THE ANALYSIS OF USING DUOLINGO APPLICATION TOWARD STUDENTS VOCABULARY DEVELOPMENT AT THE TENTH GRADE OF SMKN 1 BAWOLATO

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CHAPTER I INTRODUCTION

1.1 Background of the Problem

The 21st century is an era globalization with rapid development science and technology. Appearance multimedia technology and its applications for teaching, displaying audio, visuals, as well as animation effects bring own color inlearning. Technology in teaching and learning as an enabler and suggests that technology can work to help organize and provide structure for material to students; help student, teachers, and parents interact, anytime and anywhere. Educational technology in 2024 which was formulated through creating, using, managing appropriate learning processes and resources as a study and ethical practice in facilitating learning. Reskyani, Basri and Salija (2021:42) say technology is an instrument that has powerful functions to provide unique and varied inspiring ideas so that vocabulary teaching can be improved.

The ability to speak English is a basic skill needed by someone in the information and globalization era, because the introduction and mastery of science and technology are mostly written and delivered in English. In the learning process, of course cannot be separated from the role of technology. Technology can simplify all forms of internal needs regarding the learning process. In this modern era there are many applications that can help students to improve their English skills. There are some of applications for learning English HelloTalk, Rosetta Stone, Babbel, Beelinguapp, Duolingo, etc.

The researcher here only focused on one application, namely Duolingo which provides 66 different language courses available in 23 languages, there are 22 more courses that are still being developed. According to Riva (2023:1791) "Duolingo is a web language teaching program that helps students with some exercises, largely based on the translation system". The translation in Duolingo Application is the translation of English to Indonesia and Indonesia to English. Then, the application provides various choices or themes of vocabulary and the users just need to click the theme of the vocabulary. The themes of the vocabulary in the Duolingo Application consist of the noun,

adjective, verb, preposition, possessive pronoun, color, date, occupation, place, society, and question. In this research, the researcher chooses the present and past verbs based on the students' problems that happened. Last, the vocabulary of the verb in this application is easy to remind because a vocabulary that is a verb repeats many times in the Duolingo exercise.

Vocabulary is part of the language system. Vocabulary development can be one of the factors that influences students' English speaking abilities. The limited number of students' vocabulary can affect their speaking abilities. Students couldn't make sentences, they doesn't know the words in English, they also didn't know the function of a word. So, this problem can cause slow progress in speaking. They couldn't make sentences without knowing the vocabulary to representthoughts, feelings and ideas. There have been several studies conducted on vocabulary. English learning is an important thing in the world because it is the most widely spoken language. English is used at most international events and as a medium of information in the fields of science, culture and technology. It can be said that English is the first (international) language. In addition, it must be realized that most scientific books are written in English. Therefore, to be able to understand books to gain knowledge, everyone must have adequate command of English, including Indonesian students. English is one of the important languages in the world. English also plays an important role in facilitating global connections and mobility in the transportation industry.

Based on initial observations made by researcher on May 22nd, 2024, it was found that students at SMK Negeri 1 Bawolato had low interest in learning English. This was caused by several factors; first, many of the tenth grade students difficult to learn English because lack of vocabulary and difficult to remember them. They did not have many vocabularies; second, they are not interested in a delivered material because the teachers used the traditional learning method in transfering materials to the students; and the last is some of them used that smartphone only for pleasure especially playing the games. Therefore, researcher investigated the English learning application, namely

Duolingo, which has very influentialbenefits in developing English language skills. Where this application has 4 English language skills, namely listening, speaking, reading, and writing. Apart from that, with this application students can practice directly how to pronounce words and sentences in English easily.

In a first study related to the use of Duolingo as a technology-based learning medium in improving students' speaking skills, it was found that one of the difficulties was that the results of preliminary research found that they had low motivation in learning English. In presenting research, Grego in Ellin et al (2021). Then the second researcher was related to the application of the Duolingo media application in improving English vocabulary mastery of students at SMP Negeri 3 Agrabinta Cianjur. Other students agreed that vocabulary is the main key that someone must have in learning a language. Because the richer a person's vocabulary, the more likely a person is to be skilled in language and the easier it will be for him to convey and receive information either orally, in writing or using certain signs. Basically, students learn vocabulary so that they can improve their listening, speaking, reading and writing skills well (Erna 2021), and the last researcher said regarding the Duolingo application in improving German vocabulary. One way that teachers can help students master German vocabulary is by using learning media. Learning using media will be more fun and students will be enthusiastic in learning German.

However, the fact when application of duo linggo english on May 22nd, 2024 is that teachers still used the teacher method, however learning methods are still teacher-centered, difficulties in pronunciation, no friends to practice, difficulty in understanding material related to speaking, and students spend more time playing with gadgets and the last is the English teachers use the Duolingo app but have not beenable to develop language skills. This causes a gap between the research that has been carried out and the facts on the ground. This gap can be exploited by future researchers to answer the question of whether difficulties in understanding learning material are caused by the learning media used (online learning) or other factors that must be researched.

Finally, based on the explanation above about the students' ability to speak English, the researcher analyzed the Duolingo application used by the English teacher. The research are conducted at SMK Negeri 1 Bawolato, Sisarahili village, Bawolato subdistrict, Nias district. This research is "THE ANALYSIS OF USING DUOLINGO APPLICATION TOWARD STUDENT VOCABULARY DEVELOPMENT AT THE TENTH GRADE OF SMKN 1 BAWOLATO"

1.2 Focus of the Research

Based on description discussed in the background above, the focus of the research is analysis of using Duolingo application toward students vocabulary development at tenth grade of SMKN 1 Bawolato.

1.3 Formulation of the Problem

With the background of the research, the researcher has formulated the research question is how the students' vocabulary development taught by using Duolingo Application at the tenth grade of SMKN 1 Bawolato.

1.4 Objective of the Research

Based on previous problem formulation, the research objective was to analyze the use of the Duolingo Application toward vocabulry development for tenth grade students at SMKN 1 Bawolato.

1.5 Significance of the Research

This research is useful for:

- a. Theoretically
 - a. The results of the research are expected to support theories dealing with Duolingo application to help students in develop their vocabulary.
 - b. For researcher, as an experience and to increase understanding inresearch and broaden insight.

c. For future researchers who want to do researcher which are relevant totheir research topic.

42. Practically

- a. The results of this research are expected to give information to the English teachers, especially in guiding students to develop vocabulary effective way.
- b. For schools or teachers, this research help to analyze the Duolingo application, in English vocabularybecause it is suitable for student inths era.
- c. It is also expected to encourage students awareness for using theuseful application like Duolingo in learning especially in developvocabulary.

CHAPTER II LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Duolingo

"Duolingo is a free online language platform that provides translation assignments for learning vocabulary and grammar (in the form of studying and practicing a given topic), as well as assignments for practicing pronunciation and listening" Herlina, Yundayani & Astuti (2021:246). Duolingo is easy to use because the usage procedure is simple, so Duolingo can be used for all ages. This means Duolingo is easy used and more interesting, so it will be comfortable as ourmedia use in teaching in class.

Looking at the problem above, the researcher applies to one of the media to make students have an interest while learning English vocabulary. Duolingo is a free language learning applications and site. Like what the creator said at their site, "Duolingo builds a world with free education and no language barriers. Users are able to learn languages for free while simultaneously translating web". Duolingo is an application intended to assist the students with learning the language effectively and fun so that students do not feel like learning instead of having fun with the application.

