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THE EFFECTIVENESS OF USING SMALLTALK2ME AI IN TEACHING SPEAKING SKILLS

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ABSTRACT

The purpose of this study is to find out the effectiveness of using Smalltalk2me AI in teaching speaking skills to secondary students. This quantitative research implemented a one-group pretest-posttest pre-experimental design. The collection of data process consisted of three steps: pre-test, treatment, and post-test. Then the researchers found the results of students' achievement after they were taught by using Smalltalk2me AI. This research used Microsoft Excel to analyze the data by looking for the mean, standard deviation, T-test value, and T-test table. The findings of this study revealed that the average of the post-test was higher than the average of the pretest (30,75>41). It means that this study discovered a significant or substantial difference between the pre-test and post-test scores for students who had been taught by using Smalltalk2me AI. Therefore, it is possible to infer that Smalltalk2me AI is an excellent tool to teach speaking skills since tenth-grade students at SMA 1 Sajingan could be more active in speaking with high accuracy and great fluency.

Keywords: *Smalltak2me, Artificial Intelligence (AI), Teaching Speaking skills.*

INTRODUCTION

Speaking skills are the most significant skill to learn in a language. Speaking is regarded as the most difficult of the four major language skills to achieve. Speaking is when students can convey ideas, thoughts, and feelings orally (Patiung et al., 2015). According to Thornbury (2005), a real-life activity that a speaker does to deliver ideas to interact with listeners. Brown and Yule (1983) say, "Speaking is the skill that the students will be assessed on most in real life situations." It is considered that speaking is an ability that may help students learn a language. Speaking is simply a mechanism of communication that uses the sound generated by the human speaking system to send messages

from one source toward another. (Safitriani & Jayadi, 2021). Mastering English speaking skills is not an easy thing to do for students, even though they are in senior high school which is considered the intermediate level of fluency. According to Brown and Heekyeong (2015), custering, reduced forms, redundancy, colloquial language, performance variables, rate of delivery, stress, rhythm, intonation, rate of delivery, interaction, grammar and discourse structural complexity are all aspects that contribute to speaking difficulties. Therefore, teachers need to use effective media to teach the students speaking skills well.

In the era of technological advancement, Artificial intelligence (AI) has become a tool to help many people all over the world to do work in many fields. Especially in the education field, it is one of the sophisticated tools to look for knowledge faster. For teachers, using AI can analyze the teaching process automatically (Xiao & Yi, 2021) The use of AI in learning English effectively increases the students' skills in listening, speaking, reading, and writing (Abimanto & Mahendro, 2023). There are some useful AIs that can help teachers in certain skills in the current era. So, the teachers need to find a specific AI as a medium for improving speaking skills. One of the artificial intelligence to assist teachers in teaching their speaking skills is Smalltalk2me.

Smalltalk2me AI is powered by artificial intelligence and is designed to help students improve their English skills specifically in speaking. It can be accessed from any device. This AI provides a speaking test feature for teachers to help them analyze students' speaking skill levels. It provides interactive learning and practices that can increase engagement as it can make students more engaged and enjoy the learning. It can detect the progress of the learners who have used it regularly. So, the students can know the progress of their learning. Also, it provides real-life situation topics and immediate feedback on the practice (Liya Umaroh et al., 2023) Smalltalk2me AI is created to assist learners in enhancing their speaking skills.

Furthermore, it is assumed that students' speaking skills can be affected by implementing effective media. A previous study conducted by Liya Umaroh et al. (2023) explores the use of Artificial Intelligence (AI) technology to enhance students' speaking skills in English. It discusses the benefits of AI in education and how it can affect students' English learning experience. It provides examples of AI-based English learning platforms and discusses the performance of students using AI-powered technology. The study shows that AI can significantly affect students' speaking performance in English. The similarity of this research to previous research is exploring the use of Artificial intelligence for learning English. Nevertheless, the difference is that the previous study conducted the research using mixed methods and also focused

on more than one AI, while this research used pre-experimental research. This study filled the gaps by focusing on the Smalltalk2me AI to measure the effectiveness of this media as a tool for teachers to affect students' speaking skills.

