

The Effectiveness of Digital Poster in Project-Based Learning to Promote Speaking Skill

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Abstract

This research aims to determine the effectiveness of digital poster in project-based learning to promote students' speaking skills. This research used a quantitative design. It was conducted at SMKN 1 Sindang in XI Fashion class using a pre-experimental design involving 25 students. To collect the data, the writers used purposive sampling with pre-test and post-test as the instruments. Based on the results of the research, the total value of the pre-test is 1699, while the total value of the post-test is 1952. After calculating the pre-test and post-test data, a significant result was obtained from the paired samples test (Sig. 0.000<0.05). The writers found that the use of digital poster project-based learning was effective to promote students' speaking skills at SMKN 1 Sindang. It can be interpreted that the null hypothesis (H_0) is rejected. The results showed that digital poster project-based learning was effective in promoting students' speaking skills. This research implies that students are able to become more active in expressing ideas during the learning process through the use of digital posters. It also suggests that teachers apply digital poster in project-based learning in teaching English. Furthermore, students are encouraged to overcome their difficulties in order to achieve better speaking performance.

Keywords: Digital poster; Project-based learning; Speaking

A. Introduction

Speaking is an important skill because it is one of the key to English communication. Speaking is a skill in using language to convey clear information or goals. Speaking skills for students are skills in learning English to build students' confidence in their abilities. According to Brown (2001), speaking is one of the important communication skills in English and it's closely linked to listening within the pragmatic context of language performance. The ability to communicate in the language is known as speaking skill, and it is typically defined in terms of speaking language abilities, (Nunan, 2003). Speaking is a productive skill in developing second and foreign language skills to communicate clearly and

efficiently. It is one of the important English skills for students. Students' ability to communicate will have a positive impact and will provide useful information.

Nevertheless, there are problems in learning speaking skills. These problems usually occur because students are unable to convey their ideas and understand sentence structure well. This is also related to students' English speaking skills and vocabulary. According to (Murcia, 2000), students are unable to convey their ideas and comprehend the formation adequately since they have a very restricted vocabulary and struggle to pronounce the term correctly. Therefore, the use of digital posters in classroom activities can create communicative learning environments that support the development of students' speaking skills. Digital posters encourage students to actively participate in meaningful communication and help promote their speaking abilities.

Digital poster is a form of visual media that presents information clearly while attracting the audience's attention through digital formats. According to Ahmad (2019), the digital poster encompasses various from, including online posters, multimedia posters, and electronic posters. Nowadays, the internet and technology networks have developed well, and it can impact the education system also involves technology in learning. The Internet has provided educators with several opportunities to incorporate technology into teaching and learning, (Ahmad, 2014). The difference between traditional paper posters and digital posters is in the way they are made and presented in different forms. According to (Winasih et al., (2019) digital posters are media that may be utilized to communicate information rather than traditional paper posters. In the context of language learning, digital posters can serve as an engaging visual media that encourages students to express ideas more clearly and creatively. This potential makes digital posters highly relevant to be integrated into a project-based learning approach, where students are actively involved in creating meaningful projects. One effective approach that facilitates this is project-based learning, which encourages students to actively engage in meaningful tasks and collaborative work.

According to Brown (2001), a student-centered approach is an important component of Project-Based Learning (PJBL). In the PJBL learning model, students can be more active, because they will learn together through groups. Students will interact with the understanding they know and deepen the material they have learned. In the PJBL model in an era that uses a lot of technology, then in learning, technology is included to involve teachers and students in an interesting learning process. The goal is encouraging students to use technology to demonstrate their knowledge and skills (Eady & Lockyer, 2013). One of the useful media is

poster. This is in line with Maulid & Sakti (2022), a poster is a visual combination of strong design, color, and message that aims to get important concepts into a people's mind.

In the Vocational high school in Indramayu, there are several majors such as computer and network engineering, automotive engineering, electronics engineering and Fashion. Each of these majors has its own characteristics and challenges. Problems in Vocational high school sometimes need to be visualized to facilitate understanding. In this case, the fashion major provides opportunities for students to design and create images or designs that reflect their creative ideas. Besides, they are required to design an image, they are also required to be able to explain design of the clothes. The focus in this research is that how the speaking skill of fashion major students in SMKN 1 Sindang, can be promoted through the use of digital posters in project-based learning. There are some researches that investigated on the application of project-based learning. The first research was an experimental research conducted by Nurazizah et al., (2023) the findings showed that digital posters in project-based learning can promote students' speaking skills and students have a positive interest in learning in the classroom using PJBL for speaking teaching and learning in the junior high school classes. Because it provides a functional context with students being more confident in their English skills, more communicative and motivated in increasing the motivation and speaking skills possessed by students. The second research was a quasi-experimental conducted by Salsabila et al., (2023), which concluded that the use of digital posters emphasizing images can effectively guide students' thinking processes and foster enjoyable connections in the writing learning process in junior high school classes. The third research is a descriptive approach research conducted by Ginusti, (2023) which found that digital posters in project-based learning resulted in the majority of students feeling more creative because they could use digital tools and applications to explore and communicate their ideas in completing project assignments.