Furthermore, Jaskova says that Duolingo is a decent application in language learning for vocabulary. It can make students more obvious and remember the words, make them intrigued, appreciate, and blissful in learning since it gives battle in the educational experience. The researcher advantage in picking Duolingo application is that the application utilizes gamification procedures that make it simple and amusing to utilize. Gamification is a game-based and tasteful learning component that draws in individuals to think, play, rouse, and take care of issues. It has different and exceptional methods in learning language particularly on vocabulary. It very well may be a future in learning language. It can without much of a stretch access and gives a great deal

of language, this Applications that canbe utilized on iOS, Android, and Windows phone is made so that clients can keep on working on the capacity to examine whenever and anyplace. Thus, it is so useful to the individuals who need to learn vocabulary.

According to Munday (2019) "Duolingo is a free app created by Luis Von Ahn and Severin Hacker in November 2011." Duolingo also have motto, in which "Free language education for the world." In accordance with its site, "it has more than 30 million registered users. It offers several languages for English speakers as well as others for non-English speakers." Meanwhile, Teske (2017) "Duolingo is an online language- learning platform which launched in 2012 that offers courses in 27 different world languages." Duolingo itself can be accessed in mobile application on Android or accessing internet on computer devices. "This review will primarily focus on the website version of the software. The siteclaims to act as a private language tutor that provides individualized instruction that motivates its users through game-like activities to promote language acquisition." Duolingo offered the instruction that individualism and also the English Test site to evaluate non- native English speakers' proficiency degree and also an English test for bussiness and schools. This observation should be focus on the individual educator function of the site for Spanish for English speakers.

Moreover, Paula (2016: 60) "duolingo is an application for cell phones or computers. It is one of the most famous and praised language teaching applications on the market. It works in a very 14 simple way and it is very useful for those who are studying English and several other languages, such as Spanish, Italian, German and Turkish. It can be used forat least five minutes a day, and the users define how they would like to practice it right from the beginning. The four skills, reading, writing, listening and speaking, are present during the learning process in Duolingo, through elaboration of questions, affirmative and negative sentences, small texts and excerpts to be heard and transcribed, and it is also possible to the students to record their own pronunciation to assess their oral performance." As the conclusion that Duolingo is either

of English teaching learning media, which is able to assist the students in learning English which is more enjoyable, because it is such as the game based free learning platform, that can be used as educational technology in school.

Based on Cecep (2018: 16) Duolingo as a free language-learning application can offers a wider range of features that requires an internet connection during using this application. Here are the characteristics of Duolingo application, such as:

- Achievements is a Duolingo application feature given out when thelearners or users has been completed the lessons through best effort.
- b. Lingots is a small jewel icons that the learners have completed the activities and level successfully to get "lingots". It can be changed for bonus extra practices.
- c. Crown Levels are new feature in Duolingo application. Each skill has a "Crown Levels". When you have completed a skill, you will get a crown, and continued to new skills.
- d. Daily Goal is about appreciation for the learners who have completed a daily goal. Duolingo application gives a rewards to them with surprising sounds and unique pictures and make the learners feel more enjoyable.
- e. Clubs User Networking is a feature for learners to communicate and sharing with other users about language learning. It also can compete to gain (10) XPs and see their friends" score.

Duolingo application also provides the learners withvarious types of exercises within a lesson or unit, such as:

- a. Vocabulary, in which the users see a picture, and be asked to choose it with correct answer.
- b. Pronunciation, in which the users will be asked to repeat or say a sentences what they hear.
- c. Listening, in which the users will hear an audio clip of word or sentence and have to type it correctly.

d. Translation in which the users will be asked to translate a word or asentence into the language they want to know or learn.

2.1.2 Vocabulary

The body of words and phrases used in a particular language or subject matter is referred to as vocabulary. It incorporates the words that an individual knows and uses, and can be considered a proportion of their semantic and social skill. As stated by Lines (2005:121) in Rusdi et al (2022), vocabulary is the grouping of words that a person is aware of. Vocabulary could characterize as various words in a language which contains data about it is importance in structure and utilization correspondence. According to other research, Neuman and Drawyer, as cited in Bintz (2011:44) in Rusdi et al (2022), Vocabulary is identified as the words that a person must be familiar with in terms of communicating.

In essence, vocabulary serves as a critical foundation for language comprehension and expression. It allows individuals to understand and convey ideas, emotions, and information accurately. A rich vocabulary enhances one's ability to engage in meaningful communication across various contexts and subjects, making it an indispensable component of language learning and overall linguistic competence.

Vocabulary is a fundamental component of language proficiency (Wardani, 2020). This is because vocabulary is very necessary when language learners learn to speak, read, write, and make them understand what they hear from the language they listen. Jack C. Richards (2020:255 as quoted in Kartika, 2019) says that: "Vocabulary is a core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write. Without a broad vocabulary and strategies for acquiring new words, starting from taking advantage of language learning opportunities around them such as listening to the radio, listening to native speakers, using language in different contexts, reading, or watching television".

According to Cameron (2022:188) vocabulary as one of the

knowledge areas in language plays a great role for learners in acquiring a language. Vocabulary is one of the language components that is really important. Vocabulary development refers to the knowledge of stored information about meanings of words necessary for communication

Based on the definition described above, it can be concluded that vocabulary plays a very important role in mastering second and foreign languages. Without knowing a lot of vocabulary, students will not be able to convey their messages and ideas. In addition, vocabulary must be taught since young students learn English first. In other words, vocabulary is the key so that students at the next level can understand all about English subjects such as students can speak English fluently and can listen, write, and read English easily.

Vocabulary is competence to know words and meaning. The mastery of English vocabulary itself is closely related to the ability of the learner in acquiring the vocabulary. Henry and Pongrantz (2006, p. 246), points out that "mastering a language means being able to comprehend the vocabulary and its phonological system both in speech and in writing". It means that the learner who learns English as the second language must comprehend the meaning of the words and is able to apply them in sentences vocabulary mastery in children plays an important role in achieving achievement and success in children at school. The more words a child masters, the more vocabulary understanding they have. The child's low mastery of Indonesian vocabulary is thought to be because parents, when communicating with their children, often use their mother tongue or regional languages more often than Indonesia and Indonesia is rarely used when communicating with their children.

2.1.2.1 Importance of Vocabulary

Vocabulary defines as an urgent part in correspondence and articulation of contemplations, thoughts, and feelings. It enables to expressour thoughts and ideas in a clear and concise manner and contributes to themeaningfulness of language. Vocabulary is regarded as the key factor linking all skills required in

communication (Huyen & Nga, 2003 cited in Naderiheshi, 2022).

Vocabulary acts as a crucial bridge connecting the four fundamental language skills: speaking, listening, reading, and writing. As students expand their English vocabulary, they gain a powerful tool that simplifies their overall language learning process. This expanded word knowledge enables them to articulate their thoughts more effectively in writing, engage in English conversations with greater ease, and comprehend both spoken and written English more readily. Essentially, a welldeveloped vocabulary opens doors to more efficient and effective English language acquisition and use across all skill areas. Paul Nation - As an expert in language teaching, Nation emphasizes that a broad vocabulary is an essential foundation for reading and comprehension. He argues that without an adequate vocabulary, reading comprehension suffers because readers are unable to identify and understand words in their broader contexts. Here are the opinions of experts about the importance of vocabulary

- a. Krashen said, best known for his Input Hypothesis theory, believes that exposure to rich and varied language, including vocabulary, is key to effective language acquisition. He believes that vocabulary acquired through natural learning and extensive reading can accelerate language acquisition.
- b. McKeown elt. In their book "Bringing Words to Life," these three authors emphasize the importance of explicit vocabulary instruction. They argue that students need to learn vocabulary in meaningful contexts and engage in discussions and activities that promote the use of new words.
- Gee said highlights how vocabulary and conceptual understanding are closely related to one's ability to

participate in a variety of social and cognitive practices. He argues that a broad vocabulary enables individuals to interact more effectively in a variety of social and professional contexts.

d. Hirsch said, in his book "The Knowledge Deficit," argues that general knowledge and a rich vocabulary are fundamental to effective education. He suggests that vocabulary learned not only impacts reading ability, but also understanding broader information and social contexts.

