

## The Effect of Cake Applications on English Learning Outcomes of Class X Students of SMKS Muhammadiyah Sidrap

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## Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh aplikasi Cake terhadap hasil belajar bahasa Inggris siswa kelas X SMKS Muhammadiyah Sidrap. Penelitian ini dilakukan di SMKS Muhammadiyah Sidrap pada bulan Juli 2021. Penelitian ini merupakan penelitian kuantitatif yang menggunakan metode True Experimental Design. Populasi pada penelitian ini adalah siswa kelas X SMKS Muhammadiyah Sidrap. Kelas tersebut dibagi menjadi 2 kelompok, yaitu kelompok kontrol berjumlah 14 siswa dan kelompok eksperimen berjumlah 15 siswa. Tiap kelompok penelitian menggunakan metode belajar yang berbeda. Kelompok kontrol belajar dengan metode ceramah, sedangkan kelompok eksperimen belajar menggunakan aplikasi Cake. Teknik pengumpulan data pada penelitian ini berupa tes dalam bentuk pilihan ganda. Adapun teknik analis data berupa uji-t. Hasil dari penelitian ini yaitu kelompok eksperimen lebih besar dibandingkan kelompok kontrol sdemikian dapat ditarik kesimpulan bahwa H0 ditolak dan Ha diterima.

Kata Kunci: Aplikasi; Cake; Hasil belajar

## Abstract (English-Indonesia)

This study aims to determine the effect of Cake application on English learning outcomes of class X SMKS Muhammadiyah Sidrap. This research was conducted at SMKS Muhammadiyah Sidrap in July 2021. This research is a quantitative study using the True Experimental Design method. The population in this study were students of class X SMKS Muhammadiyah Sidrap. The class was divided into 2 groups, namely the control group with 14 students and the experimental group with 15 students. Each research group uses a different learning method. The control group learns using the lecture method, while the experimental group learns using the lecture method, while the experimental group learns using the Cake application. Data collection techniques in this study were in the form of multiple choice tests. The data analysis technique is in the form of t-test. The result of this study is that the experimental group is larger than the control group, so it can be concluded that H0 is rejected and Ha is accepted.

*Keywords*: Application; Cakes; Learning outcomes

## Pendahuluan

Education is the learning of knowledge, skills and habits of a group of people that are passed down from one generation to the next through teaching, training or research. Education is very important in human life, this means that every Indonesian citizen has the right to education and is expected to always develop in it, as stated in the 1945 Constitution Article 31 paragraph (1) which reads " Every citizen has the right to education. Education in general has the meaning of a life process in developing each individual to be able to live and carry out life. So being an educated person is very important. Humans are educated to be useful people both for the country, homeland and society nation.

The first educational environment that every human being gets is in the family environment (Informal Education), the school environment (Formal Education), community environment and the (Nonformal Education) (Nurhastuti, 2019). One of the subjects taught in formal education is English. English is one of the subjects that students have studied since elementary to high school. Given that English is an international language used by various countries in the world, learning English is indeed very important. Through Language English we can introduce the diversity of culture and language of the Indonesian people to those who want to know more about this nation. There are several benefits when we are able to master English, such as having a great opportunity to get a job, ready to travel, being able to continue education abroad, and there are many more benefits that we can get. However, in Indonesia, teaching English in practice, both teachers and students still face many problems during the learning

process. Various responses can be found in the classroom related to these problems, especially in students' attitudes during the learning process, student learning outcomes, and participation in carrying out group activities (Chen et al., 2016).

Based on the results of initial observations located at **SMKS** Muhammadiyah Sidrap, especially class X on February 12, 2022, researchers observed that in the learning process teachers still use conventional learning methods or lecture methods, so students who take lessons quickly feel bored, and this certainly affect student learning outcomes. Whereas one indicator of the success of a learning process can be seen from the achievement of student learning outcomes. Where success is generally determined by the role of teachers and students as individuals who are directly involved in the process. Teachers as facilitators in learning must be able to make students active by using active learning methods to improve learning outcomes student.

The learning method is a method used by educators to prepare everything that is prepared for the needs of teaching and learning to match the goals to be achieved. One of the learning methods that can be used is the method of using learning media. The method of using instructional media is a method taken in achieving learning objectives that have been designed and planned for the benefit of learning or strategies in designing learning media that will be given to students, and a teacher identify various must be able to characteristics of the learning media used, whether the media used is used in accordance with the characteristics of the subject matter to be given. This means that the learning media can support the smooth learning process so that students can take part in learning well and meaningfully (Maimunah. 2016). Meanwhile. the meaning of learning media is the tools used to support the implementation of the teaching and learning process, from books to the use of electronic devices in the classroom, which serve to explain or visualize a material that is difficult to understand if only using verbal speech (Heri, 2020). ). Thus, to overcome unsatisfactory student learning outcomes, the researchers tried to anticipate these problems by looking for appropriate and interesting learning media, so that in the learning process students are expected to be active and enthusiastic in following lessons. The learning media that will be used in this research are the application of Cakes.

