Effectiveness of Using Vlogs as Learning Media in Improving the Speaking Ability of Class X Students

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Abstract

The use of vlogs in speaking classrooms. This research aims to (1) describe the effectiveness of vlogs as a learning medium in student speaking achievement; and (2) determine how much influence vlogs have as a medium used in learning to enhance student speaking in the tenth grade at SMAN 1 Badegan Ponorogo. This research was experimental, with a population comprising all tenth-grade students of SMAN 1 Badegan Ponorogo, consisting of ten classes. The X5 and X1 classes were randomly chosen as the sample. The data collection technique used was a post-test only. The data analysis employed was an independent samples t-test, while Cohen's d-effect size was used to analyze the influence of vlogs as a medium in learning speaking. The results showed that for the independent samples t-test, the value (sig. 2-tailed) was 0.00, which is smaller than 0.05. Therefore, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. For Cohen's d-effect size, the value was d = 1.218. These results indicate that the use of vlogs is effective in improving the speaking achievement of tenth-grade students at SMAN 1 Badegan.

Keywords: speaking skills, technological media, vlogs

Introduction

The current era of technological development is unavoidable and touches all aspects of human life, including the economic, health, and educational sectors. In education, many technological developments have been utilized as learning media by teachers (Taqwa & Sandi, 2019). The use of technology in education can improve students' abilities in various ways (Damayanti et al., 2024; Mustikawati et al., 2023). According to Smith (2016), technology is highly beneficial in fostering students' creativity and critical thinking. Furthermore, the use of technology can increase students' motivation to learn and accelerate the

exchange of information, thereby creating more effective learning environments (Raja & Nagasubramani, 2018; Indriastuti, 2023). Ratheeswari (2018) also notes that technology in education enhances teachers' competence in pedagogy, technical issues, social interaction, and collaborative networking. Therefore, the integration of technology is crucial for learning, as it offers a variety of media that can be applied across different subjects, including language learning.

In language learning, certain factors must be considered when applying technology (Ratrina et al., 2022). Students need to develop an understanding of basic principles and applied linguistic concepts. They must be able to comprehend linguistic input and identify gaps between their knowledge and the target language. According to Chapelle et al. (2019), students can transform the language they encounter into meaningful language lessons. However, there are still some challenges in technology-assisted instruction, such as low student participation and the teacher-centered nature of traditional learning paradigms (Phillips, 2001). Additionally, when technology is used in the classroom, students may become more focused on the media being used rather than the lesson itself, potentially hindering their communicative proficiency, particularly in speaking (Khotimah et al., 2019). When given the opportunity to respond orally, students may hesitate to voice their opinions and lack confidence when answering questions or engaging with teacher feedback (Setyaningrum et al., 2023). This hesitancy can inhibit students' speaking abilities in the classroom, underscoring the need for media that encourages active participation rather than passive learning (Riwasanti et al., 2021).

The implementation of vlogs as a learning medium can assist teachers in creating an effective and enjoyable learning atmosphere. Vlogs enable students to develop their ideas and creativity by producing their own video content. Given the need for teachers to foster a collaborative and creative learning environment, the researcher is interested in investigating the effectiveness of vlogs in improving students' speaking achievements at SMAN 1 Badegan. Rahmawati et al. (2018) also highlight that vlogs can create a confident classroom environment, where students enjoy the learning process and develop a strong interest in speaking. Therefore, the aim of this study is to determine whether the use of vlogs is effective in enhancing students' speaking achievements.

Based on this background, the research questions of this study are:

1. Is the use of vlogs effective in improving students' speaking achievements?
2. How does using vlogs as a learning medium affect students' speaking achievements?

Method

This research uses a quantitative research design, particularly experimental research methods. According to Creswell (2012), quantitative research examines results using statistical calculations that produce accurate data to answer hypotheses, which aim to predict conditions that can be achieved through actual experiments. However, there is no control or manipulation of all relevant variables.

The researcher aimed to investigate the effectiveness of using vlog media for English language learning by improving students' speaking skills. The population for this study was selected from the tenth grade at SMAN 1 Badegan, Ponorogo, comprising a total of 10 classes and 397 students.

This study employed probability sampling with a simple random sampling technique and divided the participants into experimental and control groups (Sugiyono, 2013). For the treatment, the researcher used vlogs as media in the experimental class and conventional learning in the control class, with a total of 72 students. The control class was designated as the first group, while the experimental class was classified as the second group. In the control class, no special treatment was given, whereas in the experimental class, the researchers used vlogs as a medium for teaching English to improve students' speaking abilities (Sains et al., 2024).

This study employed post-tests in both the experimental and control classes based on the material. To collect data, video vlogs were used as treatment in the experimental class, while no treatment was given to the control class. Observations were made during the learning process to assess the treatment's impact. The post-test results from both the control and experimental classes were compared and analyzed (Ayu et al., 2024). The results were in the form of numerical data to evaluate students' speaking abilities. The post-test scores of the control and experimental classes were compared to assess the differences between the two groups.