Overall, vocabulary is considered one of the most fundamental aspects of language learning and literacy development. The ability to understand and use vocabulary appropriately has a direct impact on reading comprehension, communication, and overall academic learning.

2.1.2.2 Development of vocabulary

According to Whorter, vocabulary development is a skill worth the effort to improve. Vocabulary affects not only speaking skills, but reading, listening and writing skills as well. In speaking, the words chosen affect how well students understand, the impression they make and how another people react to them. In writing, vocabulary determines how clearly and accurately students can express their ideas to others. In listening, vocabulary influences how much students understand in class discussion. There are four kinds of vocabulary that should be learned and mastered by the students. According to Snow and Colleagues (1998) in Tankersley (2003:66) "we all have four different vocabularies: the listening vocabulary, the speaking vocabulary, the reading vocabulary, and the writing vocabulary. According to Whorter, developing one's vocabulary is a talent that is worthwhile. Not only does vocabulary impact speaking abilities, but it also influences reading, writing, and listening skills. When pupils talk, the words they use have an impact on their comprehension, their impression, and how other people respond to them. Students' use of terminology in writing affects how precisely and clearly they can communicate their ideas to others.

Vocabulary in listening affects how well students comprehend class discussions. There are four types of vocabulary that students should study and become proficient in. In Tankersley (2003:66), Snow and Colleagues (1998) state that "each of us has four distinct vocabularies: speaking, listening, reading, and writing." First comes the development of the listening vocabulary, then the In line with Brunner (2012:1) "there are four distinct types of vocabularies: speaking, writing, reading, and listening. The acquisition of each impacts the ability to communicate with others".

In addition Johnson (2008:93-94) states there are four different vocabularies, they are as follows:

- a. Listening vocabulary is the word that we hear and understand, commonly referred to as words we know. This is the largest of our vocabularies and the one upon which the others are built.
- b. Speaking vocabulary is the words that we use in conversation our listening vocabulary is larger than our speaking vocabulary because our understanding of some words is incomplete or contextual (we understand a word in the context of a sentence or situation, but not necessary by itself).
- c. Reading vocabulary is the words that we are able to read. Most students enter school with very few words in their reading vocabulary. To this, they add approximately three thousands new words a year. Learning to read is much easier if students are reading words in their listening and speaking vocabularies make learning to read easier.
- d. Writing vocabulary is the words we use to express ourselves in written form. This is usually the smallest of the four vocabularies. We write by using only those words we can read and understand. Just like listening and

speaking vocabularies, our reading vocabulary is larger than our writing vocabulary.

Based on the theories above, there are four different vocabularies. They are listening, speaking, reading and writing vocabulary. Each of them has different function. It means that if the learners want to speak something, they need speaking vocabularies. Speaking vocabulary is used to communicate. So, vocabulary is very important for the students in learning the language. Every skill in the language needs vocabulary, when the students are listening, speaking, reading, and writing. They need vocabulary. Without vocabulary the learners will not be able to develop their skills.

2.1.3 Teaching Vocabulary by Using Duolingo Application

Students who are proficient in expanding their vocabulary can benefit from using Duolingo to expand their knowledge of English words. For the modern teacher, the new period brings with it new tasks and challenges. In order to address difficulties, we must be creative. Therefore, students and teachers can use technology to facilitate communication between language learners and teachers both within and outside of the classroom. The most common and practical ways to study a language are through mobile devices and peer-to-peer internet connections. It is anticipated that the teaching and learning software Duolingo would be successful in displacing conventional instruction.

The problem is that students tend to pay less attention because they think they have used the application through class, so they prefer not to use it outside the classroom. However, it remains the 17 teacher's responsible maximize the use of Duolingo as homework. It could give them actual physical rewards, extend task deadlines, and so on.

Since vocabulary is the primary focus of the Duolingo app, as was previously said, using it to teach those subjects is advised. There are a number of ways to use Duolingo to teach EFL students, as Paul Magnuson notes (Paul, 2014). The teacher allows students to work alone for at least half of class time, with the remaining time being spent in groups engaged in language awareness exercises or online language reviews. The instructor can also conduct a review and offer some comments at the same time. It's

crucial to keep making sufficient progress with Duolingo outside of the classroom as homework.

Based on the explanation above, the Duolingo application can be accessed anywhere and anytime with a good network connection, so this application is very interesting and not boring for students. Then the teacherteaches vocabulary by giving good rewards to support achieve students' vocabulary development.

In this research, the procedures of using Duolingo Application for students' vocabulary development are conducted the following(Teske, 2017):

- 1) Students download Duolingo application and create
- 2) Account Open Duolingo application and select let's get started
- 3) I want to study? Choose English
- 4) How did you know about us ? choose friends or family
- 5) Why do you study language? click student
- 6) Select target ? regular clicks 30 minutes/day
- 7) Help us find your level ? (click for the first time learn english)
- 8) Then, students are presented with questions or quick test to find out how far we are in English
- 9) Select create profile with google email
- 10) Take a placement exam to advance.
- 11) students can access their progress through lessons or units
- 12) The lesson is leveled to the next lesson and then unlocked and gets the crown.

2.1.3.2 Benefits of Using Duolingo

Diaz (2020) asserts that there are several advantages to using Duolingo, such as enhancing learning and inspiring users. There are several advantages to using Duolingo as a homeroom learning tool. Among the benefits include Improved language proficiency: Duolingo provides a gamified approach to language learning that has been shown to improve users' language skills. According to a research in the Journal of Educational Psychology, after just 34 hours of practice, Duolingo users significantly improved their language skills. Convenient and easily accessible: Duolingo

is a flexible app that can be used on both iOS and Android devices, allowing users to access and use it whenever they have free time. Cost-effective: Dissimilar to numerous customary language courses, Duolingo is totally allowed to utilize. This makes it an available choice for individuals who might not have the assets to pay for language classes or guides.

Improves memory and cognitive function: Learning another language has been displayed to further develop memory and mental capability in grown-ups. Duolingo gives a tomfoolery and connecting method for working on these abilities. Promotes motivation and engagement: Duolingo's gamified way to deal with language learning is intended to keep students persuaded and drew in, improving the probability that students stayed with the program and keep on gaining ground in their language learning venture.

Generally, Duolingo is a useful asset for anybody hoping to become familiar with another dialect in a helpful, open, and savvy way. Whether you're an understudy, proficient, or just somebody who is hoping to further develop their language abilities, Duolingo can give variousadvantages to assist you with accomplishing your objectives.

