

**THE USE OF CAKE APPLICATION TO IMPROVE STUDENTS'
VOCABULARY**

*(A Quasi-Experimental of the Tenth Grade Students of SMA Negeri 1 Mayong
in Academic Year 2021/2022)*

FINAL PROJECT

Submitted as partial fulfilment of the Bachelor Degree (*Sarjana Pendidikan*) in
English Education



FADILA TIAMANDA

31801700013

ENGLISH EDUCATION STUDY PROGRAM

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PAGE OF VALIDATION

A Sarjana Pendidikan Final Project on

**THE USE OF ONLINE MEDIA (CAKE APPLICATION) TO IMPROVE
STUDENTS' VOCABULARY**


Prepared and presented by


**Fadila Tiamanda
31801700013**


Defended before the Board of Examiners

and Declared Acceptable

Board of Examiners

Advisor : Nani Hidayati, S.Pd., M.Pd. 

First Examiner : Mega Mulianing M, S.Pd., M.Pd. 

Second Examiner : Nur Ekaningsih, S.Pd., M.Pd. 

Semarang, 24 August 2022
Faculty of Language and Communication Science
UNNISULA
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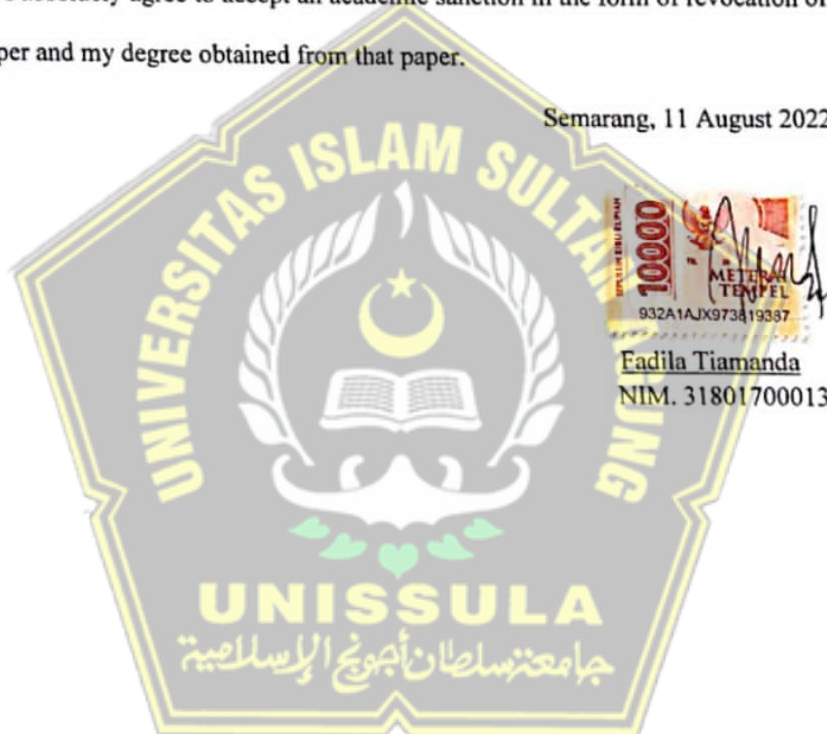


Dr. Kurniawan Yudhi Nugroho, S.Pd., M.Pd
NIK. 210813021

STATEMENT OF WORK ORIGINALITY

Hereby, I honestly declare that the undergraduate thesis I wrote does not he works or part of the works of other people, except those which were cited and quotations and the references, as a scienific paper should. If my statement is not valid in the future, I absoluely agree to accept an academic sanction in the form of revocation of my paper and my degree obtained from that paper.

Semarang, 11 August 2022



MOTTO AND DEDICATION

MOTTO

“Don’t be afraid, confident is first”

~Fadila Tiamanda~

“Life is so cruel that I want to end it, but I’m glad that I didn’t give up”

~Seo Woojin (Dr. Romantic Teacher Kim 2)~

DEDICATION

This final project is dedicated with affection, love and gratitude to:

- My beloved parent who giving me supports and motivation. For my father and my mother, I love you so much.
- My beloved sisters Syifa Anandatia and Melani Istia..

ABSTRACT

Tiamanda, Fadila (2022). *The Use of Cake Application to Improve Students' Vocabulary*. A Final Project. English Education Study Program. Faculty of Languages and Communication Science, Sultan Agung Islamic University. Advisor: Nani Hidayati, S.Pd., M.Pd.

Cake Application is one of the technology online medium on smartphone for learning English. This application, which was used in this research, very easy to use to improve English skills such as reading, speaking, writing and vocabulary. The type of research used in this study is quasi-experimental with pre-test and post-test treatment. This design was used to compare the results of students' achievement when using a control group and experimental group. The research subject was two classes at SMA Negeri 1 Mayong, they are X MIPA 2 as a control group and X MIPA 3 as an experimental group. The result of Paired Sample T-test showed that the Sig. (2-tailed) was 0.000 and the results was 58.19 for pre-test and 63.47 for post-test. It means that H_1 was accepted and H_0 was rejected and the students' condition after treatment had different score. It can be said that there was significant different score after getting using treatment using Cake Application in learning vocabulary. The results can be concluded that Cake Application as learning medium is effective to improve students' ability in English vocabulary.

Keywords: *Vocabulary, Online Medium, Cake Application*

INTISARI

Tiamanda, Fadila (2022). *The Use of Cake Application to Improve Students' Vocabulary*. Skripsi. Program Pendidikan Bahasa Inggris. Fakultas Bahasa dan Ilmu Komunikasi. Universitas Islam Sultan Agung. Pembimbing: Nani Hidayati, S.Pd., M.Pd.

Aplikasi Cake merupakan salah satu teknologi media online pada smartphone untuk pembelajaran bahasa Inggris. Aplikasi yang diterapkan dalam penelitian ini sangat mudah digunakan untuk meningkatkan kemampuan bahasa Inggris seperti membaca, berbicara, menulis dan kosa kata. Jenis penelitian yang digunakan dalam penelitian ini adalah kuasi-eksperimental dengan perlakuan pre-test dan post-test. Desain ini digunakan untuk membandingkan hasil prestasi belajar siswa ketika menggunakan kelompok kontrol dan kelompok eksperimen. Subjek penelitian ini adalah dua kelas dari SMA Negeri 1 Mayong yaitu kelas X MIPA 2 sebagai kelompok kontrol dan X MIPA 3 sebagai kelompok eksperimen. Hasil uji Paired Sample T-test menunjukkan bahwa Sig. (2-tailed) adalah 0,000 dan hasilnya adalah 58,19 untuk pre-test dan 63,47 untuk post-test. Artinya H1 diterima dan H0 ditolak dan kondisi siswa setelah perlakuan memiliki nilai yang berbeda. Dapat dikatakan bahwa terdapat perbedaan skor yang signifikan setelah mendapatkan perlakuan menggunakan Aplikasi Cake dalam pembelajaran kosakata. Hasil penelitian dapat disimpulkan bahwa Aplikasi Cake sebagai medium pembelajaran yang efektif untuk meningkatkan kemampuan kosakata bahasa Inggris siswa.

