

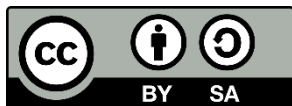
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## Education Transformation in The Digital Era: The Innovative Role of The Cake Application in Improving English Speaking Skills

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### Abstract

Education plays a crucial role in shaping human character and personality development. The Merdeka Belajar (Freedom of Learning) program underscores the significance of learning autonomy and innovation in education. This article investigates the impact of technology, specifically the Cake application, on enhancing English speaking skills within the classroom context. Using the Classroom Action Research (CAR) approach, this study examines the efficacy of the Cake app in improving English pronunciation skills among 9th-grade students at SMP N 3 Kubutambahan. Through four research cycles, the study demonstrates the Cake app's effectiveness in enhancing students' English-speaking abilities. Findings also support the app's utility in improving student speaking skills. In conclusion, teaching English pronunciation with the Cake app garnered positive feedback from students, indicating successful implementation of pronunciation instruction among 9th-grade students at SMP N 3 Kubutambahan.

**Keywords: Education, EFL, Cake Application, Speaking**

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## INTRODUCTION

Education is an important part of humans and plays an important role in the formation of humanity and the character of every human being. Education is one of the important things and should not be underestimated, therefore everyone must get education both in the family environment, at school and in the community. Through education, people acquire better cognitive and learning skills. It is undeniable that education is very important for the growth and development of the nation's next generation. To encourage adherence to these rules, education must also play a role in instilling pure values in everyone. The purpose of education is to advance the intellectual and emotional development of individuals. Education shapes the character and attitude of individuals towards life and others. It aims to promote the development of the individual's personality as a whole.

The importance of the role of education can be a learning experience where one learns about different aspects of life, understands different perspectives and tries to apply them in everyday life. Education is important for children, adults and society. Education gives people

knowledge about the world around them and changes it for the better. It develops people's view of life, helps form opinions and see things in life. The concept of education according to Ki Hajar Dewantara (1954) is based on the principle of independence, meaning that humans are given freedom from God Almighty to regulate their lives while remaining in line with the rules that exist in society. Therefore, it is expected that a student must have an independent spirit in the sense of being free outwardly and mentally and energy. The spirit of independence is needed throughout the ages so that the Indonesian nation is not dictated by other countries. Ki Hadjar Dewantara has the term among systems, which prohibit punishment and coercion to students because it will kill the spirit of freedom and kill their creativity. Seeing these various things is certainly in accordance with the education program carried out by Indonesia today, namely the Merdeka Belajar policy program.

Merdeka Belajar is a new policy program of the Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud RI) launched by the Minister of Education and Culture, Nadiem Anwar Makarim. Reporting from the Kemdikbud.go.id page, there are three characteristics of the Merdeka Belajar program, namely the development of soft skills and characteristics through the project of strengthening the profile of Pancasila students, then Focus on essential, relevant, and in-depth material so that there is enough time to build student creativity and innovation in achieving basic competencies such as literacy and numeracy and flexibility for teachers to conduct learning according to the stages of achievement and development of students each and make adjustments to local context and content.

However, the world of education has undergone many changes during the Covid-19 pandemic. Where all learning and teaching activities are carried out at their respective homes online to prevent the spread of the outbreak. In Indonesia, E-learning is one of the solutions for implementing education during a pandemic so that learning can be carried out to achieve the right learning goals (Nafrin & Hudeidah, 2021). Therefore, when using online digital technology, teachers and students must adapt from the beginning during the learning process where previously learning was carried out directly in class but during the pandemic it was done with the help of technology. Teachers must also prepare the right teaching methods for students when using this online technology and students must be able to understand all the material delivered by the teacher through e-learning or zoom meetings.

After the pandemic, education in Indonesia began to adapt to new concepts, such as rebuilding old practices before Covid-19 such as face-to-face learning. In this post-crisis era, true innovation must be created to break old habits. Teachers must be able to change their respective strategies from creative to flexible (Arum et al., 2022). Due to the pandemic, teachers have new innovations and new teaching methods, namely utilizing technology according to today's times, technology is developing faster and sophisticated, teachers and students are required to be able to utilize existing technology. At this time there are several technologies that are already used in the learning process. Such as Cake application, The Cake app uses a way that is entertaining or fun for students and is based on artificial intelligence.

According to Sinha (2019) the cake application presents a recording feature that can be listened to by users it is very fun, this application can also involve the students. When we speak, we can also discover new vocabulary It is the best application to learn to speak English. According to Suryani et al., (2021) the Cake Application can access various language

applications through gadgets for the English teaching and learning process. One of them is a cake application. It is one of the most popular speaking apps among students (Hapipah et al., 2021). The app gives students access to a wide range of topics. Such as examples of videos / movies and dialogues. The application of CAKE is possible to be used as a media in the learning process.