All of the previous researches were focus on the implementation of digital poster with project-based learning. The first and the second research investigated the implementation of digital poster with project-based learning, but the difference between the two researches is focus on different skills. The first research was focus on improving students' speaking abilities and skills while the second research was focus on developing students' reading writing skills. The third previous research was focus on describing how the use of digital posters in PJBL affected students' beliefs and feelings about their own creativity due to the

opportunity to explore digitally, and provided insights into student motivation and experiences.

In this research, the writer examines the use of digital posters in project-based learning to promote students' speaking skills. This research aims to promote students' English speaking skills through the integration of digital poster projects. By integrating digital poster, this writer aims to examine their effectiveness in providing innovation and motivating student's in understanding in class. The research was conducted with eleventh-grade vocational high school students at a school in Indramayu to investigate the impact of designing and presenting digital posters on the development of students' speaking skills. The gap between the previous researches above and this research lies in the specific focus of the research. This research emphasizes the use of digital posters within a project-based learning (PJBL) model, focusing on fashion-related topics, particularly styles of clothing relevant to students' major. Furthermore, it employs a pre-experimental design to promote students' speaking skills in vocational high schools in Indramayu. Based on the background above, the research question is: Is digital poster in project-based learning effective in promoting students' speaking skills at a high school?

Digital Poster

Poster creation can be achieved through both traditional methods and digital technology. Utilizing digital posters as a learning tool is thought to enhance students' enthusiasm, interest, and creativity in learning English. According to Ahmad (2019), said digital poster encompasses various forms, including online posters, multimedia posters and electronic posters. It serves as a versatile online tool, offering multiple elements such as text, images, music, videos, hyperlinks, and data attachments. Purnomo & Hidayatuloh (2020), said that the poster serves as a practical visual design that plays a vital role in conveying information, establishing a significant connection with visual imagery.

Posters are not only a visual communication tool, but also an effective means of attracting attention and influencing public opinion. It serves as an effective learning media by seamlessly integrating theory with sketches, images, graphics, and various ideas, all presented in an appealing design. Based on Ahmad (2019), that posters were regarded as highly valuable and seen as a significant tool for fostering communication and facilitating personal connections. The concept of the traditional poster has evolved into the digital poster, which employs digital technology in the production and presentation of the poster. Furthermore,

Koshy (2011) emphasized that using digital posters as a learning media for large groups of students proves to be an effective and efficient method for enhancing their verbal and presentation skills. In addition, the research found that posters serve as an effective alternative media for promote communication and interaction skills, while also encouraging students to explore a theme with collaborative. Moreover, El-Sakran & Prescott, (2015) stated that a digital poster can be regarded as an effective educational tool that fosters and enriches children's communication and metacognitive skills. The digital poster also highlights collaborative activities, which can significantly boost children's confidence in both interpersonal communication and group learning.

B. Research Methodology

This research used a quantitative research approach. According to Creswell (2013), states that experimental design is the conventional method for conducting quantitative research. In addition, employing an experimental design is essential for carrying out a quantitative research and featuring a one-group pre-test and post-test design. Data was collected from the XI busana students of SMKN 1 Sindang, without any comparison group or another class. The total are 25 students as a sample of the population. Purposive sampling technique was used for sampling, and pre-test and post-test are two types of instruments that the writer used to complete the data.

The steps are as follows: In the pre-test students are asked to describe their best hangout fashion without being given treatment, after that treatment step. During the treatment, the teacher used digital posters within the Project-Based Learning (PJBL) model by first presenting an example of a digital poster to introduce the project. Students were then assigned to work in groups to create and present their own digital posters. In the post-test, students were asked to describe the outfit shown in the digital poster they were most interested in. The data analysis technique was taken from the results of the pre-test and post-test, then calculated to determine whether there was to promote in learning outcomes using the digital poster in class XI-busana SMKN 1 Sindang students. Followed by calculations using normality test and alternative test of t-student's variance.

C. Results and Discussion

1. Results

After the data is collected, the writer assess the results of the pre-test and post-test that have been carried out by students using the assessment rubric include fluency, grammar, pronunciation, vocabulary, and comprehension. To find out the test results, the writer gives the student scores obtained from the tests conducted on the pre-test and post-test in a table to clarify the test results. The writer presented the pretest and post-test scores in the tables below:

Table 1. The Result of Pre-Test

Total score	1699
Lowest score	55
Highest score	76
Mean	67.96
Median	68

As shown in table above, pre-test scores were taken from 25 students. From the table, a total score of 1699 was obtained. In addition, the lowest score was 55 and the highest score was 76. Furthermore, the table shows that the mean score was 67.96 with a median of 68.00. Based on these results, the writer found that some students experienced difficulties in vocabulary, because they are unable to use a variety of sentence structures and word choices, creating a monotone tone and repetitive ideas. Therefore, writer applied a digital poster in project-based learning approach to teach speaking skills and be given a post-test to see the progress.