Kata Kunci: *Kosa kata, Medium Online, Aplikasi Cake*

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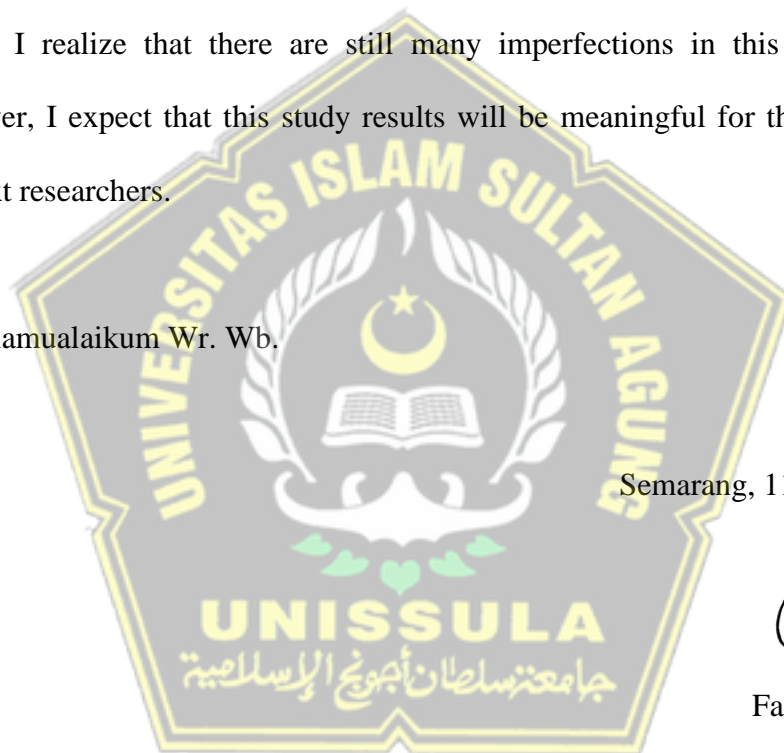
1. Prof. Dr. H. Gunarto, S.H., M.Hum. as the Rector of Sultan Agung Islamic University.
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Lastly, I realize that there are still many imperfections in this final project. However, I expect that this study results will be meaningful for the readers and the next researchers.

Wassalamualaikum Wr. Wb.



Semarang, 11 August 2022

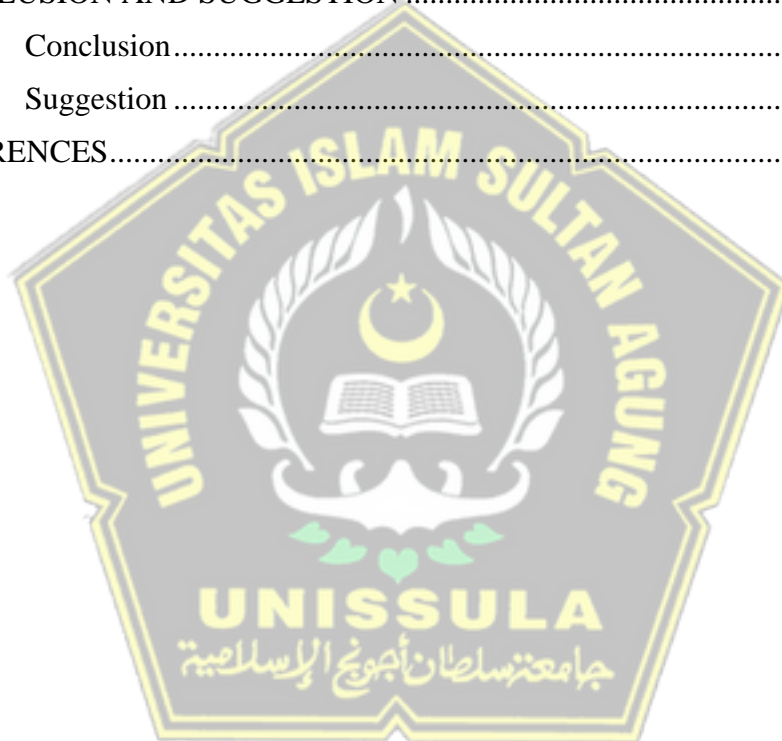
Fadila Tiamanda

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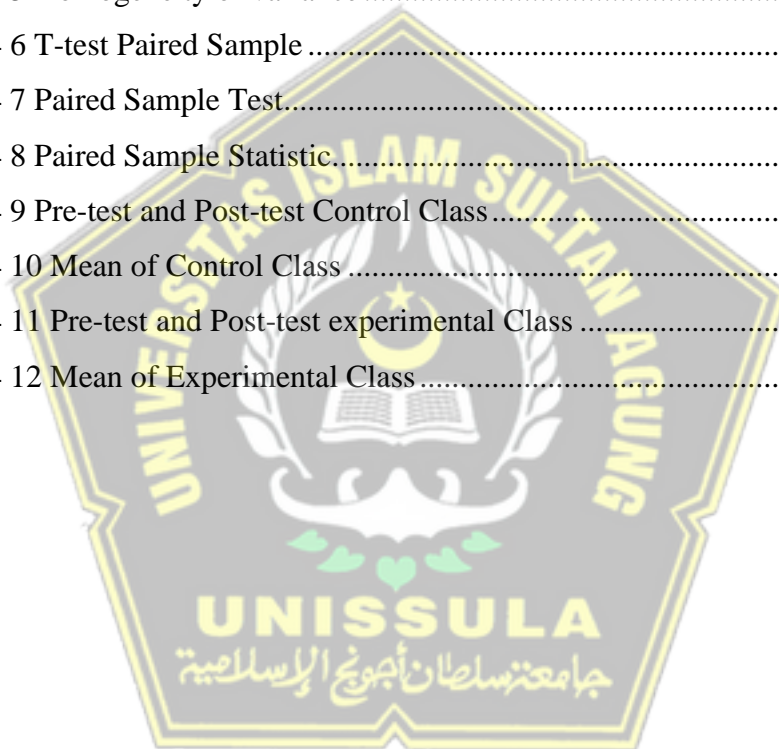
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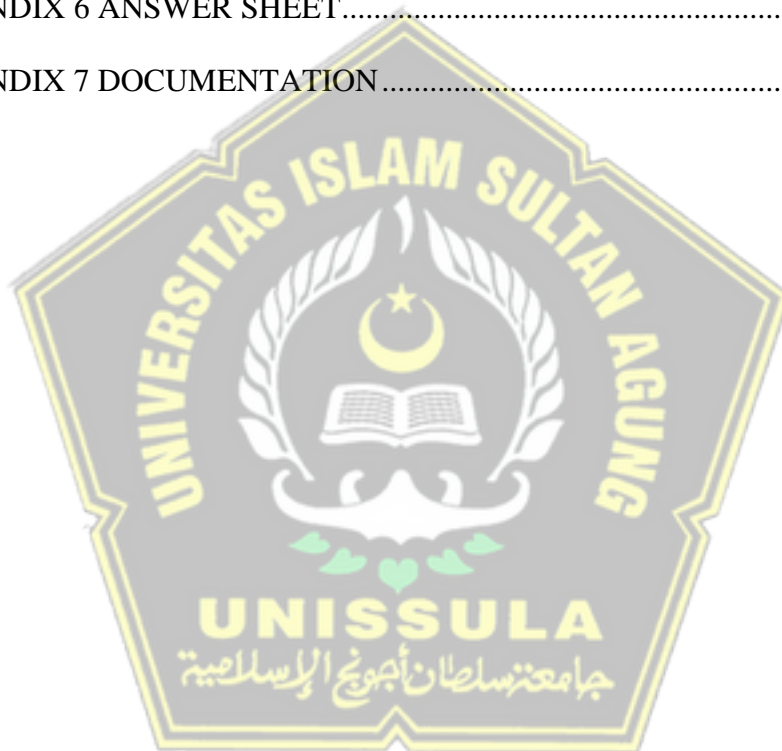
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CHAPTER I

INTRODUCTION

This first chapter provides the Background of the Study, the Reason for Choosing the Topic, Research Question, Hypothesis, the Objective of the Study, the Limitation of the Study, the Significance of the Study, the Definition of Key Terms and the Organization of the Study.

1.1 Background of Study

Communication is important for society. By communicating people can understand each other while talking. In this 21st century, communicating in English is very important, because border between countries is getting lesser and lesser. English is an international language that is often used to communicate among countries. Therefore, English is important to learn in this era. With English, we know information from other countries. However, in Indonesia, English is still rarely used in daily life. Indonesian people often use local language as their first language and Indonesian as their second language, so English is still a foreign language.

The important basic aspect in learning language including English is vocabulary. Vocabulary is very important when we are learning English (Santosa, 2019). Students find it difficult to learn English without knowing the vocabulary, they have difficulty when they want to express or to say in English.

