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THE USE OF CAKE APPLICATION IN LEARNING ENGLISH SPEAKING SKILLS

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Abstract. This study aims to investigate the effectiveness of using the CAKE application in improving the English language skills of Bumigora University students. This research was conducted through a Classroom Action Research (CAR) model, which consists of two cycles. Each cycle involves four stages: planning, action, observation, and reflection, involving 40 students of the Information Technology Study Program. Data collection techniques used in this study were a Speaking Ability Test, Observation, Questionnaires, and Interviews. The results of the study showed a significant increase in students' speaking skills after using the CAKE application as a learning medium. The average pre-test score of 54.90 indicated that students' initial abilities were still in the low category. After the implementation of the action in cycle I, the average score increased to 66.82, indicating initial improvements in the aspects of pronunciation, fluency, and students' confidence in speaking. In cycle II, the average score increased again significantly to 79.28, indicating that the consistent use of the CAKE application had a positive impact on the development of students' speaking skills. Thus, this study concludes that CAKE is an effective and relevant digital learning medium in supporting the mastery of EFL students' speaking skills, especially in the context of technology-based learning in higher education.

Keywords: English, Learning Media, Cake Application, Computer

Abstrak. Penelitian ini bertujuan untuk menyelidiki efektivitas penggunaan aplikasi CAKE dalam meningkatkan kemampuan berbahasa Inggris mahasiswa Universitas Bumigora. Penelitian ini dilakukan melalui model Penelitian Tindakan Kelas (PTK), yang terdiri dari dua siklus. Setiap siklus melibatkan empat tahapan: perencanaan, tindakan, observasi, dan refleksi dengan melibatkan mahasiswa Program Studi Teknologi Informasi dengan jumlah 40 orang. Teknik pengumpulan data yang digunakan dalam peneltian ini adalah Test Kemampuan berbicara (Speaking Test), Observasi, Kuesionaire, dan Wawancara. Hasil penelitian menunjukkan peningkatan yang signifikan pada kemampuan berbicara mahasiswa setelah menggunakan aplikasi CAKE sebagai media pembelajaran. Rata-rata skor pre-test sebesar 54,90 menunjukkan bahwa kemampuan awal mahasiswa masih berada dalam kategori rendah. Setelah implementasi tindakan pada siklus I, rata-rata skor meningkat menjadi 66,82, menunjukkan peningkatan awal pada aspek pengucapan, kelancaran, dan kepercayaan diri mahasiswa dalam berbicara. Pada siklus II, rata-rata skor meningkat lagi secara signifikan menjadi 79,28, menunjukkan bahwa penggunaan aplikasi CAKE secara konsisten memberikan dampak positif pada pengembangan kemampuan berbicara mahasiswa. Dengan demikian, penelitian ini menyimpulkan bahwa CAKE merupakan media pembelajaran digital yang efektif dan relevan dalam mendukung penguasaan kemampuan berbicara mahasiswa EFL, khususnya dalam konteks pembelajaran berbasis teknologi di pendidikan tinggi.

Kata Kunci: Bahasa Inggris, Media Pembelajaran, Aplikasi Cake, Komputer

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INTRODUCTION

According to Aqilah (2024), speaking ability in English is an essential skill that must be mastered by learners, especially in the era of globalization, which demands international communication competence. Unfortunately, many students in Indonesia still experience difficulties in speaking English, particularly university students in Computer Science programs. These difficulties are caused by a lack of self-confidence, limited practice opportunities, restricted access to native speakers, and teaching methods that are still teacher-centered. As a result, students tend to be passive and less actively involved in speaking activities in the classroom. Speaking is defined as an interactive process of constructing meaning that involves producing, receiving, and processing speech using sounds as the main instrument (Pratiwi & Budiarti, 2020). Previous studies state that speaking ability is the capacity to use spoken language to communicate ideas, intentions, thoughts, and feelings to others in such a way that the message is clearly conveyed and well understood (Paramita, 2022). Other research also emphasizes that speaking is intended to communicate meaning so that others can understand it (Kafryawan et al., 2018).