Table 2. The Result of Post-Test

Total score	1952
Lowest score	70
Highest score	84
Mean	78.08
Median	77

Based on table above, there were some progress in post-test scores. From this table, the total score was 1952. The highest score is 84, and the lowest score is 70. Based on the post test results, some students were still found to have difficulties with vocabulary, although this was not a frequent occurrence. This is indicated by the lowest score of 70, which shows that some students still have limitations in word choice, a monotonous tone, and repetitive ideas. Then, based on the tests that have been conducted, it was found that the mean is 78.08, and the median is 77.00. These findings indicate that after the treatment, there was a significant promote the students' speaking skills.

To analyze the data in this research, the Shapiro–Wilk test was employed to examine the normality of the difference scores (post-test scores minus pre-test scores) using SPSS version 25. The data were considered normally distributed if the significance value (Sig.) was higher than 0.05, which is a requirement for applying a paired-sample test in hypothesis testing. Conversely, if the Sig. value was lower than 0.05, the data were considered not normally distributed.

Table 3. The Result of Normality Test

Tests of Normality			
	Shapiro-Wilk		
	Statistic	Df	Sig.
Pretest	0.935	25	0.111
Posttest	0.944	25	0.186

Based on the results of the normality test, the Shapiro–Wilk test produced statistic values were obtained from the calculation of the data distribution using the Shapiro-Wilk formula. The Sig. value for the pre-test is 0.111, while the Sig. value for the post-test is 0.186. Both values are higher than the significance level of 0.05. Therefore, the results of the normality test indicate that the data are normally distributed. In conclusion, since the Sig. values is higher than the significance level (0.05), the null hypothesis (H_0) is accepted.

After confirming that the data is normal distributed, the next step is to present the Paired sample statistics. These statistics serve to present a descriptive summary of the

pre-test and post-test scores. Then, the difference in means between the two conditions is examined for significance using the Paired sample test.

Table 4. The Result of Paired Sample Test

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-10.12	5.167	1.033	-12.253	-7.987	-9.794	24	0

The analysis shows that the significance value (Sig. 2-tailed) was 0.000, which is lower than the significance level of 0.05 ($0.000 < 0.05$). This indicates that there is a statistically significant difference between the pre-test and post-test. Therefore, the null hypothesis (H_0), which states that there is no difference in speaking skills between students taught using the Digital poster in project-based learning approach, is rejected. Meanwhile, the alternative hypothesis (H_a) is accepted, indicating that the use of Digital poster in project-based learning approach has a significant effect on students' speaking skills.

2. Discussion

The research findings reported that the implementation of digital poster in project-based learning approach has resulted in significant progress in speaking skills of students in class XI-1 majoring in Fashion at SMKN 1 Sindang Indramayu in the 2025/2026 academic year. The test results showed a significant increase in scores from the pre-test to the post-test after implementing a digital poster in project-based learning approach using digital posters.

The first step of this research, aimed to evaluate the effectiveness of digital posters in project-based learning in promoting students' speaking abilities, the pre-test given to

25 students showed a mean score of 67.96, indicating that their speaking skills still needed to be promoted. This result also revealed that students faced difficulties in vocabulary. In addition, sentence structures and word selections were limited, resulting in a monotonous tone and repetition of ideas. After the pre-test, the students received treatments was taught speaking skills using digital poster in project-based learning (PJBL) approach, with digital posters as the main learning media. In this learning process, students learned to understand the structure and linguistic characteristics of descriptive texts, collect relevant information, and creatively organize their ideas in the form of digital posters. Then, students practiced developing their speaking skills by describing clothing according to their major, fashion.

After the treatments, the students given a post-test. The mean score of the students was to 78.08, reflecting a substantial progress in their abilities. The score indicates that the use of digital posters in a project-based learning approach can effectively motivate students in a more interesting and dynamic way compared than conventional teaching methods, which finally has a positive impact on students' speaking skills. The result aligns with previous research by Nurazizah et al., (2023), which found that there was a significant difference in students' speaking skills between those taught using digital poster media and those taught using conventional teaching strategies. In addition, the use of digital posters in the Project Based Learning (PJBL) framework encourages students' creativity in using technology, as students are required to design, develop, and present projects. This is in line with Ginusti, (2023) said that most students responded that they became more creative because they were able to use digital tools and applications to explore and communicate their ideas in completing project assignments. The writer found that students experienced difficulties in vocabulary. Nevertheless, the students showed progress in expressing their opinions in describe clothes after the implementation of the digital poster project.