In the current pandemic era, students are now learning using online medium at home. In this current situation, students are forced to study from home due to the *Covid-19* pandemic and the government forbids students to study as usual face to face at school. When they receive lessons especially English online, students do not understand what to do and most of the teachers just give exercise without explanation. This may be one of the factors that students are lazy to learn English.

There are several factors that cause students to be lazy when learning English. The students have difficulty in understanding every word in English because English is not language used in daily life. When the teacher teaches, students feel bored because the learning process is monotonous. Teachers must find other methods so that learning is more attractive and students do not feel bored during learning English.

One of the method which may lead students to get involved and interested in studying English is by using technology. Technology has become a part of our daily life. We often use technology when we are doing activity. Such as obtaining information from anywhere through technology. During a pandemic people often rely on technology to get information quickly, just like students while studying technology which is easier to use. Technology has a good impact on students learning (Notoatmodjo, 2014). With a technology, students are helped when learning English. They can improve their vocabulary by using application on smartphone. By using Cake application, it is hoped that students will be more interested in learning English and improving their

vocabulary ability. Compared to just listening to the teacher explanation and feel bored, Cake application will help students learn English easily.

Cake application is an online medium on smartphone for learning English. Cake application is very easy to use to improve English skills such as reading, speaking, writing and vocabulary. Using a Cake application can have a good impact for improving speaking skill (Syalwa, 2020). Therefore, Cake application can make students leaning more fun and motivated to improve their English skills.

To improve a good language skills, good vocabulary is needed because that is the key to learning a language. It is very important to know correct vocabulary in order to understand the language when communicating, because the basic of learning a language is to have good vocabulary skills.

Based on the explanation above, it is interested in conducting research on Cake application as a medium for learning English to improve vocabulary skills for high school students. Therefore, this research will have title of *“The Use of Online Medium (Cake Application) to Improve Students’ Vocabulary in SMA Negeri 1 Mayong Academic Year 2021/2022.”*

1.2. The Reasons for Choosing the Topic

There are four reasons for choosing the topic. These reasons as follows:

1. Cake application is a technology on smartphone which is easy to learn.
2. Cake application is a new learning medium.

3. Many students feel they have a bad vocabulary with a traditional learning.
4. With cake application, students can improve their vocabulary ability in fun ways.

1.3. Research Question

The research question of this study is as follows:

“Is the use of Cake application as a learning medium effective to improve English vocabulary ability for students at SMA Negeri 1 Mayong Academic Year 2021/2022?”

1.4. The Objective of the Study

In line with research question above, the purpose of this study is to find out whether or not the use of Cake application as a learning medium is effective to improve English vocabulary ability for tenth grader of SMA Negeri 1 Mayong Academic Years 2021/2022.

1.5. Hypothesis

According to Sugiyono (2012) hypothesis is a temporary answer to the research, due to it is temporary nature it is necessary to prove the truth through the collected data. In this research, the formulation of the problem will be tested H_0 which is a hypothesis that has no difference or zero change difference while H_1 the result which is contra with null hypothesis.

H_0 : there is no significant different the result score between control group and experimental group. If there is no significant different, it means that the null hypothesis is accepted.

H_1 : There is a significant different between the result score of control group and experimental group. If there is a significant score between two groups it means the hypothesis can be accepted and cake applicator is effective in learning vocabulary.

1.6. The Limitation of the Study

Based on the statement above, this research limits on the use the Cake application as a learning medium for students, to make learning more interesting and enjoy. Therefore, this study focuses on the effect of using Cake application in increasing students' vocabulary for tenth graders in SMA Negeri 1 Mayong.

1.7. The Significance of the Study

1. Pedagogical Significance

This research can help English teachers to provide more modern methods to improve teaching vocabulary skills. Teachers need more effort to create varied learning.

2. Practical Significance

- For students: hopefully from this study students can develop their insight in learning vocabulary and make learning more fun and enjoy.

- For teachers: Cake application can help teachers in teaching vocabulary. Varied learning can motivate students to improve vocabulary skills.
- For the readers: this study gives the information that cake application can be used as a learning medium to improve vocabulary mastery.

1.8. Definition of Key Terms

To avoid confusion of the similarity terms, the definition of this research's terms is presented as follows:

1. Vocabulary

Vocabulary is an important element in language learning to make it easier for students to master 4 English skills reading, writing, speaking and vocabulary (Mansur et al., 2019)

2. Online Medium

Online medium is very attached to daily life. Using online in this current era is the right thing to do because is very easy to get information (Aprilianti, 2020)

3. Cake Application

Cake app is one of the most popular English learning applications. Not only learn to use dialogue, the advantage of this application is that there are short videos divided into several categories (Syalwa, 2020). Users can also repeat the video to practice reading and pronunciation skills at the same time.

1.9. The Organization of the Study

Chapter I describes background of study, reason for choosing the topic, research question, the objectivity of the study, hypothesis, the limitation of the study, the significance of the research, definition key terms and the organization of the study.

Chapter II describes review of related literature of general concept of vocabulary, kinds of vocabulary mastery, general concept of cake app, procedure of cake application and advantage and disadvantage of cake application.

Chapter III describes research design, subject of the study, data for the study, instrument of the study, technique for collecting data, data collecting procedure, data analysis and time schedule.

Chapter IV describes about profile of school, validity and reliability, treatment analysis, normality test, T-test, analysis pre-test and post-test and discussion of research finding.

Chapter V describes about conclusion and suggestion.

CHAPTER II

REVIEWS OF RELATED LITERATURE

The second chapter provides review of related literature of General Concept of Vocabulary, Kinds of Vocabulary Mastery, General Concept of Online Medium, General Concept of Cake Application, Procedure of Cake Application, Advantage and Disadvantage of Cake Application and Review of Related Study.

2.1. General Concept of Vocabulary

In this part, this study delivers some detail information about the definition of vocabulary and the important of vocabulary mastery.

2.1.1. Definition of Vocabulary

According to Mansur (2019) vocabulary is an important element in language learning to make it easier for students to master 4 English skills reading, writing, speaking and vocabulary. While Yeung (1999) mention that vocabulary presented according to the format can increase or decrease the ability depending on the task and reading. As reported by Meliana, Umaemah, & Hidayat (2018) vocabulary is a companion of words that are not only in definition but also connected in perfect sentences.

Based on the experts' definition, it can be concluded that vocabulary is important as a support for learning a foreign language. It is the basic of learning more about a language. Therefore, vocabulary is the basic of learning how to read, write and speaking in a foreign language.

2.1.2. The Importance of Learning Vocabulary

Vocabulary is a basic of learning English, without vocabulary students cannot understand and express their self in English (Trifonov, 2011). Vocabulary is important for a learning language. Vocabulary is needed in order to understand a word and sentence in learning a new language. As well as learning English, vocabulary skills are needed when learning how to write, read and speaking in English. The students must learn vocabulary to improve their English skills. Good vocabulary can make them more confident in using English when they are communicating. Because vocabulary is the point of language skills learned to improve listening, speaking, reading and writing skills.

Each student has a different vocabulary ability. In addition, students can determine vocabulary learning techniques according to their abilities in order to get more new words in language learning (Afifah, 2021:10-11). With increasing vocabulary, each students can make it easier to communicate each other in English and they can get new words that they think are unfamiliar.

Lack of vocabulary skills can cause students difficulty in learning English. Students who have difficulty in expressing their expressions in English and also have difficulty in communicating because basically vocabulary is the basis or foundation in learning language (Afifah, 2021:10-11). If the basics of learning a language need to be mastered by students, they will have difficulty in learning the next level of language.

It can be concluded, with a strong foundation in learning a language, vocabulary mastery can make easier for students to learn a language, especially English. By learning English vocabulary, students can express their great ideas into English easily.

2.2. Kinds of Vocabulary

Some experts divide vocabulary into two types: Active and Passive. According to Hamer (2015) there are two types of vocabulary. The first is vocabulary refers to the one that the students have been taught and they are expected to be able to use and the second is refers to the word which the students will recognize when they meet them and they will probably not be able to pronounce. As a mentioned by Hatch & Brown (2015) there are two kinds of vocabulary; receptive vocabulary and productive vocabulary.

