

THE EFFECTS OF DIGITAL SPINNING WHEEL MEDIA ON STUDENTS' SPEAKING PERFORMANCE

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Abstract

This research investigates the effects of Digital Spinning Wheel media on students' speaking performance at the seventh graders of MTs Wachid Hasyim Jagalempeni. The objectives of this research are to find out the effectiveness of Digital Spinning Wheel media on students' speaking performance and to determine whether Digital Spinning Wheel media gave significant differences on speaking performance between students' who are taught by using Digital Spinning Wheel media and those who are not. This research utilized a true-experimental design with two groups experimental and control. The population of this research is all seventh-grade students and the sample is 60 students of MTs Wachid Hasyim Jagalempeni. The instrument used in this research is speaking test about descriptive text focusing on describing people material. The result of post-test is 78.07 as mean of the experimental group and 68.90 as mean of the control group. The result of paired and independent t-test shows that the sig. (2-tailed) value is 0.000, which is lower than 0.05 (0.000 < 0.05). The findings of this research indicated that the Digital Spinning Wheel media was effective to improve students' speaking performance and there was a significant difference in speaking scores between students who are taught by using Digital Spinning Wheel media and those who are not taught using Digital Spinning Wheel media. In conclusion, Digital Spinning Wheel media has a positive effect to improve students' speaking performance. The results of this study are expected to enhance understanding of using Digital Spinning Wheel in classroom speaking instruction.

Keywords: Speaking performance, Digital Spinning Wheel, Descriptive Text

INTRODUCTION

Today's interconnected global society, proficiency in English is crucial. Effective communication is necessary for addressing fundamental human needs. As the predominant language of knowledge and technology, English empowers individuals to gain understanding and solve various issues. According to (Asrifan et al. 2020; Masykuri et al. 2022; Y. Prihatin et al. 2021; Setiyorini, Prihatin, and Edi Santoso 2021; Wulandari, Prihatin, and Santoso 2021) English is used by every individual from any country in the world, both foreigners and people from countries that do not use English unofficially. Consequently, students in Indonesia, from elementary to high school, are instructed in English, focusing on four key skills: speaking, writing, reading, and listening.

One of the most useful and crucial English skills is speaking. Mastery of speaking is a crucial component of English proficiency, given that daily communication involves the exchange of hundreds of thousands, if not millions of words. Speaking skills are one aspect of basic skills in language, because speaking skills are useful for communicating and interacting with others. According to (Krisnanto, Taufiqulloh, and Prihatin 2023; Rizani, Taufiqulloh, and Sudibyo 2022; Suwandi and Taufiqulloh 2009; Widiyanti, Taufiqulloh, and Apriyani 2022), speaking or oral language is involves the exchange of ideas between a speaker and a listener with the aim of effectively communicating thoughts or information. (Prastyawan, Ashari, and Ismiyatun 2021; Sulistianingsih et al. 2021; Taufiqulloh, Eka Sulistyawati, and Rosdiana 2021; Taufiqulloh, Nindya, and Rosdiana 2023), stated that speaking is a key productive essential for students to acquire, enabling them to communicate or directly impart knowledge to others. Therefore, students English speaking skills must be developed and practiced independently.

In the 21st century, developing speaking skills to communicate is essential. There are various ways to communicate, including exchanging ideas, thoughts, questions and answers. Cultivating speaking abilities is an essential linguistic proficiency for those learning English as a second language. It is widely acknowledged that among the four core language skills, speaking poses the greatest challenge. (Maya, Bte Abdul, and Azis 2022; Meiristiani et al. 2022) stated that students experience several problems in speaking, including lack of vocabulary, self-confidence, motivation, fear of being wrong and

nervousness. Moreover, technology significantly contributes to the educational process (Meiristiani et al. 2022; Sulistyawati, Yuvita, and Wardhani 2022; Yuvita et al. 2023).