The development of information technology has opened new opportunities in education, one of which is the use of digital-based learning applications. Eldania (2024) states that the CAKE application is an English learning platform designed to help users independently improve their speaking skills. This application provides short videos from native speakers, pronunciation practice, and sentence and phrase training commonly used in daily conversations. Subhan & Hani (2024) argue that the CAKE application can increase students' motivation in learning speaking skills due to its integration with various video features.

Nurnaningsih (2024) explains that the use of the CAKE application offers a more interactive, flexible, and enjoyable learning experience. Students can learn anytime and anywhere while having opportunities to listen to and imitate correct pronunciation directly from native speakers. Features such as repetition, intonation recognition, and situational context in dialogues significantly contribute to improving speaking competence. CAKE is a free application developed by Cake Corp and launched on March 22, 2018. Amiruddin (2023) notes that the application contains various useful tools for learning English, including speaking aids that allow learners to practice conversations, watch videos to enhance speaking skills, complete guessing and gap-filling exercises, and compare correct answers to reinforce vocabulary retention. Speaking practice is one of the features that stimulates communication with native speakers.

Mobile-based learning enables more private and personalized learning experiences, both in formal and informal contexts. Wilson & Sutrisno (2022) found that the CAKE application can be used to improve students' vocabulary mastery, with statistically significant results (sig. = 0.006 < 0.05; F = 7.842). Muslihatun (2025) also concluded that the CAKE application is effective in enhancing speaking skills when integrated into a broader language learning strategy.

Therefore, the utilization of the CAKE application in English speaking instruction is considered relevant for addressing the limitations of conventional teaching methods and supporting more communicative learning. Moreover, this study aims to improve the English-speaking skills of Computer Science students through the use of the CAKE application and to examine its effectiveness in enhancing pronunciation, fluency, vocabulary, grammar, and comprehension. In addition, this research seeks to analyze students' responses toward the implementation of the CAKE application in speaking instruction.

METHODE

This research was conducted at the Faculty of Computer Science, Universitas Bumigora, using a pre-experimental research design with a descriptive quantitative method. This study employed Classroom Action Research (CAR**)** using a descriptive quantitative approach. Classroom Action Research was selected to improve both the learning process and students' English-speaking skills through the systematic implementation of the CAKE application in classroom instruction. Each cycle involves four stages: planning, action, observation, and reflection, involving 40 students. The study aimed to provide opportunities for students to improve their English language skills with the support of technology-based learning media. The Classroom Action Research (CAR) in this study was conducted in two cycles, with each cycle consisting of four main stages: planning, action, observation, and reflection. In the planning stage, the researcher identified students' difficulties in English speaking skills, prepared lesson plans, designed speaking materials using the CAKE application, and developed research instruments such as speaking assessment rubrics, observation sheets, and test items. The action stage involved the implementation of the CAKE application in classroom speaking activities, where students practiced pronunciation, shadowing, dialogues, and speaking tasks through video-based and speech recognition features. Observation was carried out simultaneously with the action stage to monitor students' participation, engagement, and responses during the learning process, as well as to collect data from speaking performance tests. In the reflection stage, the researcher analyzed the results of observations and students'

speaking test scores to evaluate the effectiveness of the implemented actions. The findings from the reflection were then used to identify weaknesses and make necessary improvements for the subsequent cycle if the predetermined success indicators had not been achieved. The following are the stages in classroom action research:

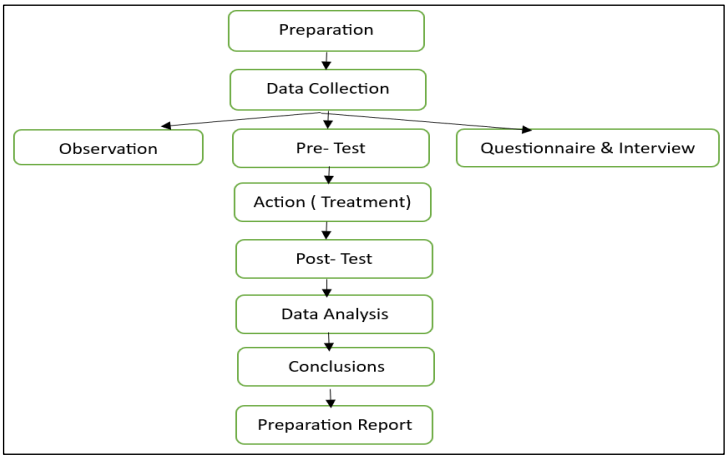

Figure 1. Steps of classroom action research

During the planning stage, the researcher prepared the research instruments, lesson plans, speaking materials, observation sheets, and assessment rubrics. In the action stage, the Cake application was implemented in classroom learning activities to enhance students' speaking practice. The application was used as a digital learning medium to support pronunciation, vocabulary, and speaking fluency. The observation stage was carried out simultaneously with the action stage. The researcher observed students' participation, engagement, and responses during the learning process. Data were collected through classroom observations, questionnaires, and interviews. To measure students' speaking improvement, a pre-test was administered before the implementation of the action, and a post-test was conducted after the action was completed. In the reflection stage, the results of the pre-test and post-test, along with observational data, were analyzed to evaluate the effectiveness of the implemented action. The findings from the reflection were used to determine whether the objectives of the study had been achieved and to plan improvements for the next cycle if necessary. Finally, the data from all stages were analyzed to draw conclusions regarding the effectiveness of the Cake application in improving students' English-speaking skills, and the results were compiled into a research report.

FINDING

Tabel 1. Skor kemampuan speaking mahasiswa (*pre-test*, siklus I, siklus II)

No	Kategori Penilaian	Indikator	Pre-Test	Siklus I	Siklus II
1	Pronunciation	Kejelasan dan ketepatan pelafalan	55.20	67.15	79.45
2	Fluency	Kelancaran berbicara tanpa banyak jeda	54.35	65.50	78.30
3	Vocabulary	Kecukupan kosakata dalam speaking	56.10	68.40	80.25
4	Grammar	Struktur bahasa dalam berbicara	53.85	65.20	77.40
5	Comprehension	Pemahaman dan kejelasan penyampaian ide	55.00	67.85	81.00
Rata-rata nilai			**54.90**	**66.82**	**79.28**
Kategori			**Low**	**Average**	**Good**

Tabel 2. Distribusi nilai mahasiswa

Rentang Nilai	Kategori	Jumlah Mahasiswa (Pre-Test)	Siklus I	Siklus II
80 – 100	Very Good	0	2	18
70 – 79	Good	3	12	20
60 – 69	Average	10	21	2
< 60	Low	27	5	0
Total		**40**	**40**	**40**

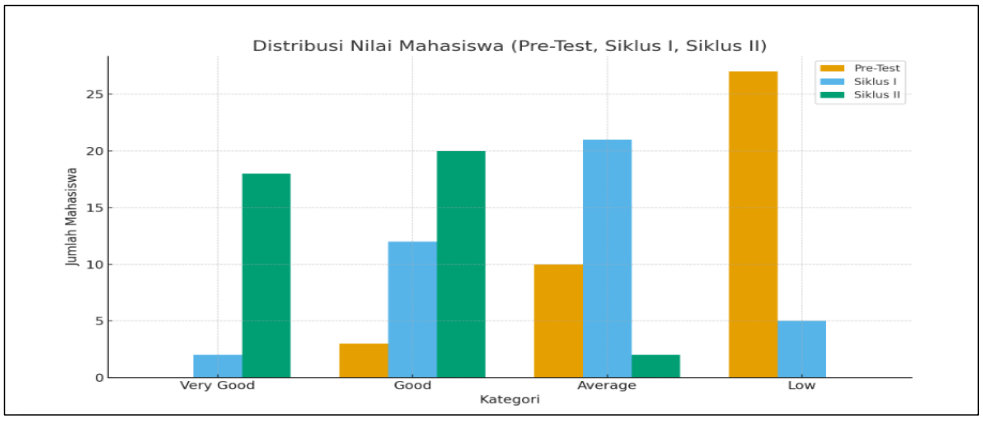

Figure 2. The picture of diagram

As explained in the table above, this research was conducted on 40 computer science class students using the Pre-Experimental Research Design method and a Descriptive Quantitative approach. The research aimed to improve English speaking skills through the support of technology-based learning media, namely the Cake Application. The research was conducted in two cycles, and each cycle consisted of planning, action, observation, and reflection stages. Data collection was carried out through speaking ability tests in the pre-test, post-test cycle I, and post-test cycle II.