The data analysis conducted in this study used statistical methods. A normality test was conducted to determine whether the data was normally distributed. Following this, a homogeneity test was performed to determine whether the samples had similar characteristics. A T-test was used to compare the data results from the control and experimental classes. Additionally, the effect size level was calculated to determine how much influence the media used had on learning outcomes.

The hypotheses of this study are as follows:

1. **Alternative Hypothesis (Ha):** The use of vlogs is effective in improving students' speaking achievement.

2. **Null Hypothesis (H0):** The use of vlogs is not effective in improving students' speaking achievement.

Result and Discussion

1. Result

This research was conducted from January 15–29, 2024, at SMAN 1 Badegan, Ponorogo. Data were collected using a single instrument: the post-test. The post-test served as a tool to measure the students' speaking ability. Information was gathered regarding the effectiveness of using vlogs on the speaking achievement of tenth-grade students at SMAN 1 Badegan, Ponorogo.

a. The Use of Vlogs Effective towards Student Speaking Achievement in Tenth Grade in SMAN 1 Badegan

1) Normality Test

The data obtained after the normality test must be normally distributed as a prerequisite for conducting further analysis using the SPSS software. If the normality value or significance value (sig.) from the Shapiro-Wilk test is greater than 0.05, the data distribution is considered normal. However, if the normality value is less than 0.05, the data is considered not normally distributed. In this study, the data used were the post-test results obtained from the students. The following data were used in the T-test:

Table 1. List of Post-test Values

No.	Experiment Class		Control Class	
	Name	Post-Test	Name	Post-Test
1.	ANF	72	AKN	80
2.	AMAA	74	AV	76
3.	ANA	92	APP	80
4.	ADA	100	APA	72
5.	ALR	100	ANRS	68
6.	BI	80	CDC	88
7.	DEL	88	DIS	80
8.	DKA	80	DAS	64
9.	ERAP	88	EAR	88
10.	EDA	72	FDA	72
11.	GCR	74	GAPV	76
12.	IFANS	88	H	68
13.	JDJIM	72	IA	60
14.	JKY	88	LESR	76
15.	KPN	88	LMM	68
16.	KI	100	LS	92
17.	LIS	84	MGA	64
18.	MPH	80	MA	64
19.	MRA	96	M	72
20.	MPDN	88	MYH	68

No.	Experiment Class		Control Class	
	Name	Post-Test	Name	Post-Test
21.	MBES	88	NZD	76
22.	MRNF	72	NAP	80
23.	NN	80	NNM	60
24.	NFS	96	PAM	68
25.	PEH	84	RAS	76
26.	PNA	96	RR	60
27.	RKS	84	ROV	80
28.	SBR	84	RAS	72
29.	SNR	88	SN	64
30.	SAKW	72	SSS	72
31.	SDP	100	SAH	68
32.	TY	84	VIF	88
33.	WR	96	VEA	96
34.	WSA	72	VAS	96
35.	YO	100	WR	64
36.	ZSN	84	YAYP	64

The result of the normality test calculation for the test data using SPSS is as follows:

Table 2. Normality test output

Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CLASS E	,124	36	,178	,916	36	,009
CLASS C	,139	36	,078	,929	36	,024

The results of the normality test are presented in the form of test statistics, namely the significance (sig.) value. For the post-test variable of students' speaking achievement, the Kolmogorov-Smirnov test shows a significance value of 0.178 for the experimental class and 0.078 for the control class. Generally, a significance value smaller than 0.05 indicates that the data is not normally distributed. Based on the results of the normality test, the post-test data on students' speaking achievement in both the experimental and control classes show significance values greater than 0.05, indicating that the data is normally distributed (Agassy et al., 2020; Adhantoro et al., 2024).

2) Homogenity Test

The homogeneity test was conducted using the variance homogeneity test to examine the group variance in the statistical analysis, aiming to determine whether the obtained data are homogeneous. The results of the homogeneity test, performed using SPSS, are as follows:

Table 3. Homogeneus Output

		Levene Statistic	df1	df2	Sig.
	Based on Mean	,112	1	70	,739
	Based on Median	,026	1	70	,871
Result PT	Based on Median and with adjusted df	,026	1	67,767	,871
	Based on trimmed mean	,086	1	70	,771

The results of the homogeneity test, conducted using the variance homogeneity test, show a significance value (sig.) based on the mean of 0.739. According to the criteria for determining data homogeneity, if the significance value based on the mean is < 0.05, the data is considered not homogeneous. Therefore, since the significance value in this case is greater than 0.05, the data can be considered homogeneous.