1. Receptive Vocabulary

Receptive vocabulary is the words that the learners recognize and understand when they are used in context but they cannot produce. It is vocabulary that the learners recognize when they see or meet in reading text but do not use it speaking and writing (Alqahtani, 2015).

2. Productive Vocabulary

Productive vocabulary is the words that the learners understand and can pronounce correctly and use constructively in speaking and writing. It involves what is needed for receptive vocabulary plus the ability to speak or write at the appropriate time. Therefore, productive vocabulary can be

addressed as an active process because the learners can produce the words to express their thought to others (Alqahtani, 2015).

According to Montgomery (2007), there are four types of vocabulary:

1. Listening Vocabulary

Some words we can hear and understand. The babies are listening during all their time and continue to learn a new word a whole our lives. When adult, will recognized and understand close to 50.000 words.

2. Speaking Vocabulary

The words can we use when speak. Most of adults use a more 10.000 words for conversation and instructions.

3. Reading Vocabulary

The words can understand when read the text. We can read and understand many words that we do not use in our speaking vocabulary. This is the second largest of the most vocabulary. Read a lot and you can grow up your vocabulary ability.

4. Writing Vocabulary

The words can retrieve when we write to express ourselves. It can generally find it easier to explain ourselves orally, using facial expression and intonation to help get our ideas across, to find just the right words to communicate the same ideas in writing. Our writing vocabulary is strongly influenced by the words we can spell.

2.3. General Concept of Online Medium

In this part, the researcher delivers some information about the definition of online medium, kinds of online medium and advantage and disadvantage of online medium.

2.3.1. Definition of Online Medium

Online medium means is published over the internet and includes without limitation, web sites, blogs and social medium (Aprilianti, 2020).

Online medium is a means to communicate online through high-end websites and applications with the internet containing text, sounds, photos and videos (Maysari, 2016). Meanings online medium in general includes all types of websites and application including news site, company sites, education sites, blog and even e-commerce.

Online medium has easy access to provide direct information in minutes or even seconds. Up to date information makes online medium favored from various circle (Maysari, 2016).

Such as context, online medium can be used to learning medium for students. Easy and fun access can be used to close nowadays learning. Take as much information as possible to add insight (Maysari, 2016).

During the pandemic covid-19 recently, online medium is used for learning options. Because offline learning has not been maximized, online medium is an option t keep learning during a pandemic. Fast and practice

access, students can explore online medium as they wish. Of course, online medium is used wisely so that it is useful when used.

2.3.2. Kinds of Online Medium

As mentioned by Prawiro (2018) in the definition of online medium, these medium are divided into several types:

1. News Sites

A site is provided in the form of a post. The topics covered are very broad such as a news, humor and the latest discussions.

Example: CNN Indonesia, Liputan6

2. Education Sites

A site is used to study the material that has been taught in school. Students often use it as an addition to better understand school material. Example: RuangGuru, Zenius.

3. E-commerce Sites

A site is often used for online shopping. Example: Shopee, Bukalapak, Tokopedia.

4. Social Medium Site

A site used to connect people around the world through virtual meetings. Example: Zoom, Googlemeet, Twitter, Whatsapp.

2.3.3. Advantage and Disadvantage of Online Medium

As mentioned by Prawiro (2018) there some advantages and disadvantages of online medium. There are some advantages of online medium:

1. Faster information dissemination process.
2. Old information or data can be retrieved easily
3. Changing forms of content ranging from various videos, photos and sounds
4. Online medium users can interact with each other

The disadvantage of online medium:

1. The information contained is not always accurate
2. The user must use a supported device and a stable connection
3. Long-term online medium users can cause eye health problems.

2.4. General Concept of Cake Application

In this part, some informations about definition of cake application, procedure of cake application and advantage and disadvantage of cake application is delivered.

2.4.1. Definition of Cake Application

Cake Application is an English learning that can be downloaded on *PlayStore* for *android* users and *AppleStore* for *iOS* users. In this application, users can learn English by using videos that already available in the application. Cake Application is rarely used in Indonesia for learning English, but there are

many applications to learn English such as Duolingo, My Dictionary and U Dictionary which is often used to learning English.

This application has a several levels of learning, for beginners it is start form level 1-2 and for intermediumte and advanced it is level 3-4. Every day in this application has a new vocabulary or idioms and expressions are presented to improve the quality of English. Cake Application is not only for learning to improve vocabulary but also for practicing speaking and listening so that can master English skills.

2.4.2. Procedure of Cake Application

In this application people also can learn real English from videos. There are fun, short English conversation videos updated every day so users can learn English fast and it is completely free (Siregar & Ed, 2020).

1. Users can learn real English expressions curated from YouTube and see similar phrases in one place and spend just a few minutes a day to improve your English.
2. Cake application offers speaking practices that simulate conversations with native speakers and there is a blank subtitle to fulfill and also the meaning of the word.
3. It can be used to check pronunciation with AI speech recognition. Simply record voice and we get immediumte feedback.
4. Cake application is completely free and there are no annoying ads.

Based on explanation about that, Cake application can be downloaded in the play store. The way it works is almost the same as Youtube which shows a video and then there is a native speaker in delivering the conversation (Siregar & Ed, 2020). To access the application, we must first have an account in order to learn English using the cake application

You can sign in with your Facebook account or your Google account. You can also use guest mode which is you do not need to sign in but, when you use guest mode, only free episodes are available. But, cake application has a trial for a new user, so we do not have to pay as long as we use a trial of 2 weeks (Fitria et al., 2021)

Fitria et al., (2021) mentioned to start learning in this application, we can choose the videos that have been provided as well as sentences that are incompletely to fulfill the sentences. We can choose the level of learning according to our abilities. Every time we start a video, we will get points when we finish doing the learning in the video. The video can be repeated if you do not understand what the conversation about.

You no need to worry if you do not understand about the conversation in the video. In the video, complete subtitles have been provided but there are also missing sentences, so we have to fill it in according to the conversation in the video (Fitria et al., 2021).

2.4.3. Advantage and Disadvantage of Cake Application

This application has advantage and disadvantage. There are some of the advantages of using Cake application as a medium for learning English (Mataniari, 2019):

1. Easy to use and is a new method in learning English.
2. Smartphone based application, can be used anytime and anywhere.
3. Has a various contents and free when we used the application.
4. Learning English becomes interesting and will not make us bored.

There are some of the disadvantages of using Cake application as a medium for learning English:

1. After the trial period is over, we have to pay per month in order to enjoy the content
2. Sometimes there are some videos that cannot be opened because you have to subscribe.
3. Must use adequate devices and stable connection in order to use the application comfortably.

2.5. Review of Related Study

The researcher found several previous studies that had similarities with the research, which discusses the use of online medium (cake application) to improve students vocabulary.

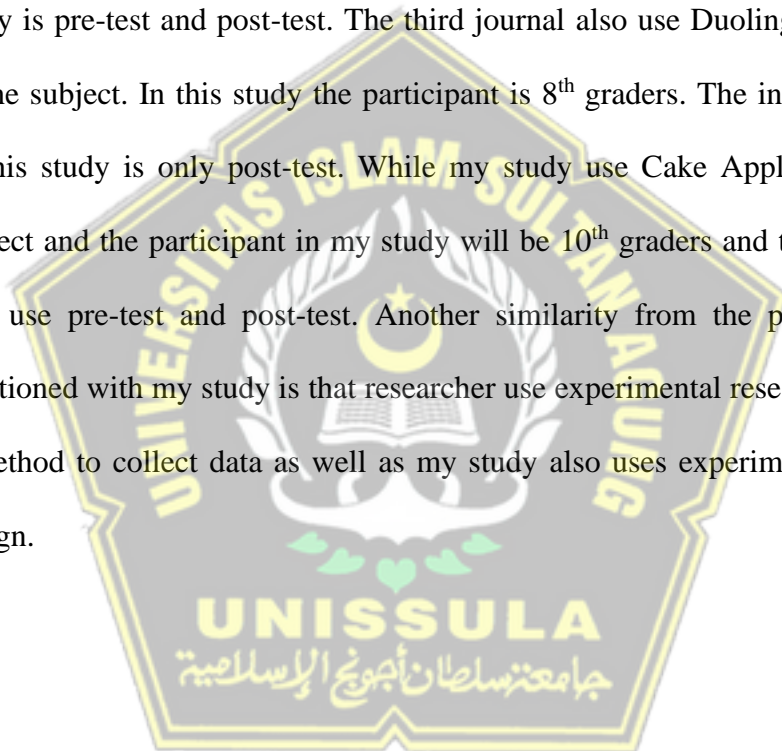
The second related study was carried out by Ilham Wahyu Ambara in 2016 under title *“The Effects of Using Duolingo Application in Learning Vocabulary”* in SMA Negeri 2 Karang. This study was find out using Duolingo Application

can improve vocabulary mastery. It can be proven by the post-test scores was higher than pre-test. This study was using quasi experimental research design that using experimental group and control group. There were 2 classes in this study XI IPA 1 is an experimental group and XI IPA 2 is a control group. The data was collected from pre-test and post-test.