In the context of English language learning in the classroom, the use of technology such as e-learning can be a valuable innovation. The use of e-learning in the English learning process not only facilitates the delivery of learning material, but also opens up opportunities for students to develop different skills more effectively. E-learning allows students to access learning materials anytime, anywhere, making English lessons more flexible and easier to follow. In addition, e-learning allows students to interact more interactively with teachers through various applications such as Google Classroom, video conferencing, phone calls, live chat, Zoom and WhatsApp groups. This lively exchange encourages students to participate more actively in their learning, improve their English communication skills, and have more fluent, spontaneous conversations. By integrating e-learning technology into English language learning in the classroom, teachers can create a more engaging, dynamic, and student-centered learning environment. This increases students' interest and motivation in learning English especially learning speaking and prepares them for the challenges of the evolving digital age.

According to Brown (2007), speaking is considered an empirically observable productive skill. However, such observations are inevitably influenced by the listening skills of the examinee, which can compromise the reliability and validity of oral production exams. In other words, when we speak, the listeners can immediately evaluate our speech. Speaking is very important in the era of globalization where we will interact with people not only from our country but also from other countries. One of the things to master is to speak in English, as one of the most popular foreign languages to learn in different countries is English because English is an international language. In English language learning, speaking is considered the most difficult thing for some students to learn, because in English there are some sounds that are not in the Indonesian. According to Anggaraini (2022), one of the competencies that must be mastered by students is the ability to pronounce English correctly and precisely. As a second language learned by students, speaking English fluently may not be easy, in fact there are many students who still have difficulty in speaking English. These difficulties vary and differ for each student, but the most commonly encountered is the pronunciation of English words. Students still struggle in pronouncing English vocabulary while reading or speaking, this is certainly a problem because pronunciation is one of the most important aspects as a basic requirement of the language. English pronunciation is certainly not an easy thing for students because they have to produce different sounds in each letter that are very different from the sounds they know in Indonesian, besides that in general there are several factors that cause students to lack pronunciation. This subject is still considered trivial in language teaching, many language teachers avoid the importance of English pronunciation. Lack of time to practice and also lack of supporting materials and media are the main reasons why pronunciation is still neglected in language learning.

Researchers are very interested in conducting research on CAKE applications because the artificial intelligence (AI) powered Cake application allows users to use e-learning

technology more effectively to improve their English skills. The app gives students the opportunity to practice speaking through simulated conversations with artificial intelligence and virtual peers. With artificial intelligence technology, the app recognizes and understands the user's speaking voice and provides immediate feedback on correct pronunciation and intonation. In addition, the adaptive learning capabilities of the Cake app also use artificial intelligence to determine the needs and skill level of users when speaking in English. Therefore, the teaching materials and exercises provided by this application can be set automatically according to the performance level of each user. In the context of learning English in the classroom using artificial intelligence-based Cake applications, this application can be a valuable addition. The app provides a personalized and interactive learning experience, helps students improve their English skills, and provides relevant feedback to improve their pronunciation and speaking fluency. The use of artificial intelligence technology in this application also reflects the development and use of technology in education in the era of globalization and openness as previously explained.

## **METHOD**

This research uses CAR (Classroom Action Research) as a research design categorized so because of its problem-solving nature. This aims to improve students' learning and abilities, especially in improving English pronunciation skills among grade 9th students of SMP N 3 KUBUTAMBAHAN. Classroom action research includes a variety of models, one of which is the Kemmis and McTaggart model, as outlined in Burns (2013: 7), adopted in this study. The data collection process in this study can be carried out progressively through several cycles of action. For the first cycle, researchers identified problems of sixth graders, especially in their English speaking and pronunciation skills. After analyzing this issue, actions are planned and executed. The researcher also evaluates whether any problems or failures of the plan occurred during the implementation of the action. If so, the researcher revises the planned action and reimplements it.

To gather the data, the researcher used some instruments speaking test. A test is a series of questions and exercises used to measure student achievement, individual or group abilities of cognitive aspects. For example, measuring students' competence, knowledge, intelligence, and ability in pronunciation through tongue twisters. A very useful test to find out student achievement in understanding the material given by the teacher. In this study, researchers used an oral test to determine the pronunciation ability of grade 9B students of SMP N 3 Kubutambahan.

This study used two types of tests, namely pre-test and post-test. A pre-test is given before researchers teach students about pronunciation using the CAKE app. This aims to find out the value obtained by students in learning English pronunciation before the teaching and learning process begins. To find out how well students are obtained in pronouncing English words while post-test is an activity to test students' abilities at the end of the learning process after using the CAKE application. This will describe student outcomes during the learning process whether there are improved student scores between before using CAKE and after using. This posttest will be carried out until students reach the KKM success target, which is with a score of 75.