The statistical analysis conducted using the paired sample test produced a significance value (Sig. 2-tailed) was 0.000, which is lower than 0.05. This indicates that there is a significant difference between the pre-test and post-test results. Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, indicating that the Digital poster in project-based learning approach significantly affects students' speaking skills. In addition, the Shapiro-Wilk normality test applied to the pre-test and post-test data showed that the data distribution was normally distributed.

Digital posters in project-based learning approaches have shown to be effective in promoting speaking skill because this form of media presents information in an attractive and easily understandable visual format. Posters contain images, colors, and short texts. Through digital posters, students can show pictures of the clothes they have chosen, then describe the type of clothing, color, material, pattern, and function of the clothing using English. As found by Salsabila et al., (2023), that images can effectively guide students' thinking processes and foster enjoyable connections. In the context of descriptive learning about fashion, digital posters play an important role in helping students connect visual representations of clothing with relevant English vocabulary. Through digital posters, students can more easily understand and express ideas, making the process of learning to speak more meaningful, engaging, and relevant to their vocational competencies.

During the while-speaking stage, the use of digital posters in project-based learning approach made the process more interesting and focused. Digital posters made it easier for students to remember vocabulary and explain the content in English. This is in line, Nurazizah et al., (2023) found that the use of digital posters is a real help in facilitating vocabulary that students are able to produce better forms of speech. Similarly, Salsabila et al., (2023) also found that visual explanations can increase students engagement and understanding, making the classroom atmosphere more dynamic and interesting. These conditions encourage students to participate more actively in presentation activities, reducing nervousness when speaking.

Digital posters in a project-based learning (PJBL) approach also support the development of students' creativity, especially for fashion majors, because they are encouraged to describe clothing related to their area of expertise. Through the creation of digital posters, students can explore new knowledge about fashion design, such as types of clothing, colors, materials, patterns and styles. Then they can apply it to create attractive digital products. As found by Ginusti, (2023), that project-based learning can foster creativity and enable students to integrate new knowledge and existing knowledge in creating digital products. In the context of fashion majors, this process ultimately promotes students' technological literacy, as they become more accustomed to using various digital design applications while practicing their ability to describe clothing orally as preparation for the fashion industry.

However, there are several factors that may have influenced the results of this research. These factors include students' previous experience in using technology, external factor, and the availability and stability of internet connectivity. The problem in implementing digital posters is the different levels of digital literacy among students. While some students quickly adapt, others need more time and guidance, which can reduce learning effectiveness as they struggle to focus on developing ideas and vocabulary, while they are still trying to understand how to use the digital poster tools. Meanwhile, external factors such as limited access to digital devices and unstable internet connections can prevent the implementation of digital poster in project-based learning, as students may face difficulties in designing, editing, and presenting their digital posters effectively. This condition meant that the learning process was not always optimal and in some situation required writer to adjust their learning strategies, such as providing additional guidance and helping with difficulties in editing the application. Nevertheless, in general, the use of digital posters still had a positive impact on students at SMKN 1 Sindang Indramayu in promoting students' speaking skills.

D. Conclusion and Suggestion

The purpose of this research was to determine the effectiveness of using digital posters in project-based learning to promote students' speaking skills. This research used a pre-experimental research design with pre-test and post-test instruments. A total of 25 students from class XI majoring in Fashion at SMKN 1 Sindang in this research. The research procedures included pre-test, treatment, and post-test. In the pre-test, the writer found that the students' ability to generate ideas to describe "their best hangout fashion" was unsatisfactory. To address this problem, the researcher implemented digital poster project-based learning as the treatment. At the beginning of the treatment, the teacher introduced a digital poster as an example of the project that students would create. The process included project determination, planning, scheduling, working on and monitoring the project, presenting the results, and evaluation. Students worked in groups to create digital posters and presented them in front of the class, explaining their result of digital poster. Through these stages, students were able to develop their ideas and improve their speaking skills.

In the post-test, students were asked to describe the outfit shown in the digital poster they were most interested in, reflecting what they had learned during the treatment.

Based on the analysis of pre-test and post-test results from 25 students, the total pre-test score was 1,952. This showed a significant improvement in students' speaking skills after using Digital poster in project-based learning. The results of the normality test using Shapiro-Wilk showed a significance value for the pre-test of 0.111 and for the post-test of 0.186, which meant that the data was normally distributed. Furthermore, the results of the hypothesis test using a paired sample test showed a t-value of -9.794 with a significance of $0.000 < 0.05$. Thus, which meant that the use of Digital poster in project-based learning was significantly effective to promote students' speaking skills. This research implies that digital poster in project-based learning activities can make students more active and engaged through discussion, collaboration, and presentation during the learning process.

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