The first related study was carried out by Imam Santosa and Andriyani in 2019 under title *“The Use of My Dictionary Application to Improve Students Vocabulary Mastery”* in MTs Darunwadah Cipongkor. This study was find out using My Dictionary to improve vocabulary is very helpful for the students. Using this application can develop and improve students’ vocabulary skills. This was using a quasi-experimental design that used experimental group and control group. There are 2 classes in this study, 9A is an experimental group and 9B is control group. The participants is consists of 40 students from 2 classes. The data was collected from pre-test and post-test using a test consist of 20 multiple choices.

The third related study was carried out by Husnur Rosyidah Aulia, Eka Wahjuningsih and Rika Andayani in 2020 under title *“The Effect of Duolingo Application on Students English Vocabulary Mastery”* in one of Junior High School in Jember. This study find out the students who were taught by using Duolingo Application got better than using flashcard. This study was using quasi experiemental research design and the instrument using post-test only to collect the data. VIII D is a control group was taught vocabulary by flashcard and VIIE is an experimental group was taught by using Duolingo Application.

From the previous study mentioned, there are some differences and the similarity with my study. For the differences are: The first journal used My Dictionary Application as the subject. The participant involved in this study were two classes, they were class 9A and class 9B. The instrument used in this study was pre-test and post-test. The second journal used Duolingo Application as the subject. In this study the participant is 11th grader. The instrument in this study is pre-test and post-test. The third journal also use Duolingo application as the subject. In this study the participant is 8th graders. The instrument used in this study is only post-test. While my study use Cake Application as the subject and the participant in my study will be 10th graders and the instrument will use pre-test and post-test. Another similarity from the previous study mentioned with my study is that researcher use experimental research design as a method to collect data as well as my study also uses experimental research design.



CHAPTER III

RESEARCH METHODOLOGY

This third chapter provides Design of the Study, Subject of the Study, Data for the Study consist of Types of Data, Variable, Instrument of the Study, Technique for Collecting Data, Data Analysis and Time Schedule.

3.1. Design of the Study

Concerning the main of this study was to investigate the use of online medium (Cake Application) to improve students' vocabulary. This study was used quantitative methods to process the data and to found out the results of this study. The type of research used in this study is quasi-experimental with pre-test and post-test treatment. This design used to compare the results of student achievement when using a control group and experimental group. The flow of this study was first, control group and experimental group both got a pre-test to analyze students' abilities before using the actual treatment. After that, experimental group learned vocabulary by using Cake Application as a treatment for this study. In the end, control group and experimental group were given a post-test to find a different significant scores. This research used two classes they were X MIPA 2 as a control group and X MIPA 3 as experimental group. As mentioned by Hastjarjo (2019), quasi experimental design consists of post-test, treatment and pre-test which has: the following formula:

Group 1	O ₁	x	O ₂
Group 2	O ₁		O ₂

In which:

Group 1: Experimental group

Group 2: Control group

O₁ : Pre-test

O₂ : Post-test

X : Treatment

There are several reasons why this study used dependent pre-test and post-test of quasi-experimental. First, quasi-experimental is a nonrandom assignment (Hastjarjo, 2019), therefore this study used two classes, there were X MIPA 2 and X MIPA 3 as the participant and make sure the students have the same knowledge before the research begin. Second, due to limited time and cost of using a quasi-experimental design, it is very appropriate to use it in this research. Third, according to Sugiyono (2012) there are 2 kinds of quasi-experimental, time series and non-equivalent control design group. This study used non-equivalent control design group in which the experimental group and control group were given a pre-test before doing treatment and post-test were given after experimental group got a treatment to find out whether or not Cake Application as a learning medium to is effective to improve vocabulary.

The use of this medium is tested to find out the results of desired data. This research had several meetings for the experimental group to provide the treatment of teaching students how to improve vocabulary using Cake

Application. Hopefully that the use of Cake Application as a treatment can improve students' English vocabulary skills.

The research was conducted at class X MIPA 2 and X MIPA 3 SMA Negeri 1 Mayong which is located in Sengon Bugel, Mayong, Jepara residence. This school is close to the highway and residential areas that are easily accessible. This school has adequate to support a comfortable teaching and learning process.

3.2. Subject of the Study

In this part, the sub chapter consists of the population, the sample of the study and place of the study.

3.2.1. Population

Population is a collection of individuals with predetermined qualities and characteristics. Population is not just humans but can be organizations but can be organizations, animals and others that have the qualities and characteristics defined by the researcher to be studied and the draw conclusions (Kurniawan, 2016). According to Kurniawan (2018) population is all respondents who general characteristics that have been identified and used by researchers as a more accurate source.

There are 2 types of population used in the study according to Kurniawan (2018) which are limited population and unlimited population. This study used a limited population because there were only two classes from SMA Negeri 1 Mayong which were X MIPA 2 as a control group and X MIPA 3 as an

experimental group and those two classes have the same characteristics and quantities.

3.2.2. Sample of the Study

Sample is part of the number and characteristics of the population (Sugiyono, 2012). A sample is a part of an existing population, so taking a sample must use a certain means but use predetermined provisions (Kurniawan, 2018). This study used purposive sampling as a technique for taking a sample.

Sugiyono (2012) said that data collection with the provisions of the sample with various considerations. In purposive it is emphasized to be a certain sample with consideration of characteristics. Purposive sampling is non-random sampling because data collection is based on predetermined characteristics to get a desired sample (Sugiyono, 2012). A sample taken is then given to a particular part on each group (Anshori & Iswanti, 2017). This study took at least 36 students who have the same characteristics and habit and divided into 2 groups: control group and experimental group. Control group gave pre-test (O_1) and post-test (O_2). Experimental group gave pre-test (O_1), treatment (x) and post-test (O_2) during this research.

3.2.3. Place of the Study

This study was carried out at SMA Negeri 1 Mayong in the academic year of 2021/2022 which is located on Jl. Raya Jepara-Kudus No.Km 20, Sengon, Sengonbugel, Mayong, Jepara, Jawa Tengah 59465.

3.3. Data for the Study

This part describes the types of data and variable as follows:

3.3.1. Types of Data

Data is a collection of facts resulting from the use of research instruments. The data used in this study is quantitative method. Quantitative method is methods that have long been used so it is often used in many research. This method uses research data in the form of numbers and statistical analysis (Sugiyono, 2012).

Using quantitative data contains the purpose of solving problems and whether using this data is effective or not. By using this method, this study wanted to know that Cake Application can significantly improve English vocabulary skills.

3.3.2. Variable

In a research, variables are very important in obtaining the information that has been studied. Variable is the object of research that becomes the focus during research. Variable can be in any form that has been determined to be studied so as to get information about it (Kurniawan, 2018). In this study, there are 2 variables used: dependent variable and independent variable.

1. Dependent variable is variable that is affected by independent variable.

This variable also known the output variable and is the result of

independent variable. The dependent variable from this study is improving vocabulary skills.

2. Independent variable as the cause of the emergence of other variables and usually this variable are manipulated, observed and measured to determine the effect of other on other variables. The independent variable of this study is Cake Application.