Education in science and technology is expanding swiftly (Diningrat, Nindya, and Salwa 2020; Taufiqulloh, Nindya, and Rosdiana 2023). The use of technology is a very useful alternative to improve speaking and communication skills. Communicating using digital media is one way to improve speaking skills and can be supported by technology. There is no doubt that media plays a crucial role in the educational process (Setiyorini, Prihatin, and Edi Santoso 2021; Wulandari, Prihatin, and Santoso 2021). Teachers must help students to prepare for relevant new skills in 21st century, teachers must develop innovative teaching materials with the development of digital learning media (Meiristiani, Rofiqudin, and Santoso 2021; Sulistianingsih et al. 2022). Therefore, teachers as facilitators at school, must teach English speaking skills by using the right digital learning media so that learning can run effectively and optimally.

The researcher identified a number of obstacles faced by students when communicating orally. The main problem experienced by students is that they have difficulty speaking in public. This is caused by several factors, including students not maximizing their practice during the learning process, lack of vocabulary, not confident, feeling nervous and experiencing anxiety when required to speak in front of the class. In addition, the lack of motivation and interest in learning English speaking causes students to be uninterested and bored when receiving subject matter (J. Y. Prihatin et al. 2021; Setiyorini, Prihatin, and Edi Santoso 2021; Wulandari, Prihatin, and Santoso 2021). This is because teachers still use conventional media, namely only using book media and lecture methods during the learning process. Teaching media is less considered important, even though there are many teaching media that can be used by teachers. One of the teaching media that can be used is the spinning wheel (Y. Prihatin et al. 2021).

Based on these problems, researcher decides to use Digital Spinning Wheel as teaching media to enhance students' speaking performance. The spinning wheel is a form of digital learning tool that can be applied in the educational and instructional process. Spinning wheel is a spinning game media featuring questions in multiple sectors (Sulistianingsih and Aflahatun 2021; Sulistianingsih and Jamaludin 2023). This media includes a variety of questions concerning several learning resources that are taught in the classroom and include every student in order to boost the process's effectiveness, enjoyment, and level of activity.

According to (Rachmaida and Mutiarani 2022), spinning wheel as an educational medium, serves as an effective platform for English language acquisition. Its appeal lies in its ability to engage students' attention through vivid colours and creative imagery, thereby simplifying the process for learners to cultivate and enhance their conceptual thinking. A number of research claim the effectiveness of spinning wheel, including research conducted by (Maya, Bte Abdul, and Azis 2022), (Fatimatuzzahra, Muin, and Septiana n.d.) and (Çetin and Cihan 2021). Findings from the three studies reveal that the utilization of spinning wheel media positively influences student learning achievements. The adoption of digital spinning wheel tools emerges as a viable alternative for enhancing the oral proficiency of learners.

Digital Spinning Wheel media was chosen by the researcher to improve students speaking performance because this media makes learning more interesting and interactive, motivates students to participate more actively, students get immediate responses that help them improve their speaking performance. Then, a supportive learning environment through the use of this technology can reduce anxiety and increase confidence. In addition, the Digital Spinning Wheel can be accessed anywhere, providing more opportunities to practice.

In relation of the gap in this study, the researcher presents digital spinning wheel as a tool aimed at enhancing the oral communication performance of seventh grade students. This study will be performed to ascertain the effect of digital spinning wheel media on the speaking performance of grade seven junior high school students, with a specific focus on descriptive texts. The selection of the seventh graders stems from its position as the introductory level in junior high school, where there is syllabus content that aligns with the research topic.

This research investigates the effects of Digital Spinning Wheel media on students' speaking performance at the seventh graders of MTs Wachid Hasyim Jagalempeni. The objectives of this research were to find out the effectiveness of Digital Spinning Wheel media on students' speaking performance at the seventh graders of MTs Wachid Hasyim Jagalempeni and to determine whether Digital Spinning Wheel media gave significant difference on speaking performance between students' who are taught using Digital Spinning Wheel media and those who are not using Digital Spinning Wheel media.

This study is expected to provide additional knowledge, offering invaluable insights and serving as a pivotal reference point for both educators and readers concerning the application of technological advancements in English language education, with a focus on the digital spinning wheel media as a tool for enhancing student speaking performance.