2.1.3.1 Advantages of Duolingo Application

There are several drawbacks to using the Duolingo Application in learning English vocabulary: The Duolingo application will work when there is an internet connection. Connectivity refers to how mobile devices can connect wirelessly using various mobile and wireless access technologies such as GPS, EDGE, GPRS, GSM, 3Gs, 4Gs, WiMAX, Wifi, WLAN(Imtinan, 2013). The Duolingo application wont work when you ina remote area with no internetaccess.

Teachers must use a projector if they wish to use the Duolingo app in the classroom. Students will become more engaged and take part in the teaching and learning process as a result. Teachers must prepare more time and resources, such as projectors, loudspeakers, and notebooks, if they plan to use them in regular classrooms (Munday, 2016). The efficiency of utilizing the Duolingo app in the classroom will be decreased in schools without sufficient equipment, such as projectors and loudspeakers. According to the above

description, schools must have sufficient facilities because the Duolingo application cannot be used without a strong internet connection and needs a projector in the classroom.

2.4 Relevant Study

In this instance, a number of earlier studies that were pertinent to the research the researcher was planning to undertake were located. They are found in journals and theses. It is anticipated that the topics of these investigations will be connected to earlier research. The initial piece An alternative for learning to speak English is the use of Duolingo media, according to the first study on the use of this technology-based learning tool to help students improve their speaking abilities.

The purpose of the study is to determine how using Duolingo materials can help students become more proficient speakers. This study employs a classroom action research design and a qualitative methodology. 35 students participated in this study, which was carried out at a state senior high school (SMAN) in Bekasi. Tests, interviews, and observations were used to gather data. The study's findings demonstrate that using Duolingo materials improves students' English-speaking proficiency. One of the challenges was shown to be their low motivation for learning English, according to the findings of early research. In Ellin et al. (2021).

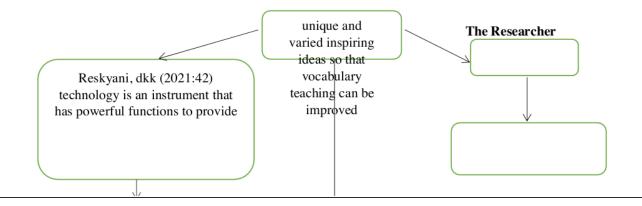
The second researcher then focused on how students at SMP Negeri 3 Agrabinta Cianjur were using the Duolingo media application to improve their vocabulary mastery of English. Other pupils concurred that the most important skill for learning a language is vocabulary. The purpose of this study is to use the Duolingo media application to help seventh-grade students at SMP Negeri 3 Agrabinta become more proficient in English vocabulary. 22 seventh-grade students served as the research subjects for this two-cycle classroom action study. Data is gathered through performance evaluations, learning outcomes assessments, and observation.

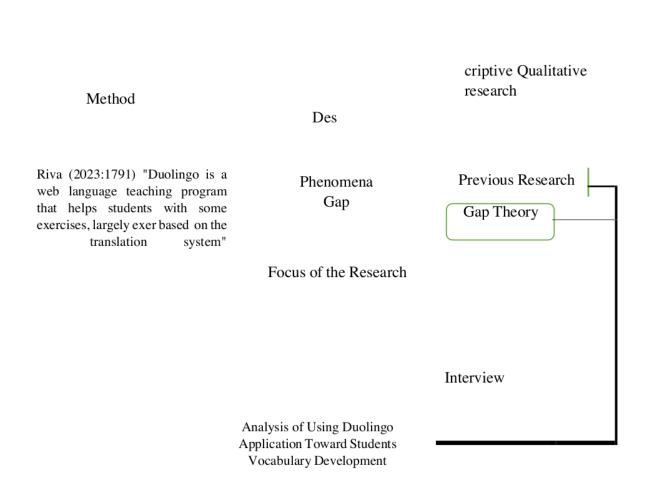
Meanwhile, research data analysis techniques use qualitative and quantitative descriptive analysis. The results of this research indicate that the application of the Duolingo application media can improve the vocabulary mastery of class VII students at SMP Negeri 3 Agrabinta Cianjur. Because the richer a person's vocabulary, the greater the

possibility that a person will be skilled in language and the easier it will be for him to convey and receive information either verbally, in writing or by using certain signs.

Basically, students learn vocabulary so they can improve their listening, speaking, reading and writing skills well (Erna 2021). And the last researcher said that the Duolingo app improved German vocabulary. The purpose of this study was to determine the mastery of German vocabulary in class X MIPA SMA Negeri 8 Makassar through the Duolingo application. Classroom Action Research, which has two cycles—cycle I and cycle II—is the research methodology employed. Thirty-six pupils from class X at MIPA SMA Negeri 8 Makassar served as the study's subjects. Both qualitative and quantitative data analysis methods were used in this investigation. Observation was used to get qualitative data, and vocabulary improvement assessments in cycles I and II were used to gather quantitative data. Using educational materials is one way teachers can assist pupils in learning German language. Students will be more excited to study German if they use media, like Duolingo, to make the learning process more enjoyable.

2.2 Conceptual Framework





Tabel 2.1

CHAPTER III RESEARCH METHODS

3.1 Approach and Type of the Research

To carry out this research, the researcher employed a qualitative research approach. According to Harefa et al. (2022), qualitative research is a type of study that examines natural conditions with the aim of understanding and interpreting them. The approach used in this study is qualitative. Qualitative research seeks to understand the phenomena experienced by research subjects in a holistic manner, using descriptions in words and language within a specific natural context, and employing various scientific methods. Creswell (as cited in Murdiyanto, 2020) defines qualitative research as a process of investigating social phenomena and human issues. Additionally, qualitative research is described as a strategy to explore meanings, understandings, concepts, characteristics, symptoms, symbols, and descriptions of a phenomenon in a focused, multimethod, natural, and holistic manner, prioritizing quality, using several methods, and presented narratively in scientific research (Sidiq & Choiri, 2019).

Therefore, the qualitative approach research process begins with the development of basic assumptions. Then it is associated with the rules of thought used in the research. The data collected in the survey is then interpreted. Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Sarmila et al., 2023). Furthermore, qualitative research methods are research methods based on philosophy, which are used to research scientific conditions (experiments) where the researcher is the instrument, data collection techniques, and qualitative analysis emphasize meaning (Saputra & Riady 2024).

Thus, it can be concluded that qualitative research not only provides deep insight into phenomena, but also emphasizes the use of researchers as the main tool, as well as data collection and analysis techniques that are oriented towards understanding meaning.

3.2 Variables of the Research

Research variables are characteristics that can be observed, measured, or manipulated in a research. In a research context, these variables are used to understand or explain the relationships between various elements. Puspitasari, 2020 states that research variables are all forms of objects that become thefocus of research and are observed during research to collect information about these objects from which conclusions can be drawn. Handayani et al., 2022 state research variable is attributes or behavior or values of people, object, or various activities determined by the researcher, in order to get information about the research and to

draw the conclusion. There are two variables in the research namely independent variable and dependent variable. The dependent variable of this study is the students' vocabulary development while the independent variable of this study is Duolingo

3.3 Setting and Schedule of the Research

This research was conducted at SMKN 1 Bawolato. This research was conducted from July 2024 to August 2024, starting from submitting a research title in October 2023. In July 2024 researcher was conducted research by collecting data in the form of observation and interviews, followed by working on the results of field surveys.