3.4. Instrument of the Study

In this part, the sub chapter consists of test instrument and scoring technique.

3.4.1. Test Instrument

In conducting this study, there must be an instrument to get the desired data results. According to Kurniawan (2018) an instrument is a tool used to collect data systematically in achieving research object. In other word, instrument is a tool to facilitate the process of collecting data to achieve the desired information.

To collect data from this study, the research only used a test as an instrument used in this study. Tests used in this study only pre-test and post-test. The vocabulary test would be done to measure the students' English vocabulary skills before and after treatment using Cake Application.

3.4.2. Scoring Technique

This study uses multiple choice questions for pre-test and post-test which has the same number and types of the question in each session. There are 2

formulas that can be used to process the data: reducing score and without reducing score. This study uses a formula without reducing score on question that have been wrongly answered by students in pre-test and post-test (Sugiyono, 2011).

The formula is drawn as follows:

$$S = \frac{\text{Right answer}}{3} \times 10 = \text{Total score}$$

In which:

Right answers = 1

Wrong answers = 0

3.5. Technique for Collecting Data

As explained, this study only used one instrument there is pre-test and post-test. According to Kurniawan (2018) test is a component of research that is used in research to indirectly assess ability. The test used are pre-test and post-test to measure students' vocabulary skills with material made from the syllabus that has been determined by the school. The following is an explanation of the instrument that were carried out in this study:

1. Pre-test.

In this phase, the pre-test was given as an introduction before using cake application as a treatment for further vocabulary learning. The test of 30 questions about daily conversation with the meaning and students can found the right answer with 40 minutes allocated time.

2. Post-test

In this phase, post-test was given to students after doing treatment to learn English vocabulary using Cake Application. The results of the pre-test and post-test would be compared to found out the students' ability in learning English vocabulary. The test consists of 30 question and students can answer question in 40 minutes.

3.6. Validity and Reliability of Instrument

In this validity and reliability session, this study describes about the validity and reliability of the multiple choice test.

3.6.1. Validity

Validation is a measure that shows the level of instrument validity (Sugiyono 2012). In other word, validity is used to find out the truth of the research instrument. The results of the study would be valid if there are similarities between the data collected and the data that occurs in the project under study. The validity test in this is taken based one pre-test and post-test. Then, validation is sought by correlating the item score with total item. The item would be valid if r-value is higher than r-table. This research use Pearson Product moment formula could be used to found the coefficient value and can be identified by using SPSS 23.

3.6.2. Reliability

Reliability is the level of consistency to measure research. A reliable instrument if the instrument is used repeatedly to measure the same object it still

produce the same data (Sugiyono, 2011). According to (Sugiyono, 2011) there are 4 formulas used for reliability testing: Spearman Brown (split half), KR.20, KR 21 and Anova Hoyt. This study used Spearman Brown (split half) to test the reliability. The formula could be identified by SPSS 23.

3.7. Data Collecting Procedure

The procedure of study that be conducted as follows:

1. Asking permission of the Headmaster and English Teacher at SMA Negeri 1 Mayong
2. Choosing two classes for the participants in this research. This research used two classes and dividing them into two groups, X MIPA 2 as a control group and X MIPA 3 as an experimental group.
3. Carrying out learning using Cake Applications to improve English vocabulary skills.
4. Collecting the data and analysis data.

3.8. Data Analysis

Data analysis technique is efforts made to analyze and measure data accurately. Data analysis can be interpreted as an effort to process the data into information that the characteristics of data are easily understood and used to formulate problems (Kurniawan, 2018).

This research used statistical computation for analyzing the data. It is aimed at finding a significant different between experimental group and control group. The classes which would be tested were experimental group and control

group and the result would be counted by using t-test. There are two terms which must be fulfill best of the statistic which include normality test and homogeneity test.

a. Normality Test

Normality test is a test carried out for the purpose of assessing distribution of data in a group to determine whether the distribution is normal or not (Sugiyono, 2011). This test can be identified using the *Kolmogorov-Sminorv* test using SPSS 23.

The data can be said normal if the significant value is higher than 0.05 ($P > 0.05$) and can be said not normal if the significant value lower than 0.05 ($P < 0.05$).

b. Homogeneity Test

Homogeneity test is used when 2 groups which are experimental group and control group are tested and found out whether that have homogeneous variations or not (Sugiyono, 2012). This data level significance is a = 0.05 and was tested by using SPSS 23 with criteria

- The variant can be homogeneous is the T-value $>$ T-table with significant < 0.05
- The variant cannot be homogeneous if the T-value $<$ T-table with significant > 0.05

CHAPTER IV

DATA ANALYSIS AND DISCUSSION

This chapter explains about Profile of School, Subject of the Study, Validity and Reliability, Treatment Analysis, Normality Test, Homogeneity Test, T-Test, Analysis Pre-test and Post-test and Discussion of Research Finding.

4.1. Profile of School

This research was conducted at SMA Negeri 1 Mayong on 20 April-20 May 2022 for class X MIPA 2 and X MIPA 3. This school is one of the favorite school in Jepara has good reputation and win many academic and non-academic competition in various levels. SMA Negeri 1 Mayong is located on Jl. Raya Jepara-Kudus No. Km 20, Sengon, Sengonbugel, Mayong, Jepara, Jawa tengah 59465. this school has good administrator and adequate facilities to support the teaching and learning process such as classroom, laboratory, library, mosque, administrator office, principal room, teachers' office, and canteen. This school has 52 teachers 4 of them are English teachers. This school has only two major which are Science (MIPA) and Social (IPS). There are 10 classes for the tenth grade, each major has 5 classes and each class have 35-38 students.

4.2. Subject of the Study

The sample used in this study was tenth graders of SMA Negeri 1 Mayong, in which X MIPA 2 as a control group and X MIPA 3 as an experimental group. In the experimental class, students learn English by using Cake Application as learning medium. The sample taken is non-random sample.

Tabel 4.1 The Data of Participants

The Students	X MIPA 2 (Control Group)	X MIPA 3 (Experiemental Group)
Male	11	10
Female	25	26
Total	36	36

4.3. Validity and Reliability

This part describes the measurement of validity and reliability.

4.3.1. Validity

To find out whether the instrument is valid or not, it is necessary to test the validity of the instrument to be given. In testing the validity, in this study used X IPS 4 as try out class. In this test, there were 30 questions of multiple choices given to the class. Data is said to be valid when r value is higher than r table. In this study, there were 20 questions than can be said to be valid. Based on the table below, this is instrument that has been said to be valid which has been testing by using SPSS 23.

Tabel 4.2 Validation of Question

Question Number	r-value	r-table (5%) 34	Description
1	0.699	0.339	Valid
2	0.632	0.339	Valid
3	0.520	0.339	Valid
4	0.672	0.339	Valid
5	0.604	0.339	Valid
6	0.781	0.339	Valid
10	0.743	0.339	Valid
11	0.601	0.339	Valid

12	0.423	0.339	Valid
15	0.554	0.339	Valid
16	0.520	0.339	Valid
19	0.672	0.339	Valid
21	0.745	0.339	Valid
22	0.781	0.339	Valid
23	0.560	0.339	Valid
25	0.604	0.339	Valid
27	0.70	0.339	Valid
28	0.554	0.339	Valid
29	0.632	0.339	Valid
30	0.672	0.339	Valid

Based on the data above, it is stated that each rater gave a value on per questions. In calculating the validation test, the r value must be higher than the r table (r table 5% N= 34 is 0.339) which means that based on the table shows the value is higher than the r table (N=34, 0.339) the data is valid because r value is higher than r table.