METHODOLOGY

This study used quantitative research to evaluate the effect of digital spinning wheel media on students' speaking performance. A true-experimental design with pre-test and post-test control groups was utilized, including an experimental group and a control group. The experimental group used Digital Spinning Wheel media, while the control group used traditional media.

The study's population comprised all seventh-grade students at MTs Wachid Hasyim Jagalempeni during the 2023/2024 academic year, totaling 90 students, with 60 students selected as the sample. Cluster random sampling was used, with random numbers determining which classes were chosen for the study.

Data were collected using speaking tests administered before and after different teaching methods were implemented. A pre-test was conducted at the first meeting to gauge the students' initial speaking performance. After the treatment, a post-test was conducted to evaluate the enhancement in students' speaking performance in both groups, comparing those who used digital spinning wheel media to those who did not.

The speaking test served as the research instrument, requiring students to choose a public figure's picture and answer questions orally related to descriptive text about people. Validity and reliability of the research instrument were crucial, and expert validation was employed. Content validation ensured the test's validity, followed by a reliability evaluation. The oral scoring rubric by (Brown 2019) was used to assess students' speaking performance.

After data collection, the researcher analyzed the data using quantitative methods. Statistical analysis was performed using SPSS version 26 to analyze the pre-test and post-test results for both groups. The researcher conducted various tests, including descriptive statistics, normality, homogeneity, paired sample, and independent sample tests.

RESULTS

The study aimed to investigate the effect of digital spinning wheel media on improving students' speaking performance. Conducted from May 6th to May 28th, 2024, the study involved a population of 90 seventh-grade students, with a sample of 60 selected for the research. Data were collected using speaking tests administered before and after different teaching methods were implemented. The class was split into two groups: the experimental group (VII B) received English lessons using a digital spinning wheel, while the control group (VII C) received traditional English lessons without this tool. The lessons focused on describing people orally. The researcher analyzed and interpreted the data to determine if the digital spinning wheel media had a significant impact on students' speaking performance.

A pre-test was conducted on May 6th, 2024, for both two groups, with 60 students participating. The test assessed their speaking abilities before any teaching interventions. During the test, students were shown various pictures and asked to describe one of them. They were given 5 spoken test questions and had 15 minutes to prepare their responses. The pre-test aimed to evaluate their speaking performance before introducing the instructional material.

Following the teaching interventions, a post-test was conducted during the final meeting to evaluate the students' speaking abilities. The post-test aimed to ascertain whether there were significant differences in students' speaking performance, assess their comprehension of the provided materials, and observe any improvements in their speaking performance after using the digital spinning wheel as a learning tool. The post-test, held on May 28th, 2024, required students to select and describe one of several pictures orally. The analysis of the speaking test results provided insights into the data.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test experimental (VII B)	30	48	65	56.17	4.371
Post-test experimental (VII B)	30	69	86	78.07	5.146

Pre-test control (VII C)	30	48	62	56.03	4.131
Post-test control (VII C)	30	58	78	68.90	5.365
Valid N (listwise)	30				

Descriptive Statistics

Based on the data, the experimental group comprised 30 samples (N). Pre-test scores ranged from 48 to 65, with an average score of 56.17 and a standard deviation of 4.371. After the intervention, the post-test scores in the experimental group ranged from 69 to 86, with an average score of 78.07 and a standard deviation of 5.146.

Similarly, the control group also had 30 samples (N). Pre-test scores in the control group ranged from 48 to 62, with an average score of 56.03 and a standard deviation of 4.131. Post-test scores after the learning process in the control group ranged from 58 to 78, with a mean score of 68.90 and a standard deviation of 5.365. This data clearly indicates a difference between the two groups.