3) Independent Sample T-Test

This study used an independent samples t-test to determine whether the null hypothesis should be accepted or rejected. The results of the independent samples t-test are as follows:

Table 4. Independent Sample T- test

		Levene's Test for equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig.(2-tailed)
Speaking Achievement	Equal Variences assumed	,112	,739	5,154	70	,000
	Equal Variances not assumed			5,154	69,706	,000

From the data presented, the significance value (sig. (2-tailed)) in the independent samples t-test is 0.00. In decision making, the null hypothesis will be rejected if the significance value (sig. (2-tailed)) is less than 0.05 (5%). Thus, it can be concluded that in this study, the null hypothesis was rejected, and the alternative hypothesis was accepted.

b. How Does the Effect Size Level of Using Vlogs as Media Affect Students' Speaking Achievements in Tenth Grade in SMAN 1 Badegan

1) Effect Size Level

The researchers used Cohen's d effect size calculations to determine the magnitude of the influence of the media used in learning between the experimental and control groups. The data obtained are as follows:

Table 5. Mean of Statistical Group

	Using Vlogs	N	Mean	Std. Deviation	Std. Error Mean
Speaking Achievement	EXPERIMENT	36	85,6667	9,37474	1,56246
	CONTROL	36	73,8889	10,00508	1,66751

The result of cohen d-effect size level calculation is as follows:

Cohen's d was calculated according to the formula:

d	= (M1 – M2) / SDpooled
SDpooled	= [(SD12 + SD22) / 2]
Where: M1	= mean of experiment group,
M2	= mean of control group
SD1	= standard deviation of experiment group,
SD2	= standard deviation of control group,
SDpooled	= pooled standard deviation.
M1	= 85.6, M2 = 73.8, SD1 = 9.37, SD2 = 10
d	= (85.6 – 73.8) / 9.69,
SDpooled	= [(9.374 + 10) / 2] = 9.69
d	= 11.800 / 9.69 = 1.218,
d	= 1.218

The Cohen's d effect size level in the experimental group and the control group was d=1.218d = 1.218d=1.218. To determine whether the Cohen's d effect size represents a small, medium, or large effect, one should refer to the criteria for interpreting Cohen's effect sizes (Cohen, 2017).

Table 6. The Interpretation of Cohen's Effect Size

Value of Effect Size	Significances
0-0.2	Weak effect
0.21-0.50	Modest effect
0.51-1.00	Moderate effect
>1.00	Strong effect

Based on the table above, the value of the effect size influences the significance of the learning media used on student learning outcomes. If the effect size is between 0 and 0.2, the media has a weak effect on learning. If the effect size is between 0.21 and 0.50, the media has a modest effect on learning. An effect size between 0.51 and 1.00 indicates a moderate effect on learning, while an effect size greater than 1.00 suggests a strong effect on learning. The calculation of the Cohen's d effect size, which resulted in d = 1.218, demonstrates that

the use of vlogs in learning has a strong effect on student speaking achievement.

2. Discussion

The post-test data is normally distributed because the significance value is greater than 0.05. In other words, the data pattern follows the general distribution pattern observed in the population. In addition to the normality test, a homogeneity test was also conducted. The homogeneity test, using the variance homogeneity test, resulted in a significance value (Sig.) of 0.739 based on the mean. This indicates that the groups being compared have comparable and homogeneous variances.

Based on the T-test that has been carried out, the significance value (two-tailed) is 0.00. Thus, it can be concluded that in this study, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. The calculation of the Cohen's d effect size, which resulted in d = 1.218, indicates that the use of vlogs in learning has a strong effect on student speaking achievement. In other words, the use of vlogs is effective in improving students' speaking achievement at SMAN 1 Badegan.

This result is consistent with previous research by Zahro (2020) and Mustikawati & Indriastuti (2023), which states that the use of vlogs in learning English can improve students' speaking achievement. In a similar study, Prayitno and Hertiki (2022) reported comparable findings, showing that students have a positive perception of the improvement in their English-speaking skills. Furthermore, other research conducted by Hassan (2023) indicated that students were active and interested in the teaching and learning process. The results showed that students became more interested, confident, and enjoyed practicing speaking English by using vlogs (Rachman et al., 2021; Wingard et al., 2020; Christidamayanti & Kristanto, 2020). This suggests that the effectiveness of using vlogs in improving speaking achievement is supported by additional studies (Indriastuti et al., n.d.; Ijirana & Wahyuni, 2019).

Conclusion

These results showed that the use of vlogs was effective in improving speaking achievement. These findings support the effectiveness of using vlogs to enhance students' speaking performance in English learning. Based on the findings and conclusions, several suggestions can be made:

1. This research can serve as a reference for teachers to incorporate vlogs as an engaging and enjoyable medium for improving students' speaking skills.

2. For future research, it is recommended to use this study as a foundation for further exploration and to employ different research designs to provide additional insights into the

effectiveness of vlogs in enhancing students' speaking abilities.

3. For the institution, the results of this experimental research can be used as feedback for the implementation of teaching strategies aimed at improving students' speaking achievements.

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