3.4 Source of Data

There are two types of data used in this research, namely primary data and secondary data. Ibrahim in Haryoko, 2020: 122 states that all information, facts and facts that are related to research and have a very clear connection, even direct relationships are considered primary data, because this data is the main factor in determining the success or failure of a research. This process is referred to as primary data. This means that research cannot be said to be successful if it does not obtain this data. Meanwhile, secondary data is information, reality and facts related to research but not directly related to research, as well as supporting documentation related to primary data. This secondary data is more superficial and cannot capture the depth of information, facts and realities that have been studied or investigated thoroughly, and as supporting data, the information is not very conclusive (not very proven), but can describe some of the research findings.

To obtain data that was used as research objects, researchers use severaltypes of sources. Researchers use several previous research theories as initial data that can explain the phenomenon of using Duolingo in providing vocabulary learning to students. To analyze the use of the Duolingo application among students, especially tenth graders at SMKN 1 BAWOLATO as informants or respondents who are the main source of information in this research because the success of the research is based on the responses they provide. Researchers will carry out direct observations using observation sheets to obtain data about the roleof the Duolingo application in providing vocabulary mastery to students and interview teachers based on interview guidelines. So in this research the primary data that researchers must obtain is data from observations of teachers and students in class and also interviews with teachers as informants which are then published in the form of interview transcripts, as well as data, from observations of teacher checklists.

3.5 Instrument of the Research

The research instrument was a written guideline for interviews, observations, and questions that were prepared to obtain information (Ovan & Saputra, 2020). According to Sukmawati et al., 2023 Research instruments are tools that use various types of information in research to be collected, processed quantitatively or qualitatively and then arranged systematically. The research instrument is a tool used in research to collect and obtain data so that the research carried out can be carried out easily. Based the explanation above, research instruments used by researcher in this study are observation and interview.

In this study, researcher used the participant observation. In participant observation, the researcher actually participate in the situation or setting they are observing. Interviews are a qualitative research method that collects data by asking questions. It includes three main types: structured, unstructured, and semi-structured interviews. In this study, researcher used structured interview guidelines.

3.6 Data Collecting Technique

Technique is the procedure how to get data. In this research the technique used by the researcher in the process of collecting data conducted includes observation and interview.

1 Observation

Observation is essentially an activity using the five senses, can be sight, smell, hearing, to obtain the information needed to answer a research problem. The results of observations are in the form of activities, events, objects, certain conditions or atmosphere, and one's emotional feelings. Observations are made to obtain a real picture of an event or events to answer research questions.

Kumar, 2022 argues that Observation is described as a method to observe and describe the behavior of a subject and it involves the basic technique of simply watching the phenomena until some hunch or insight is gained. Observation of people's behavior or work processes of a product resulting from research and development. In making observations, researchers see, listen, then take measurements with the instruments they carry.

2 Interview

Dursun, 2023 argues that interview is the process in which the researcher is asked various questions to the person participating in the interview and is tryingto obtain information from the interviewer about a certain subject. Interview are used to collect data from subject about opinion, belief, and feelings about the situation in their own words. There are three kinds of interview model: structured interview, unstructured

interview, and semi structured interview.

In this research, the researcher used the unstructured interview becausethe through the unstructured interview the researcher can explain the main question for long time and then the subject can talk in some depth about the information which the researcher needed. In conducting the interview, the researcher must pay attention to the attitude, appearance, and body language of the interviewee when answering the researcher's questions. In collecting the data, the researcher use audio recorder, camera recorder, interview guidelines, andwriting the result of the interview activity. There are three types of interview in qualitative research, namely:

a) Unstructured interview

Due to the nature of the interview, it cannot be pre-structured. Although the researcher, who is expressed in the unstructured interview here, determines the interview questions with the main lines before starting the interview, he can produce new questions according to the flow of the interview with the flexibility and freedom given by the interview process. According to the participant's answer, the interviewer should prepare new questions at that moment and ask them by structuring open-ended questions. While interviewing for the research, he interviewer takes informal notes and generates questions at the time of the interview. Although it is not structured before the research, the interviewer checksfor the research. In this respect, this type of interview is classified as a narrative interview.

b) Structured interview

This type of interview is carried out by the interviewer in a detailed and regular manner. It is carried out with an interview form that includes questions written in a standardized format. Structured interviews are controlled by the interviewer and therefore the interviewee is given less time to be flexible and comfortable. In the structured interview, the interviewer draws a framework and asks the questions he prepared for it. The interviewer asks short questions prepared in advance and the participants are expected to give short and understandable answers. While this type of interview offers the opportunity to work with larger groups, survey studies can be given as an example. Structured interviews can be thought of as the oral form of written questionnaires. As in the questionnaires, the structured interview aims to avoid answering the

question or tominimize the participant's inadequate response. In structured interviews, the researcher should stick to the interview form that he prepared beforehand. During the interview, the question order and question statements should be followed. In this type of interview, also called standardized interviews, questions and the order in which these questions are asked are predetermined (Merriam & Grenier, 2019).

c) Semi-structured interview

It is the type of interview that is frequently preferred by researchers. It is more flexible than the structured interview type. The interviewer schematized the flow of the interview beforehand. But here, the researcher can ask different questions according to the flow of the interview. The semi-structured interview is between a structured and an unstructured interview. In this type of interview, questions can proceed more flexibly. This type of interview can be shaped according to the current situation of the interviewer, the answers given by the participant, and their views on the subject.

So in this research, the researcher was conducted structured interview, because it can help the researcher in determining the direction of the interview in accordance with the objectives and focus of the research.

3.6 Data Analysis Technique

In analyzing qualitative data, there are three stages of activity, namely: Data reduction, data presentation and drawing conclusions (Mezmir,2020). Based on opinion then the data analysis will be carried out following the steps as follows:

a. Data Reduction

Data reduction is an activity of summarizing, selecting the main things, simplifying and focusing on the important things so that the data obtained will provide a clearer picture (Aulean et al., 2024). The result of this process are themes, concepts and descriptions of data, both in terms of similar and contradictory matters. Data reduction is a sensitive thinking process that requires intelligence, breadth and great depth of insight. Data reduction in this study, namely data that has been obtained in the field by observation and interview will be selected and focused on this research. The following are the guidelines used by researcher to reduce data.

b. Data Display

After the data is reduced, the next step is displaying the data. This process is done to make it easier for writers to construct data into a complete social picture. In addition to check so far where the completeness of the data is available. Next in displaying data apart from narrative text, it can also be in the form of graphs, matrices. By displaying the data it will make it easier to understand what that has been understood. The following are the guidelines used by researcher for presenting data in description form:

c. Drawing Conclusion (Verification).

The conclusion in qualitative research that is expected is new discoveries that never existed before. The discovery of data in the form of a description or image of an object that was previously still dim so after research becomes clear. Display data stated above if it has been supported by solid data it can be made a credible conclusion. After the data is obtained in the above way, the researcher analyzes it by inductive thinking. Inductive thinking, namely: "Departing from thefacts specific, concrete events, then from the facts or general conclusions are drawn from these particular events.

CHAPTER IV
RESULTS AND DISCUSSION

4.1 RESULT

In Chapter IV, the researcher was describes and discusses the results of the research that has been conducted at The Tenth Grade of SMKN 1 Bawolato In general, Chapter IV was explains the results of the research and discussion. Based on the problems and objectives of the research, it is sourced from in-depth interviews, direct observation, and documentation studies that are be explored in accordance with the problems and objectives of the research.