A hypothesis is a statement of the expectation or prediction of the researcher regarding the connection between research variables. (Dayanand, 2018). Hypothesis is needed to determine the prediction about what will the researcher find in the research. The hypothesis of this research can be formulated as follows:

Ha : There is a significant effect of using Smalltalk2me AI in teaching speaking skills

Ho : There is no significant effect of using Smalltalk2me AI in teaching speaking skills

METHODS

In this research, the researchers used quantitative research specifically pre-experimental research design. The participant of the study includes 30 students of tenth-grade students at SMA Negeri 1 Sajingan in the academic year 2024/2025. According to Creswell (2018), "Pre-experimental designs involve studying a single group and implementing an intervention during the experiment." This research employed pre-experimental research with one group pretest-posttest. The researchers collected data using a pre-experimental study design with a one-group pre-test-post-test design, which included pre-test, treatment, and post-test. According to Leedy & Ormrod (2015), ". This research employed pre-experimental research with one group pretest-posttest. The researchers collected the data using a pre-experimental study design with a one-group pre-test-post-test design, which included pre-test, treatment, and post-test. According to Leedy and Ormrod (2015), "In one group pretest-posttest design, one group receives a pre-experimental observation or assessment then is given the experimental treatment, and finally is observed or assessed again after the treatment." The pre-test and post-test each included 20 multiple-choice questions that had similar difficulty and format between the pre-test and post-test. The researcher employed Smalltalk2me AI as a treatment to teach speaking skills for secondary students. The treatment was given 3 times in the different meeting.   To analyse the data, the researchers used T-test that was calculated in Microsoft excel to measure the significant effect of Smaltalk2me AI and the students' speaking scores.

FINDINGS AND DISCUSSION

Following this research, the researchers obtained the data of students' pre-tests and post-tests from the pre-experimental research design one group.

Pre-test, post-test. Students' names are inscribed with a letter that corresponds to their attendance number.

Students' accuracy in speaking skill

It was shown that Smalltalk2me AI in teaching speaking skills at the SMA 1 Sajingan affects students' speaking skills. The student's accuracy score is assessed based on rubric from Hughes (2003). The table below shows how Smalltalk2me AI was used to deal with pronunciation and vocabulary at SMA 1 Sajingan.

Table 1. The score of Pre-test and Post-test Students' Accuracy in Speaking Skills

No	Students name code	Pre-test	Post-test
1	A	20	30
2	B	40	40
3	C	40	50
4	D	30	50
5	E	30	40
6	F	30	40
7	G	20	30
8	H	40	50
9	I	30	40
10	J	30	50
11	K	40	50
12	L	20	30
13	M	30	50
14	N	40	60
15	O	40	50
16	P	40	40
17	Q	30	50
18	R	40	50
19	S	20	30
20	T	30	40
Mean		**32**	**43,5**

According to Table 1, the students' accuracy of speaking skills scores ranged from 20 to 40 on the pre-test, with an average of 32. The post-test's lowest score was 30, the highest score was 60, and the average score was 43.5. It demonstrates that there is a difference in the student's accuracy test scores before and after the test was given.

Student's fluency in speaking skill

The following table shows the students' fluency to deal with pauses and hesitations using Smalltalk2me AI at SMA 1 Sajingan.

Table 2. The score of Pre-test and Post-test Students' fluency in Speaking Skills

No	Students name	Pre-test	Post-test
1	A	40	50
2	B	30	40
3	C	30	30
4	D	20	40
5	E	20	30
6	F	40	40
7	G	40	50
8	H	30	40
9	I	20	30
10	J	40	50
11	K	30	40
12	L	20	40
13	M	30	30
14	N	20	30
15	O	20	30
16	P	50	60
17	Q	30	20
18	R	20	30
19	S	20	40
20	T	40	50
	Mean	**29,5**	**38,5**

Table 2 shows that the students' scores in the fluency of speaking skills ranged from 20 to 50 on the pre-test, with the average score being 29. The post-test scores ranged from 20 to 50, with an average of 38.5. It demonstrates that the student's pre-test and post-test fluency scores differ. After assessing the students' speaking accuracy and fluency, the researcher gives their final speaking skills score using Smalltalk2me AI at SMA 1 Sajingan. It is readily shown in Table 3.