4.3.2. Reliability

After testing the validity of the data, the next step was to calculate the reliability of the data. This study aims to determine whether the data is reliable or not. The data was used also from the try out class, X IPS 4 which has been previously given the validation test. *Spearman Brown (split half)* was used to counting the reliability which can be said to be reliable if r value is higher than r table. In the table below, was the result of reliability this data:

Tabel 4.3 Reliability of Instruments

Cronbach's Alpha	Part 1	Value	.774
		N of Items	6 ^a
	Part 2	Value	.718
		N of Items	6 ^b
	Total N of Items		12
Correlation Between Forms			.674
Spearman-Brown Coefficient	Equal Length		.805
	Unequal Length		.805
Guttman Split-Half Coefficient			.800

Based on the table above and the explanation of data, if the coefficient is more than 0.6, it means that this data is reliable. The table shows that the coefficient is 0.800, which means that this data has coefficient more than 0.6 and this instrument is reliable. It can be said that r value must be higher than r table then this instrument is reliable. Respondents from this data were 36 students, which means r table (N=36, 0.329) it is means based on the table above showed that the coefficient is 0.800 the instrument is reliable.

4.4. Treatment Analysis

After completing the validity and reliability data, the next step was conducted a pre-test in both of group, control group ad experimental group. Each group was given the same question with the same number of questions which was 30 questions multiple choice before giving the treatment used. Pre-test and post-test were carried out during English subject. When conducting this research,

adjust the schedule from school so as not to interfere with other subjects. The pre-test in the X MIPA 2 was held on 10th May 2022 and in the X MIPA 3 11th May 2022.

After pre-test was carried out, the next step is giving treatment on the experimental group then in the control group conventional learning was conducted on learning process. Treatment was only given two time because of the limited time from school. The treatment was carried out on 12th and 19th May 2022. Each meeting was conducted around 40 minutes.

The first meeting was conducted on 11th May 2022. At the first meeting was conducted pre-test on experimental group for 40 minutes with 30 questions. On 12th May 2022 students learn English using Cake Application as treatment medium. The material used was conversation in daily life in video that were already available in the application. Before starting the study, students must download a Cake Application on the Play Store for Android user and iOS for Apple user. When the treatment was conducted, students play videos that were available and have subtitled to make it easier for students to learn. In the video there were missing sentences and students have to fill in the sentences that match the video. In the missing sentence, it was displayed in Indonesian subtitles and students must fill it in English.

The second meeting was the last meeting which was conducted on 19th May 2022. In this session, students returned learning using videos that contained missing sentences. The students more easily understand the content of the videos

available in the application and easily fill in the missing sentences. After the treatment, the students who were in the experimental group carried out a post-test on 20th May 2022.

When doing the treatment, there were some students who had problems when learning using Cake Application such as some smartphone cannot download application, do not understand the concept of application, do not understand the conversations in the video and some were still confused when filling out the missing sentences.

4.5. Normality Test

Normality test is a test carried out for the purpose of assessing distribution of data in a group to determine whether the distribution is a normal or not (Sugiyono, 2012). The normality test in this study used *Kolmogorov-Smirnov* with the criteria: Significant > 0.05 then the data is normally distributed and significant < 0.05 it means the data is not normally distributed.

Normality test had been carried out in two class, there are control group and experimental group. In this study, taking the normality test using pre-test and post-test from both groups.

Tabel 4.4 Normality of Instrument

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Kelas	Statistic	Df	Sig.	Statistic	df	Sig.
hasil	pre-test control	.107	36	.200*	.976	36	.608
	post-test control	.128	36	.142	.959	36	.207
	pre-test experimental	.118	36	.200*	.951	36	.110
	post-test experimental	.157	36	.025	.939	36	.057

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the explanation above, the data was normally distributed if the significant is $> 0,05$. The normality test result from the pre-test control group with Sig. 0.608, post-test control group with Sig. 0.207, pre-test experimental group with Sig. 0.110 and post-test experimental with Sig. 0.057. In accordance with the criteria of *Kolmogorov-Smirnov* with a significance > 0.05 the data distributed normally; it means that the results of the normality test on all variables are normally distributed because the Sig. value is > 0.05 .

4.6. Homogeneity Test

The homogeneity test was used to identify if the variants in the test are same or not. The calculation results are based on the *Sig* value in the test of homogeneity of table. In summary, the homogeneity test is obtained as follows:

Tabel 4.5 Homogeneity of variance**Test of homogeneity of variance**

	Levene Statistic	df1	df2	Sig.	
Control	Based on Mean	.344	1	70	.559
	Based on Mediumn	.238	1	70	.627
	Based on Mediumn and with adjusted df	.238	1	67.829	.627
	Based on trimmed mean	.367	1	70	.546
Experimental	Based on Mean	.551	1	70	.461
	Based on Mediumn	1.422	1	70	.237
	Based on Mediumn and with adjusted df	1.422	1	64.073	.237
	Based on trimmed mean	.816	1	70	.370

Based on the output above, it is known that the significant value (Sig.) in the control variable is 0,559 and experimental variable is 0,461 which is more than 0.05, it can be concluded that the data of the variance is the same or homogeneous.

4.7. T-test

This study used *Paired Sample T-test* to identify the data. Paired Sample T-test is the test used to compare the difference between the two mean paired samples of normally distributed data. Sample from the same subject and each variable was taken under different situation.

Significant value (2-tailed) < 0.05 indicates a significant difference between variables which mean that there is a significant effect on the difference treatment on each variable. Significant value(2-tailed) >0.05 means that there is no significant difference between variables and there is no significant effect on the difference in the treatment receive on each variable.

This research used Paired Sample T-test for equality of variances to measure the T-test of the study. The result is shown below:

Tabel 4.6 T-test Paired Sample

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Pre test & Post test	36	.853	.000

Based on the table shows the correlation between pre-test and post-test. If the significance < 0.05 then pre-test and post-test have a significant correlation, if the significance > 0.05 then pre-test and post-test are not significant. Based on the table above it shows that the correlation between pre-test and pot test is 0.000 which means the significant value is < 0.05 , then pre-test and post-test indicate a correlation between variables.

Tabel 4.7 Paired Sample Test

Paired Samples Test									
	Paired Differences					t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	Pre-test - Post test	-5.27778	6.25822	1.04320	-7.38558	-3.15898	-5.059	35	.000

Tabel 4.8 Paired Sample Statistic

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre test	58.1944	36	11.48121	1.91354
	Post test	63.4722	36	11.63612	1.93935

The result of Paired Sample T-test showed that the Sig. (2-tailed) was 0.000 and the results was 58.19 for pre-test and 63.47 for post-test it is means that the students' condition after treatment had different mean score. It can be said that there was significant difference score after getting treatment using Cake Application in learning vocabulary. It can be concluded that H_1 was accepted and H_0 was rejected.

4.8. Analysis Pre-test and Post-test

This chapter describes about pre-test and post-test analysis of two classes, control class and experimental class.

4.8.1. Control Class

This session carried out the pre-test and post-test in the control class, namely in X MIPA 2. It aims to test the students before getting treatment and to compare the score between control class and experimental class.

Tabel 4.9 Pre-test and Post-test Control Class

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest_Control	47.19	36	12.432	2.072
	Postest_Control	55.33	36	13.736	2.289

Based on the results of the descriptive analysis above, it shows that the control pre-test obtained value (Mean) is 47.19, a standard deviation is 12,432 and mean standard error is 2,072. Meanwhile, in the post-test control the average value (Mean) is 55.33 the standard deviation value is 13.736 and the mean standard error is 2.289.

Tabel 4.10 Mean of Control Class

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper				
Pair 1	Pretest_Control - Posttest_Control	-8.139	5.009	.835	-9.834	-6.444	-9.748	35	.000

Based on the Paired sample T-test is the main table of output that shows the results of the test carried out. It can be seen from the significance value (2-tailed) on the table above. The significance value (2-tailed) is 0.000 ($p < 0.05$). the results that of the pre-test and post-test control experienced a significant (meaningful) change. Based on the descriptive statistic between pre-test and post-test prove to be higher post-test.

4.8.2 Experimental Class

This session the test carried out the pre-test and post-test in experimental class, namely in X MIPA 3. Its aims compare between control class and experimental class. After carried out the pre-test, experimental class treatment was given as a comparison of the scores between control class and experimental class.

