education for everyone. For that reason, "test prep" for the Duolingo English Test may be a a little different than what you're used to, Duolingo Guide, (2024:6).

Based on the research findings that show a significant improvement after the activity was over. In addition as the graphic showed, from first cycle there were 13 students' passed with the percentage 55 % and 23 failed or about 45%. On the post test in the last cycle increase whereby 23 students had been achieve the minimum competence criterion (MCC) with the percentage 80 % and 13 of students failed the test about 20%.

According the explained above, it could be known that the by applying the Computer assisted language learning (CALL) using Duolingo Aplication as the media of learning could be facilitate the students to mastering vocabulary learning.

D. Conclusion

a. Conclusion

Based on the result of the research, the rsearcher concluded that, the CALL as an acronym of Computer-Assisted Language Learning, is a method that necessary to improving in education that more efficient to get easy information and learned. Duolingo applications is an

In addition considering to the latest research was carried out by Septiani (2023) entitled "The Implementation of Duolingo Application For Improving Students English Vocabulary at The Seventh Grade of SMP Negeri 08 Muaro Jambi", found the results of the research, Students knowledge vocabulary shows an increasing from the percentage of students mean score on the pre-test (M=58.14) and after being given treatment using the Duolingo Application students mean score increased significantly the post-test (M=75.93).

example of Digital Game Based Language Learning (DGBLL) as a part of CALL.

Duolingo application is a practice of media that provided English exercise in another time, place with easy and of course the students can studying enjoy. Based on the result the researcher can

conclude that, if the implementation of by applying the Computer assisted language learning (CALL) using Duolingo Aplication as the media of learning is recomended method to improve the vocabulary master by students.

b. Suggestion

Based on the previous conclusion, the researcher proposes the following

suggestion that the Duolingo Application can be applied as the media of strategies because it can enhance the vocabulary comprehences for students', furthermore the researcher also proposes the suggestion to the teachers, students and the next researchers.

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