Table 3. The score of Pre-test and Post-test Students' Speaking Skills

| No | Variable | Mean | |
		Pre-test	Post-test
1.	Accuracy	32	43,5
2.	Fluency	29,5	38,5
	Mean Score	**30,75**	**41**

Table 3 demonstrates that the Smalltalk2me AI affects students' speaking skills during the teaching speaking process. It is demonstrated by the average accuracy score of students in the pre-test (32) which goes into the very poor category (Arikunto, 2018). The student's average post-test score (43,5) is in the poor group. It indicates that the student's speaking accuracy progresses from very poor going up to poor. Additionally, the average fluency score of students in the pre-test (29.5) goes into the very poor group. The student's mean post-test score (38.5) is classified as very poor or almost poor. It signifies that the student's speaking ability progresses from extremely poor to very poor or almost poor. Although the post-test score average did not come into a poor category, it is clear that there is a significant difference between the pre-test and post-test scores. After calculating the score, the researcher discovers that the student's speaking abilities have affected from a average score of 30,75 in the pre-test to 41 in the post-test.

Table 5. T-test and T-table value

T-test value	T-table value
-11,10480087	2,093024

Using α = 0.05 and df = 20-1 = 19, the t-table gives a value of 2,093024. The T-test value above indicates that the t-table has a lower value than the t-test. The t-table value for speaking skills was -11,10480087>2,093024. This result is extremely huge in absolute terms, and much larger than the t-test value. It signifies that there was a substantial difference between the students' pre-test and post-test scores for speaking skills using the Smalltalk2me AI. It might

alternatively be said that the Null Hypothesis (Ho) was rejected while the Alternative Hypothesis (Ha) was accepted.

In this section of the study, the discussion focuses on the interpretation of findings resulting from students' accuracy, fluency, and final scores. Prior to the treatment, students' speaking accuracy was very low (categorized as very poor). The issue might be caused by instructional techniques, insufficient speaking practice, or the teacher utilizing a conventional approach to teaching speaking that is the same in each grade. The teachers just provided material and then discussed the example and offered exercises. This strategy is ineffective because students become bored and take a significant amount of time to regulate their English speaking, preventing them from improving their speaking achievement.

According to the data, the post-test result exceeds the pre-test in terms of speaking accuracy and fluency. During the pre-test, the researchers discovered that the majority of students lack the ability to communicate their ideas or arguments regarding the topic at hand. They were still unclear of how to use acceptable language, afraid of making mistakes, and had substantially improved. The researchers encountered several challenges in administering treatment with Smalltalk2me AI. Before going on to the next step, every student must master the every phase. This was in line with Zou et al. (2023) that AI speech evaluation programs as an effective tool in improving speaking skills. This AI is similar to the Smalltalk2me AI that works with speech recognition in giving feedback to the learner's speech.

Smalltalk2me AI gives students quick responses on what mistakes they have made and in what part they need to improve. The achievement of the students' speaking skills can be seen after they were given the treatment using the Smalltalk2me AI. When students use the AI, they talk according to the AI's instructions, such as reading material, describing pictures, sharing student experiences, and so on. Smalltalk2me AI's instructions encouraged students to speak. This is in line with previous study conducted by (Liya Umaroh et al., 2023) explores the use of Artificial Intelligence (AI) technology to enhance students' speaking skills in English. It discusses the benefits of AI in education and how it can affect students' English learning experience. Therefore, The Smalltalk2me AI can be used as an effective tool to teach speaking skills.

CONCLUSION

After analyzing the data from the students' pre-test and post-test results, the study could meet its aim to assess the effectiveness of using Smalltalk2me AI to teach speaking skills to students. The limitation of this study is that the study primarily assessed accuracy and fluency of the speaking skills. Based on the findings and discussion in the previous chapter, the researcher concludes as

follows. The use of Smalltalk2me AI to teach speaking skills has had an effect on the seventh-grade students' speaking accuracy in terms of vocabulary and pronunciation. It was determined that the students' average accuracy score in the post-test was higher than their mean accuracy score in the pre-test (32>43.5). Smalltalk2me AI affects seventh-grade students speaking skills at SMA 1 Sajingan. It was demonstrated that the students' average score of fluency in the post-test was higher than their mean score in the pre-test (29.5>38.5). According to the hypothesis testing, the Null Hypothesis (Ho) is rejected and the Alternative Hypothesis (Ha) is accepted. The t-test result for students' speaking skills (-11,10480087) is larger than the t-table value (2,093024) in absolute terms. In other words, Smalltalk2me AI is good at teaching students' speaking skills. Thus, the researchers recommend for the next research in the same topic with this research. The next research can develop teaching technique using Smalltalk2me AI or other artificial intelligence to find the most effective media for teaching speaking skills. English teacher should know how to use Artificial intelligent media and be selective in choosing the AI to teach students' speaking skills effectively.

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