4.1.1 SMKN 1 BAWOLATO PROFILE

VISION

SMART, COMPETITIVE, AND NOBLE MALLES

MISSION

- 1. Organizing education based on faith and taqwa
- 2. Organizing an active, creative and fun learning process
- 3. Providing life skills oriented educational services (life skills)
- 4. Producing graduates with competitive advantages in the global era
- 5. Instings a sense of responsibility for the cleanliness, beauty and comfort of the school.
- Improves administrative order and orderly activities in accordance with main tasks and functions

4.1.2 Observation Results

This research was conducted at SMKN 1 Bawolato. This research was done from July 2024 to August 2024, starting from submitting a research title in October 2023. In July 2024 the researcher conducted research by collecting data in the form of observation and interviews, followed by working on the resultsof field surveys.

The observation checklist is used by the researcher based on the results of observations in the field. The following table are the results of researchers' observations regarding the use of the Duolingo Application on The Vocabulary Development of Tenth Class Students at SMKN 1 Bawolato.

No	Indicators of Using					
	Duolingo Application for	English Students	Students	Done	Undone	Descriptive
	Student Vocabulary	Activities	respons			researcher's
	Development					observation
1.	Preparation/Orientation	The teacher sayshello.	All of the student : the	✓		It's just that when the
		The teacher directs	students answered well, and			teacher was taking
		students to pray together	do the activities very well			attendance in class, there
		first.	All students: students			were students who
		The teacher checks the	answered the attendance			weren't present
		students' attendance.	properly except those who			
		students attendance.	were absent.			
2.	Apperception	The teacher gives trigger	• S1, S2, S3, S4, S5, S6,	√		
	пррегеорион	questionsusing picture	\$7, \$11, \$12, \$22, \$23,			
		media pictare	\$24, \$25,\$26, \$27, \$28,			
		incuia	S29 : Students' responses			
			are understanding but			
			_			
			slow in starting to understand			
			• \$8,\$10,\$26,\$20,\$21,			
			S30 : don't understand so			
			the teacher needs to repeat			
			it again			
	N 10' di di		01.00.00.01.05.01	-		
3.	Phase 1: Orientation students	The teacher explains the	• S1, S2, S3, S4, S5, S6,	✓		
	on the problem	learning objectives and	\$7,\$11,\$12,\$22,\$23,			
		motivate sstudents and The	S24, S25,S26, S27, S28,			
		teacher explains what is	S29 : they understand and			
			listen to it well			
			• \$8,\$10,\$26,\$20,\$21,			
			S30 : don't understand			
			so the teacher needs to			
			repeat it again			
4.	Phase 2: Organizing		• S1, S5, S4, S8, S9, S19,	✓		Researchers saw that
*	students	• The teacher divides	• \$1,55,54,58,59,519, \$29 : They ask about			the use of duo lingo had
	o condo tito	students into several groups	using duolingo, then ask			been implemented but
		consisting of 4 people.	the teacher about it.			students still could not
		Using gadgets (toapplicate				understand it.
		duolinnggo application in	• S2, S3, S4, S6, S7, S11,			understand it.
		learning), headsets and	S12, S13, S14, S15, S16,			
		LKDP, teachers encourage	\$17, \$18, \$19, \$20, \$21,			
		students to listen to videos	\$22, \$23, \$24, \$25,\$26,			
		and complete Conversations.	S27, S28 : Stay silent.			
			keep quiet understanding			
			yourself how to use			
			Duolingo			

5	Phase 3: Guiding the		All of the student :		_	
6.	Phase 3: Guiding the investigation Develop and presentresults	The teacher encourages students to discuss and find explicit and detailed information in examples of shortspoken conversations. The teacher guides students to collect information related to the description of several friends in their group in terms of physical characteristics and appearance. The teacher encourages students to think critically by developing the information theyget and uses duolingo as an application that helps students in the text and then creates a dialogue scenario (short spoken conversation). The teacher encourages students to present short spoken conversations from each group.	All of the student: Students to discuss and find explicit and detailed information in short oral conversation examples. All of the student: Stay silent. keep quiet understanding yourself how to use Duolingo S1, S2, S3, S4, S5, S6, S7, S11, S12, S22, S23, S24, S25, S26, S27, S28, S29: they understand and and do the task well S8, S10, S26, S20, S21, S30: don't understand so the teacher needs to repeat it again S1, S2, S3, S4, S5, S6, S7, S11, S12, S22, S23, S24, S25, S26, S27, S28, S29: representatives from the group to carry out the practice		✓	Students need to be taught again, because some of them cannot use it yet.
7.	Analyze and evaluateprocess and results of solving	Teachers encourage students to provide feedback andevaluations regarding the results of their performance The teacher concludes all learning activities.	S7,S8,S9,: study well and follow the lesson answer and ask questions well The others just watch carefully, and end it well	~		
8.	Evaluation and follow-up plan	The teacher carries out learning reflection activities by asking students several questions. The teacher conveys material information and learning plans at the next meeting. The teacher ends the meeting by expressing gratitude and greetings.	thank you for the	·		

Based on the table above, it can be seen that duolingo is very much needed in Vocabulary Development which is implemented at SMKN 1 Bawolato and has implemented the concept and indicators according to the researcher's observations. However, there is 1 indicator that has not been implemented, namely Develop and present results. The teacher invites students to think critically by developing the information obtained and using duolingo as an application that helps students in texts and then creating dialogues. Students need to be taught again, because some of them have not been able to use the scenario (short oral conversation), where the teacher then invites students to present short oral conversations from each group.

4.1.3. Interview Result

Day/date

: Thursday

Based on matters related to this research, the theories that support the research, and the methods used in the research, this chapter will explain the results of the research. The research will be presented based on the results of interviews and documentation. The discussion in this chapter is obtained through the results of data collection through interview studies and documentation of informants needed in the research. In the chapter on the results and discussion of this research, various matters related to the results of interviews in September-October 2024 which have been conducted by SMKN 1 Bawolato will be explained.

Students' Interview Sheet

This interview was conducted with the Tenth grade Students to obtain preliminary data.

Time Location	: 08.30-10.00 WIB : SMK Negeri 1 Bawolato	
No	Questions	Studentis' Responses
1.	Can you tell us about your experience with learning English?	\$1, \$5, \$4, \$8, \$9, \$19, \$29 : limited learning \$2, \$3, \$4, \$6, \$7, \$11, \$12, \$13, \$14, \$15, \$16, \$17, \$18, \$19, \$20, \$21, \$22, \$23, \$24, \$25,\$26, \$27, \$28 : yes I can speak english
2.	How did you first hear about Duolingo?	\$1, \$2, \$3, \$4, \$5,\$6, \$7, \$8, \$9, \$10, \$11, \$12, \$13, \$14, \$15, \$16, \$17, \$18, \$19, \$20, \$21, \$22, \$23, \$24, \$25,\$26, \$27, \$29, \$30 : Interesting
3.	What motivated you to start using Duolingo for learning English?	S1, S2, S3, S4, S22, S23, S24, S25,S26, S27, S29, S30 An application that motivates me and influences me, there are features that are very helpful S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18: we can gather that this dulinggo can help us in adding common words that we use every day