Tabel 4.11 Pre-test and Post-test experimental Class

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest_Eksperimen	63.25	36	11.790	1.965
	Posttest_Eksperimen	75.14	36	10.742	1.790

Based on the results of the descriptive analysis above, it shows that the experimental pre-test obtained an average value (Mean) is 63.25, a standard deviation is 11.790 and a mean standard error is 1.965. While in the experimental post-test the average value (Mean) is 75.14, the standard deviation is 10.742 and the mean standard error is 1.790.

Tabel 4.12 Mean of Experimental Class

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Pretest_Eksperimen - Posttest_Eksperimen	-11.889	7.475	1.246	-14.418	-9.360	-9.543	35	.000

Based on the table of Paired sample T-test is the mean table of output that shows the results of the tests carried out. This can be seen from the significance value (2-tailed) in the table. The significance value (2-tailed) was 0.000 ($p < 0.05$). the results of the pre-test and post-test experimental experienced significant (meaningful) changes. Based on descriptive statistics, between pre-test and post-test proved to be higher post-test.

4.9. Discussion and Research Finding

The test was conducted to find out the effectiveness of Cake Application in improving students' vocabulary of the tenth graders at SMA Negeri 1 Mayong in the academic year 2021/2022.

The research showed that Cake Application gave the improvement o the students' vocabulary skills. The result of the research had been shown trough each test. The students got 63.25 in pre-test and 75.14 in post-test, it means that the students get higher score after given treatment. Before conducting research, the first step was given pre-test to both group, control group and experimental group. The step was given the post-test to check the result after given a treatment.

In the pre-test experimental group got 63.25 and the pre-test control group got 47.19. After gave pre-test and post-test to both groups, the next to give post-test to find out the results after given the treatment used Cake Application. The result of the score post-test experimental got 75.14 and post-test experimental group got 55.33. it is means H_0 was rejected and H_1 was accepted. It can be concluded that there was significant different score after the students was given Cake Application as a learning medium.

After the result of the data, it can be concluded that Cake Application could help the students to improve vocabulary skills. Based on explanation, it was proven that students after did a treatment used Cake Application got higher score than the students did not receive treatment. In addition, teaching vocabulary using

Cake Application as the learning medium could improve students' vocabulary skills.



CHAPTER V

CONCLUSION AND SUGGESTION

This chapter provides Conclusion and Suggestion for this research.

5.1. Conclusion

Cake application is a new learning medium to learn English for students in SMA Negeri 1 Mayong. Based on the result of the data analysis the t-test score post-test between control class and experimental class, experimental class was higher than control class. Post-test of the student experimental class was 75.14 while control group was 55.33. The hypothesis showed that H_0 was rejected and H_1 was accepted. Thus, using Cake Application for learning English vocabulary was effective to improve ability of the tenth-grade students of SMA Negeri 1 Mayong.

Furthermore, the effectiveness of Cake Application to improve tenth graders English vocabulary at SMA Negeri 1 Mayong in the academic year 2021/2022 is proved by the data of *Paired Sample T-test* that Sig.(2-tailed) was $0.000 < 0.05$ which means H_1 was accepted and H_0 was rejected. The result showed there was significant difference of vocabulary mastery between the students before and after using Cake Application as a learning medium. Therefore, it can be concluded that Cake Application as a learning medium was effective to help students to improving their ability in English vocabulary.

5.2. Suggestion

After carrying out this research, hope this research can be useful for teacher, students and the next research on the use of Cake Application as a new learning medium. Based on the conclusion above, it is proposing that following suggestions:

1. Teacher

English teacher should be more creative in choosing learning medium so that learning is more fun and with interesting and creative learning. Cake Application should apply in learning English because it makes the students more effective in learning English vocabulary. Cake Application is not only for improving vocabulary, it could be also effective to improve listening and speaking skills.

2. Students

By participating the teacher in learning process using Cake Application, students should be more attractive and giving their attention in learning process using this application.

3. Next Research

Hopefully, this research can be used in the learning process and the next research the result of using Cake Application will be more useful to improve English skills in learning process.

REFERENCES

- Afifah, G. H. (2021). *Improving Young Learners' Vocabulary through Spelling Bee*. 7, 6.
- Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, III(3), 21–34. <https://doi.org/10.20472/te.2015.3.3.002>
- Anshori, M., & Iswanti, S. (2017). *Metodologi Penelitian Kuantitatif.pdf* (p. Books 1-184). ISBN 979-3216-90-5
- Aprilianti, D. R. (2020). *the Use of Instagram As Mobile Learning To. 2.*
- Fitria, A., Dwimaulidiyanti, A., & Sapitri, S. N. M. (2021). the Implementation of Cake Application in Learning English. *Proceedings International Conference on Education*, 118–123.
- Hastjarjo, T. D. (2019). Rancangan Eksperimen-Kuasi. *Buletin Psikologi*, 27(2), 187. <https://doi.org/10.22146/buletinpsikologi.38619>
- Kurniawan, A. (2018). *Metodologi Penelitian Pendidikan* (N. N. M (ed.)). PT Remaja Rosdakarya.
- Kurniawan, A. W. (2016). Metode Penelitian Kuantitatif. In *Perpustakaan Nasional RI: Katalog Dalam Terbitan (KDT)* (Vol. 44, Issue 8). <https://doi.org/10.1088/1751-8113/44/8/085201>
- Mansur, M., Fadhilawati, D., Kota Blitar, M., & Islam Balitar-Blitar, U. (2019). *Applying Kahoot to Improve the Senior High School Students' Vocabulary Achievement*. 3(2). <https://doi.org/10.29408/veles.v3i2.1591.g933>
- Mataniari, C. (2019). *No Title*. 30 September. <https://www.hipwee.com/list/kekurangan-kelebihan-belajar-online/>
- Maysari, S. (2016). *Pengertian Medium Online serta Kelebihan & Kekurangannya*. 31 July. <https://www.akudigital.com/bisnis-tips/pengertian-medium-online/>
- Meliana, N., Umaemah, A., & Hidayat, H. (2018). Exploring Teacher ' S Strategies in Teaching. *The Journal of English Language Teaching in Foreign Language Context*, 2002, 34.
- Montgomery, J. K. (2007). Types of Vocabulary. *The Bridge of Vocabulary: Evidence Based Activities for Academic Success*, 136. https://www.srsdeaf.org/Downloads/Bridge_of_Vocabulary.pdf
- Notoatmodjo,(2014). *Proceedings of the 8th Biennial Conference of the International Academy of Commercial and Consumer Law*, 1(hal 140), 43. <http://www.springer.com/series/15440%0Apapers://ae99785b-2213-416d->

aa7e-3a12880cc9b9/Paper/p18311

- Nuryadi, Tutut Dewi Astuti, Endang Sri Utami, & Martinus Budiantara. (2017). *Dasar-Dasar Statistika Penelitian*. http://lppm.mercubuana-yogya.ac.id/wp-content/uploads/2017/05/Buku-Ajar_Dasar-Dasar-Statistik-Penelitian.pdf
- Prawiro, M. (2018). *Pengertian Medium Online Secara Umum, Ciri-Ciri, Fungsi, Jenis, dan Contohnya*. 1 January. <https://www.maxmanroe.com/vid/sosial/pengertian-medium-online.html>
- Santosa, I. (n.d.). *Santosa & Andriyadi: The Use of My Dictionary... The Use of My Dictionary Application To Improve Students' Vocabulary Mastery*.
- Siregar, M., & Ed, M. (2020). Developing Cake App As Digital Medium for Teaching Speaking in Junior High School. *Journal of State University of Medan*, 9. <https://jurnal.unimed.ac.id/2012/index.php/ellu/article/view/24461>
- Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*.
- Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif, dan Tindakan*.
- Syalwa, T. (2020). *The Effect of Cake Application Towards Students' Vocabulary Mastery*.
- Trifonov, E. N. (2011). Vocabulary of definitions of life suggests a definition. *Journal of Biomolecular Structure and Dynamics*, 29(2), 259–266. <https://doi.org/10.1080/073911011010524992>
- Yeung, A. S. (1999). Cognitive load and learner expertise: Split-attention and redundancy effects in reading comprehension tasks with vocabulary definitions. *Journal of Experimental Education*, 67(3), 197–217. <https://doi.org/10.1080/00220979909598353>