The Cake application is an android -based application that can be used to learn English, in this application there are many features, one of which is a short video conversation that has been given Indonesian subtitles, thus making the learning process more interesting. Therefore, it is hoped that with this Cake application, students will more easily understand the material so that it affects student learning outcomes. Therefore, based on the background, the author can formulate this research with the title " The Effect of Cake Applications on **English Learning Outcomes of Class X** Muhammadiyah Students of SMKS Sidrap".

## Metode

This type of research is experimental research that uses a quantitative research approach. Sugiyono (2007: 107) defines that experimental research is research that is used to find the effect of certain treatments on others under controlled conditions. A similar opinion was also expressed by Arikunto (2016: 272) who stated that experimental research is research that is intended to determine whether there is a result of treatment on the subject under investigation. The way to find out is to compare one or more experimental groups were given treatment that with a comparison group that was not given treatment. The quantitative research approach can be interpreted as research whose analysis focuses more on numerical data that is processed using statistics. The quantitative approach is carried out in order to test the hypothesis, by using this approach the significance of the relationship between the variables studied will be obtained.

This research was conducted at SMKS Muhammadiyah Sidrap in class X students. The time of the research was carried out in June 2022.

In this study, the collected data will be analyzed using statistical techniques. The steps for analyzing the data are as follows:

1. Convert the score into a value with the formula

$$N = \frac{Skor \ Peroleh}{Skor \ M} utlak^{100}$$

2. T test with the formula

t.tes = 
$$\frac{M_X - M_Y}{SDbm}$$

Information:

t = Difference of two means

- Mx = Mean X (the average value of the experimental group)
- My = Mean Y (mean value of control group)

SDbm = Standard deviation of mean value

a. Find the mean of the experimental group (X) and the control group (Y) with the formula:

$$Mx = \frac{\sum x}{N}$$
$$My = \frac{\sum y}{N}$$

b. Find the standard deviation of the squares of the two groups with the formula:

$$SD^{2}x = \frac{\sum fx^{2}}{N} - Mx^{2}$$
$$SD^{2}y = \frac{\sum fy^{2}}{N} - My^{2}$$

$$SD^2y = \frac{2}{N} - My$$

c. Find the standard deviation of the squares of the two groups with the formula:

$$SD^{2}Mx = \frac{SD^{2}x}{Nx - 1} - Mx^{2}$$
$$SD^{2}My = \frac{SD^{2}y}{Ny - 1} - My^{2}$$

d. Find SDbm with the formula:

 $SDbm = \sqrt{SD^2 Mx + SD^2 My}$ 

The criteria for determining and rejecting the hypothesis in this study are t-test analysis. If >ttabel with a significance level of 5% or what is often referred to as a real level = 0.05 then H0 is rejected and Ha is accepted, but if on the contrary <ttabel then H0 is accepted and Ha is rejected (Sudjana, 1999: 221).

## Hasil dan Pembahasan

#### **Research Results**

1. Data presentation

Data from research using documentation and multiple choice tests as data collection instruments, the following results are obtained:

a. Variable X data is data from the results of learning English using the Cake application (experimental group).

b. variable Y data is data from the results of learning English without using the Cake application (control group).

Table 1. Values of the Experimental Groupand Control Group

Ne	Control	Experiment				
No	Group	Group				
1	96	76				
2	86	73				
3	90	80				
4	80	80				
5	86	73				
6	90	56				
7	96	46				
8	76	46				
9	73	46				
10	60	86				
11	90	90				
12	86	56				
13	86	66				
14	76	76				
15	90					

Data source: Student test results

Table2.LearningOutcomesofExperimental Group and Control Group

No	Value	Experiment Group	Control Group
1	96	2	-
2	90	4	1
3	86	4	1
4	80	1	2
5	76	2	2
6	73	1	2
7	66	-	1
8	60	1	-
9	56	-	2
10	46	-	3

Source of data : Processed from table 1

## 2. Data analysis

The value of the experimental group and the control group will be analyzed to see the difference in learning outcomes between students who use the Cake application and without using the Cake application in the learning process.

Table 3. Working Table of Statistical Mean

$Fx^2$	fx	f	Value	f	fy	$Fy^2$
18432	192	2	96	-	-	-

		1		1		1
32.400	360	4	90	1	90	8.100
29.584	344	4	86	1	86	7.396
6.400	80	1	80	2	160	12.800
11.552	152	2	76	2	152	11.552
5.329	73	1	73	2	146	10.658
-	-	-	66	1	66	4.356
3.600	60	1	60	-	-	-
-	-	-	56	2	112	6.272
-	-	-	46	3	138	6.348
107.297	1.261	15	96	14	950	67.482
			/			

Source: Processed from Tebel 2

a) Finding the mean of the experimental group and the control group

$$Mx = \frac{\sum x}{N} = \frac{1261}{15} = 84,06$$

$$My = \frac{\sum y}{N}$$
$$= \frac{940}{14} = 67,85$$

b) Finding the standard deviation of the squares of the two groups

$$SD^2 x = \frac{\sum fx^2}{N} - Mx^2$$

$$SD^{2} x = \frac{107297}{15} - 84,06^{2}$$
$$= 7.153,13 - 7.066,08$$
$$= 87,05$$

$$SD^{2}y = \frac{\sum fy^{2}}{N} - My^{2}$$
$$SD^{2}y = \frac{67.482}{14} - 67.85^{2}$$
$$= 4.820,15 - 4.603,62$$
$$= 216,52$$

#### Discussion

Based on the values obtained from the results of the study, it shows that the experimental group that uses the Cake application in the learning process obtains a higher average score of 84.06 than the control group that does not use the Cake application with an average value of only 67.85.