		S5, S19, S20, S21 : can improve my vocabulary
4.	How often do you use Duolingo?	All of the student say : 5 minutes a day
5.	What features of Duolingo do you find most helpful in learning English?	\$1, \$2, \$3, \$4, \$5, \$20, \$21, \$22, \$23, \$24, \$25,\$26, \$27, \$29, features of Duolingo : speaker
		S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18 : there are games like puzzles
6.	Have you noticed any improvements in your English vocabulary since using Duolingo?	All of the student said: Since using this application in my vocabulary lessons my vocabulary has increased daily depending on usage.
7.	How do you feel about the gami fication elements in Duolingo? Do they help you stay motivated?	All of the student said: Improve me
8.	What do you think are the mostchallenging aspects of learning English vocabulary?	S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18: where we are invited to mention the words that have been provided.
		S1, S2, S3, S4, S5, S20, S21, S22, S23, S24, S25,S26, S27, S29, S30 : Listening, Reading, Speaking, and Writing.
9.	How do you typically learn new vocabulary words?	All of the student said : Yes,of course
10.	Do you find that Duolingo helps you learn new vocabulary more effectively compared to other	\$1, \$2, \$3, \$4, \$5, \$20, \$21, \$22, \$23, \$24, \$25,\$26, \$27, \$29, \$30 : Duolingo help me to improve
	methods?	S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18: Can help to learn new vocabulary, namely by using the Duolingo application
11.	What do you like most about Duolingo?	S12, S13, S14: I enjoy using it S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18: I think this application needs to be continuously updated and provide other features. S1, S2, S3, S4, S5, S20, S21, S22, S23, S24, S25,S26,
		S27, S29, S30: can help me to improve my vocabulary.
12.	How do you think Duolingo could be	All of the student said : very helpful in learning, and adding new vocabulary
	Improved to better support your learning needs?	
14.	Do you feel that using Duolingo has helped you improve your over all English language skills?	S1, S2, S3, S4, S5, S20, S21, S22, S23, S24, S25,S26, S27, S29, S30: I think it is suitable for elementary and junior high school students. Because it only studies general vocabulary.
		S22, S23, S24, S25,S26, S27, S29, S30 : able to improve our way of pronouncing vocabulary.
		S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18: able to improve our way of pronouncing vocabulary

15.	How do you think Duolingo has	Impacted me confidence in vocabulary no speaking
	impacted your confidence in speaking	English
	English?	
17.	Would you recommend Duolingo to other students	All of the student said of course
	learning English?	
	What delice would be a size to	All of the student sold of severe to the heater
18.	What advice would you give to	All of the student said of course, try to be better
	someone who is just starting to use	
	Duolingo?	

In this section, the researcher presented the results of the study in the form of interview results between the researcher and students in the English subject who became informants. Namely regarding learning English using. The informants selected were students who took part in the teaching and learning process in class, especially class X- OTKP with a total of 30 students at SMKN 1 Gunungsitoli. where the implementation of learning was carried out on Monday and Thursday at 08.30-10.00 WIB. Therefore, the researcher asked students to answer several questions regarding the use of duolingo in the learning process in helping students learn English vocabulary well. has it been implemented optimally or sometimes their teachers do not implement it in the teaching and learning process. as seen, students still do not understand how to use the features in this application, so teachers need to pay attention to this and find a solution.

4.2. DISCUSSION

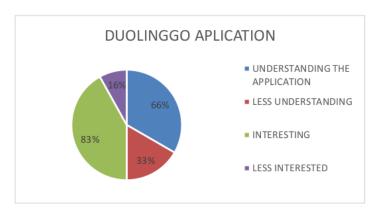
How the students' vocabulary development taught by using Duolingo Application at the tenth grade of SMKN 1 Bawolato?

"Duolingo is a free online language platform that provides translation assignments for learning vocabulary and grammar (in the form of studying and practicing a given topic), as well as assignments for practicing pronunciation and listening" Herlina, Yundayani & Astuti (2021:246). Duolingo is easy to use because the usage procedure is simple, so Duolingo can be used for all ages. This means Duolingo is easy used and more interesting, so it will be comfortable as ourmedia use in teaching in class. Looking at the problem above, the researcher applies to one of the media to make students have an interest while learning English vocabulary. Duolingo is a free language learning applications and site. Like what the creator said at their site, "Duolingo builds a world with free education and no language barriers. Users are able to learn languages for free while simultaneously translating web". Duolingo is an application intended to assist the students with learning the language effectively and fun so that students do not

feel like learning instead of having fun with the application.

Furthermore, Jaskova says that Duolingo is a decent application in language learning for vocabulary. It can make students more obvious and remember the words, make them intrigued, appreciate, and blissful in learning since it gives battle in the educational experience. The researcher advantage in picking Duolingo application is that the application utilizes gamification procedures that make it simple and amusing to utilize.

Based on the results of data processing regarding the Use of the Duolingo Application for Vocabulary Development of Grade X Students of SMKN 1 Bawolato in English learning using. In general, Duolingo is a useful asset for anyone who wants to get to know other dialects in a helpful, open, and intelligent way. Whether you are a student, advanced, or just someone who wants to further develop their language skills, Duolingo can provide a variety of benefits to help you achieve your goals. Therefore, researchers asked students to answer several questions regarding the use of duolingo in the learning process in helping students learn English vocabulary well. whether it has been implemented optimally or sometimes their teachers do not apply it in the teaching and learning process. as seen, students still do not understand how to use the features in this application, so teachers need to pay attention to this and find a solution.



4.2.1 The Research Result Versus to the Relevant Study

In this case, the researcher found several previous studies that were relevant to the research that the researcher was going to conduct. They are in the form of thesis and journals. These studies are things that are expected to be related to research that has been implemented previously. The first article In the first research regarding the use of Duolingo as a technology-based learning media in improving students' speaking skills, the use of Duolingo media is an alternative that can be used in learning to speak English. This research aims to find out how improve students' speaking skills through the use of Duolingo media. This research uses a qualitative approach with a classroom action research design.

This research was conducted at a state senior high school (SMAN) in Bekasi involving 35 students. Data was obtained from observations, interviews and tests. Theresults of this research show that there is an increase in students' ability to speak English using Duolingo media. It was found that one of the difficulties was that the results of preliminary research found that they had low motivation in learning English. Grego in Ellin et al (2021).

Then the second researcher was related to the application of the Duolingo media application in improving the English vocabulary mastery of students at SMP Negeri 3 Agrabinta Cianjur. Other students agreed that vocabulary is the main key that someone must have in learning a language. This research aims to improve the English vocabulary mastery of class VII students at SMP Negeri 3 Agrabinta through the application of the Duolingo media application. This research is classroom action research carried out in two cycles, with research subjects 22 class VII students. Data collection is carried out through observation, learning results tests, and performance.

Meanwhile, research data analysis techniques use qualitative and quantitative descriptive analysis. The results of this research indicate that the application of the Duolingo application media can improve the vocabulary mastery of class VII students at SMP Negeri 3 Agrabinta Cianjur. Because the richer a person's vocabulary, the greater the possibility that a person will be skilled in language and the easier it will be for him to convey and receive information either verbally, in writing or by using certain signs.

Basically, students learn vocabulary so they can improve their listening, speaking, reading and writing skills well (Erna 2021). And the last researcher said that the Duolingo app improved German vocabulary. The purpose of this study was to determine the mastery of German vocabulary in class X MIPA SMA Negeri 8 Makassar through the Duolingo application. The type of research used is Classroom Action Research which consists of two cycles, namely cycle I and cycle II. The subjects in this study were students of class X MIPA SMA Negeri 8 Makassar, totaling 36 people. Data analysis techniques in this study consisted of qualitative and quantitative. Qualitative data was obtained through observation, while quantitative data was obtained through vocabulary improvement tests in cycle I and cycle II. One way teachers can help students master German vocabulary is by using learning media. Learning using media will be more fun and students will be enthusiastic in learning German, suchas using Duolingo.