Normality Test

Table 2. Tests of Normality

Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Speaking test score	Pre-test experimental (VII B)	.132	30	.191	.954	30
	Post-test experimental (VII B)	.152	30	.075	.932	30
	Pre-test Control (VII C)	.132	30	.196	.938	30
	Post-test Control (VII C)	.133	30	.183	.959	30
						.291

Based on the results shown in the SPSS table above, the table indicated that the significance value for the pre-test and post-test of the experimental and control classes using the Kolmogorov-Smirnov test was greater than 0.05. This indicated that both the pre-test and post-test data for the experimental and control classes were normally distributed.

Homogeneity Test

Table 3. Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
		.913	3	116	.437
Speaking test score	Based on Mean	.889	3	116	.449
	Based on Median	.889	3	106.577	.450
	Based on Median and with adjusted df	.872	3	116	.458
	Based on trimmed mean				

According to the homogeneity test results, as shown in the table above, the significance value based on mean was 0.437. It was concluded that the pre-test and post-test outcomes of both the experimental and control classes exhibited homogeneous variants, as the significance value for both classes' data exceeded 0.05.

Hypothesis Test

1. Paired Sample Test

Table 4. Paired Sample T-test

Paired Differences			95% Confidence Interval of the Difference				t	Df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	Lower	Upper					

Pair 1	Pre-test experimental - Post-test experimental	-21.900	2.893	.528	-22.980	-20.820	-41.464	29	.000
Pair 2	Pre-test control - Post-test control	-12.867	3.298	.602	-14.098	-11.635	-21.367	29	.000

The table above shows the results of the research. The results for pairs 1 and 2 revealed a significance level of 0.000 which is less than 0.05. In summary, the research findings indicated that there is a positive effect of using digital spinning wheel media on students' speaking performance. Thus, based on the aforementioned data, it can be inferred that the research hypothesis (H_a) was accepted, while the null hypothesis (H₀) was rejected.

2. Independent Sample Test

The given data indicates a significance score (sig) of 0.000, which is less than 0.05. This is evident from the independent sample t-test data, where the sig (2-tailed) value is 0.000 which is lower than 0.05 (0.000 < 0.05). Consequently, the research findings revealed there was a significant difference between the mean of the post-test in the experimental group and the mean score of the post-test control group.

CONCLUSIONS

The researcher concluded from the analysis of the data that students who were taught by using digital spinning wheel as learning media had higher mean speaking performance test results compared to

Table 5. Independent Sample T-test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
						95% Confidence Interval of the Difference				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Speaking test score	Equal variances assumed	.125	.725	6.754	58	.000	9.167	1.357	6.450	11.883
	Equal variances not assumed			6.754	57.899	.000	9.167	1.357	6.450	11.884

those who were not. The experimental class showed a statistically significant increase in both mean pre-test and post-test scores, in contrast to the control class. This was evident from the descriptive statistics table. Additionally, the results of the paired t-test can be seen that the Sig. (2-tailed) value was 0.000 which is lower than 0.05 (0.000 < 0.05) indicated that digital spinning wheel was effective to improve students' speaking performance.

According to the findings of the independent sample t-test, the sig (2-tailed) value was 0.000, indicating a significant difference in speaking scores between students who were taught using digital spinning wheel media and those who were not. The statistical data revealed that the mean post-test score for the experimental class was 78.07, whereas the control class scored 68.90. Consequently, it could be inferred that the average post-test score in the experimental group surpassed that of the control group. Thus, it was concluded that students' speaking performance improved after being instructed using digital spinning wheel learning media. This suggests the effectiveness of utilizing digital spinning wheel media in teaching speaking skills. With the outcomes of the independent test, it can be stated that the null hypothesis (H₀) was rejected, while the alternative hypothesis (H_a) was accepted. Hence, employing digital spinning wheel as learning media was deemed successful in enhancing speaking performances.

Moreover, employing digital spinning wheel media encouraged and provided a fresh learning experience for students, particularly in English speaking sessions. Students actively participated and showed enthusiasm in utilizing this digital spinning wheel media, where they were presented with opportunities to engage in situations that demanded speaking. Consequently, students made efforts to verbalize their thoughts. In summary, the digital spinning wheel media proved to be both suitable and effective media in improving students' speaking performances.

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