The results of data analysis show that the value of is greater than the value of is 3.39 > 2.052 at a significance level of 5% with db 27. Therefore, the null hypothesis which states that "there is no effect of Cake the English learning application on outcomes of class **SMKS** Х Muhammadiyah Sidrap" is rejected, while the alternative hypothesis which states that "there is an effect of Cake application on the English learning outcomes of X grade students of SMKS Muhammadiyah Sidrap" is accepted.

Thus, it can be concluded that the Cake application has a better influence on the learning outcomes of English language students of class X SMKS Muhammadiyah Sidrap.

The results of this study are supported by the results of research conducted by (Yusri 2016) in his research entitled "The Influence of the Use of Information and Communication Technology (ICT) Media on the Achievement of Learning English for Class X Students at SMAN I Dekai, Yahukimo Regency". The results showed that the level of English learning achievement of students was in the high category (53.34%). This is indicated by the value of the correlation coefficient R =0.861 (close to the number 1). This means that the more exposed to the use of ICT in English subjects, the stronger the increase in the mastery of the internet media by educators in motivating students in class X SMA Negeri I Dekai, Yahukimo Regency. and research by (Liana, Dinn Wahyudin, and Hanoum 2018) conducted a study entitled "The Effect of Using Hello English Applications English Learning on

Outcomes of Class VII Students of SMP Negeri 1 Kadipaten". The results showed that (6,667>1,296), and obtained an average class score of 82.16%. This indicates that the Hello English application has an effect on improving student learning outcomes in English subjects in junior high school, especially listening skills.

## Conclusion

Based on the results of research and discussion, it can be concluded that:

1. Students will quickly feel bored when in the learning process only using the lecture method. Students will be more active and concentrated in following the learning process using the Cake application as a learning medium.

2. The use of the Cake application in the learning process has a more positive impact than using the lecture method. This is evidenced by the hypothesis testing using the t-test formula, namely with the acquisition of of 3.39. and of 2.052, it can be seen that the result of is smaller than , thus it can be concluded that H0 is rejected and Ha is accepted.

## Daftar Pustaka

- [1] Arikunto, S. 2016. Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.
- [2] Chen, D.N., dan Liang, P.T., (2016),"Knowledge diversity and firm performance: an ecological view", Journal of Knowledge Management, Vol. 20 Iss 4
- [3] Heri. 2020. "Pengertian Media Pembelajaran", https://salamadian.com/pengertianmedia pembelajaran/, diakses pada 4 Juli 2020.
- [4] Maimunah. 2016. "Metode Penggunaan Media Pembelajaran". Riau: PT Remaja Rosdakarya.
- [5] Nurhastuti.(2019). Peranan Pendidikan (1), 66–72.
- [6] Sudjana, Nana. 2009. Penilaian Hasil Proses Belajar Mengajar. Bandung : PT Remaja Rosdakarya

- [7] Sugiyono. 2007. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta.
- [8] Liana, Rizki Maylan Yosinta, R. Dinn Wahyudin, and Nadia Hanoum.
  2018. "Pada Mata Pelajaran Bahasa Inggris Siswa Kelas VII Di SMP Negeri 1 Kadipaten)." Edutcehnologia 2(2):122–28.
- [9] Yusri. Yusri. 2016. "Pengaruh Penggunaan Media Teknologi Informasi Dan Komunikasi (TIK) Dengan Prestasi Belajar Bahasa Inggris Peserta Didik Kelas X Di SMAN Dekai Ι Kabupaten Yahukimo." ILKOM Jurnal Ilmiah 8(1):49–56. doi: 10.33096/ilkom.v8i1.22.49-56.

## **Profil Penulis**

The first author is Drs. H. Agussalim, M.Si. the author was born in Bone, August 17, 1958. The author's undergraduate education was pursued at the Makassar State University and then the Postgraduate Program at Hasanuddin University. Currently the author lives in the city of Makassar.

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The third author, Febryani, was born in Rappang on February 17, 2000. My mother's name is Asnah, a housewife. And my father's name is Amiruddin, who works as an entrepreneur. I am the second of five children. My four siblings are named Abril, my older brother, and my younger siblings are Sapri, Mail, Adi. I studied for the first time at Idata Rappang Kindergarten from 2005 to 2006. Then I continued to elementary school at SD Negeri 2 Rappang from 2006 to 2012. After graduating from elementary school, I continued my education to SMP Negeri 1 Panca Rijang in 2012 until 2015. After graduating from junior high school, I continued to SMA Negeri 1 Sidrap from 2015 to 2018. After graduating from high school, I continued my education at the University of Muhammadiyah Sidrap from 2018 until now.

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