The findings indicate a significant improvement in students' speaking skills across the pre-test, Cycle I, and Cycle II. The average pre-test score was 54.90, categorized as low. After the implementation of learning activities using short video exercises, paired dialogues, and speech

recognition features in the CAKE application during Cycle I, the average score increased to 66.82 (average category). Reflection at the end of Cycle I revealed that students still faced challenges in fluency and vocabulary mastery, necessitating increased practice intensity and voice-recording-based assignments. In Cycle II, after more structured exercises, short presentation tasks, and gradual monitoring of application usage were implemented, the average score rose to 79.28, categorized as good. The score distribution also showed a substantial increase in the number of students achieving good and very good categories. These results demonstrate that the CAKE application effectively enhances students' speaking skills while offering an engaging, flexible, and interactive learning experience.

DISCUSSION

The use of the CAKE application significantly contributed to improvements in fluency, pronunciation, and self-confidence. Students perceived CAKE as providing a more authentic English learning experience through short videos, shadowing features, AI-based pronunciation practice, and dialogue models resembling real-life communication. This finding aligns with the principles of Mobile-Assisted Language Learning (MALL), which emphasize individualized, flexible, and contextual learning opportunities. Previous studies support these findings. Sujana, Santosa, & Mahayanti (2024) reported that CAKE effectively improves pronunciation through AI speech recognition features that provide immediate and accurate feedback. Sari (2025) also found that CAKE enhances students' speaking achievement through authentic video content that accommodates diverse learning styles. Abdilah (2024) highlighted the benefits of CAKE for young learners, particularly in improving confidence and public speaking skills through authentic language use and real-life scenarios. Ikha'a (2023) emphasized that CAKE enables students to practice speaking independently without fear of judgment, thereby reducing anxiety and increasing motivation, consistent with Krashen's Affective Filter Hypothesis. Syafi'i (2024) further reported that most students hold positive perceptions of CAKE due to its engaging, interactive, and digitally relevant content. Overall, the integration of CAKE not only diversifies teaching methods but also produces tangible improvements in learning outcomes, supporting blended learning practices in higher education.

CONCLUSSION

Based on the results of the classroom action research, it can be concluded that the implemented learning strategy was highly effective in improving students' speaking skills. This effectiveness is evidenced by a consistent increase in average scores across each stage. The

pre-test average score of 54.90 indicated a low initial ability. Following the implementation of Cycle I, the average score increased to 66.82, reflecting improved comprehension and performance. A more substantial improvement was observed in Cycle II, with an average score of 79.28, demonstrating that the learning strategy was increasingly effective and well received by students.Overall, the continuous improvement from the pre-test to Cycle II confirms that the learning intervention successfully enhanced students' speaking abilities in a sustained manner. The use of the CAKE application contributed positively to improving students' speaking skills at Universitas Bumigora, particularly among Information Technology students. The application provides an interactive, flexible learning environment aligned with the principles of Mobile-Assisted Language Learning (MALL). Features such as speech recognition, shadowing practice, authentic videos, and automated assessment significantly support improvements in pronunciation, fluency, and vocabulary acquisition. Students also demonstrated increased self-confidence due to the low-pressure practice environment.

Nevertheless, several challenges were identified, including internet connectivity issues, inconsistent application usage among students, and suboptimal integration of CAKE into the semester learning plan. Despite these limitations, CAKE has proven to be an effective supporting medium for enhancing students' English speaking skills and is highly relevant for technology-based English language learning in higher education.

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