4.1.3 The Finding Versus Theories

The results of the study were compared with the theory Duolingo is a free online language platform that provides translation tasks to learn vocabulary and grammar (in the form of studying and practicing certain topics), as well as tasks to practice pronunciation and listening" Herlina, Yundayani & Astuti (2021:246). Duolingo is easy to use because of its simple usage

procedures, so Duolingo can be used for all ages. This means that Duolingo is easy to use and more interesting, so it will be comfortable to use as our media in teaching in class. However, seeing the problems in the classroom, the researcher expects the media, namely duolingo, to make students interested in learning English vocabulary. Utilization of the Duolingo Application for the Development of Vocabulary of Class XII Students of SMKN 1 Bawolato in Learning English using. In general, Duolingo is a useful asset for anyone who wants to get to know other dialects in a helpful, open, and intelligent way. Whether you are a student, advanced, or just someone who wants to further develop their language skills, Duolingo can provide a variety of benefits to help you achieve your goals. Therefore, the researcher asked students to answer several questions about the use of duolingo in the learning process in helping students learn English vocabulary well, whether it has been implemented optimally or sometimes their teachers have not implemented it in the teaching and learning process, as seen, students still do not understand how to use the features in this application, so teachers need to pay attention to this and find a solution.

4.1.4 The Research Result Implication

The results of this study reveal implications for students in the use of students in the classroom. A teacher must be able to provide the best for his students. The success of the student learning process is largely determined by the role of the teacher and what the teacher uses as media in the classroom. Therefore, teachers must always develop their abilities. Because what the teacher conveys becomes a guideline for improving students' insights and abilities. By using the duolingo application in learning to develop students' vocabulary in the classroom, the teacher's understanding of his role, both in the learning process, can be achieved well. Then it is hoped that with the duolingo application as a medium for understanding students' vocabulary, teachers will be more motivated by the teacher's ability temanage classroom life, such as planning a good learning process; providing reinforcement; collecting resources; organizing the environment to maximize efficiency, monitoring student progress; and anticipating, preventing, and solving problems. The development of their language skills is expected that Duolingo can provide various benefits to help you achieve your goals. Therefore, the researcher asked students to answer several questions about the use of duolingo in the learning process in helping students learn English vocabulary well, whether it has been implemented optimally or sometimes their teachers have not implemented it in the teaching

and learning process. As seen, students still do not understand how to use the features in this application, so teachers need to pay attention to this and find a solution.

4.1.5 The Research Result Limitations

In this study, the researcher realized that there were still many shortcomings in the research process. This study is the first study, so the researcher has not had experience in conducting previous research. Therefore, many things become obstacles in conducting research due to lack of knowledge and errors in interpreting several terms, new sentences, and so on. These are some factors that must be considered by subsequent researchers in perfecting their research. Some of the limitations that exist are as follows:

- a. The researcher realizes that the research process carried out is still not perfect, there are still many shortcomings in conducting research, writing, and data processing because the researcher is still a beginner, so the researcher has not been able to carry out this research perfectly.
- b. The researcher's knowledge is still very limited in processing qualitative analysis data, as well as the researcher's lack of ability in finding reference sources that are in accordance with teacher skills in micro teaching and Duolingo as a media that still needs to be developed.

CONCLUSION SUGGESTION

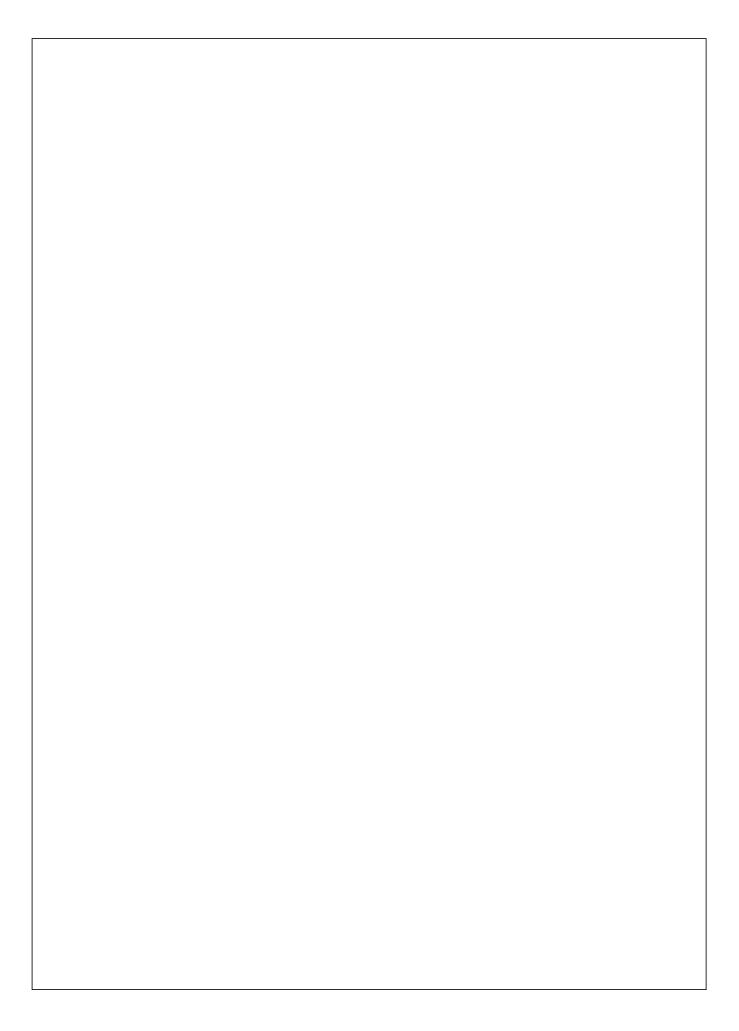
5.1 CONCLUSION

Based on the results of the research and discussion that has been done, the following conclusions can be drawn: That the 21st century has witnessed rapid progress in science and technology, which has had a significant impact on the education sector. The integration of multimedia devices has revolutionized teaching methods, providing a dynamic and interactive platform for learning. Educational technology, such as the Duolingo application, plays an important role in improving students' vocabulary and language skills. English, as a global language, is essential for accessing knowledge, technology, and international communication. This study focuses on the use of Duolingo at SMK Negeri 1 Bawolato to overcome students' low interest and challenges in learning English, such as limited vocabulary.

From the results of the research above, it is hoped that it can be implemented to achieve better goals in the future in using The Duolingo Application For Students' Vocabulary Development.

5.2 SUGGESTION

Here are some suggestions from researchers after conducting research and analyzing the research results, as described below. For teachers, especially SMK Negeri 1 Bawolato to overcome low student interest and obstacles in learning English such as limited vocabulary. Understanding the era of increasingly rapid technological learning, the Duolingo application will help students in learning, especially for vocabulary. Teachers are required to increase their creativity and critical thinking so that they can help teachers in managing better classes and motivating students in class, then for students of SMK Negeri 1 Bawolato and students as future readers, they must have the perception that learning in class is something that needs to be mastered. Therefore, by using the Duolingo for Students' Vocabulary Development application, it will have a good impact on students in class, and no less importantly, for further researchers it is hoped that they can conduct better research on the topics in this study in the future and prepare everything as well as possible in conducting research and can follow up on this research.



THE ANALYSIS OF USING DUOLINGO APPLICATION TOWARD STUDENTS VOCABULARY DEVELOPMENT AT THE TENTH GRADE OF SMKN 1 BAWOLATO

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