After researchers get data from pre-test and post-test results, researchers conduct an in-depth analysis using SPSS descriptive statistics to determine the mean and standard deviation. This analysis process aims to assess whether there is a significant improvement in students' speaking skills during the study, as guided by the rubric model developed by Rahmad Purnama (2019). The research process will continue until cycle N or until it meets the predetermined target.

## **FINDINGS AND DISCUSSIONS**

In this section, researchers present research findings. This study used classroom action research as a research methodology and this research took place on grade 9 students of SMP N 3 Kubutambahan in the academic year 2023/2024. The study also consisted of cycle one and cycle two. In each cycle this research also has several steps such as; Plan, act, observe and reflect, all steps of this research are described as follows:

**Table 1. Descriptive Analysis Pretest**

Min Score	Max Score	Mean	Standard Deviation
40	75	55.16	10.961

Pre-test data showed that prior to the learning intervention, students' speaking abilities had a fairly wide range, from 40 to 75, with an average of about 55.16. A relatively high standard deviation (10.961) indicated significant variation in students' scores prior to the intervention.

**Table 2. Descriptive Analysis Posttest**

Cycle	Min Score	Max Score	Mean	Standard Deviation
1	60	85	66.09	8.774
2	70	85	76.88	5.198

First-cycle post-test data showed significant improvement in students' speaking skills after the first intervention using the CAKE app. The score range increased from 60 to 85, with an average of 66.09. Although the standard deviation (8,774) decreased slightly from the pre-test, variation in scores remained, suggesting that not all students experienced the same improvement. In addition, in the first post-test, students were still confused in using the cake application

The second cycle post-test data showed consistency in improving students' English-speaking skills. The score range narrowed further from 70 to 85, with an average of 76.88. A lower standard deviation (5,198) indicates that most students experience consistent improvement in their scores. Therefore, the cycle ends in the second cycle. The results of descriptive statistics show that learning interventions using CAKE applications are effective in improving students' English-speaking skills. Although there was variation in the rate of improvement between students, overall, there was a significant increase from pre-test to second-cycle post-test.

The findings of Sinha (2019) and Suryani et al. (2021) on the effectiveness of CAKE applications in improving English speaking skills can be connected with the results of descriptive statistical analysis of pre-test and post-test data for cycles one and two presented above. Descriptive statistical results showed a significant improvement in students' speaking scores after learning interventions using the CAKE application. From pre-test to post-test cycle

one, there was an average score increase of 10.93 points, while from pre-test to post-test cycle two, the average increase reached 21.72 points. This finding is consistent with Sinha's (2019) research which shows that the CAKE application provides an interactive and fun learning experience, as well as helping students discover new vocabulary in the process of learning to speak English.

In addition, the findings of Suryani et al. (2021) which highlight the accessibility of CAKE applications through gadget devices for the English learning process can also be linked to the results of SPSS. The results of descriptive statistics show that the improvement in students' speaking scores occurs consistently from cycle one to cycle two, which may indicate that the accessibility of CAKE applications through gadget devices provides wider opportunities for students to engage in English learning outside of class hours. Thus, the integration of findings from the research of Sinha (2019) and Suryani et al. (2021) with the results of descriptive statistical analysis of pre-test and post-test data cycles one and two shows that CAKE applications are effective in improving students' English-speaking skills, which is reflected in a significant increase in scores from before the intervention to after the intervention.

## **CONCLUSION**

Following the implementation of this research, several notable conclusions emerge regarding the efficacy of the CAKE application in enhancing students' pronunciation abilities. The data derived from pre-tests, cycle one, and cycle two post-tests demonstrate a clear pattern of improvement. The average scores progressively increased from the pre-test score of 55 to 66 in the post-test of cycle one and further to 76 in the post-test of cycle two. This consistent upward trajectory in scores underscores the tangible benefits accrued from integrating the CAKE application into language learning pedagogy. The amalgamation of these findings points towards the successful application of pronunciation instruction through the CAKE application at the 9th grade level of SMP N 3 Kubutambahan. The utilization of technology has not only led to significant improvements in students' pronunciation abilities but has also garnered favorable responses from the student cohort. This holistic evaluation reaffirms the transformative potential of technology in augmenting language learning outcomes, particularly in the domain of pronunciation. In conclusion, the results of this research highlight the effectiveness of utilizing the CAKE application as a tool for enhancing English pronunciation skills among 9th-grade students. The positive outcomes observed underscore the importance of leveraging technology in language instruction and provide valuable insights for educators seeking innovative approaches to enhance language learning experiences.

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