

THE USE OF INTERACTIVE VIDEO TO IMPROVE VOCABULARY MASTERY OF JUNIOR HIGH SCHOOL STUDENTS

(A Quasi-Experimental study done in the first grade of Junior High School)

Dwi Arizal Tauhid
darizaltauhid@gmail.com

Rizki Widiastuti
Rizkiwidiastuti99@gmail.com

UNIVERSITAS BALE BANDUNG

ABSTRACT

This study aims to examine the effectiveness of interactive video in enhancing vocabulary mastery among first-grade students at MTs Al-Ikhsan Arjasari. Employing a quasi-experimental design, two groups were involved: an experimental class using interactive video and a control class taught by conventional methods. Data were collected through pre-tests, post-tests, and questionnaires. The t-test analysis revealed that the t-value (1.516) was lower than the critical value at the 0.05 significance level, indicating no significant difference between the groups. Despite the lack of statistical significance, questionnaire results demonstrated highly positive student responses toward the use of interactive video, citing improved motivation, engagement, and understanding of vocabulary in context. Hence, interactive video remains a promising supplementary medium in EFL classrooms.

Keywords: interactive video; vocabulary mastery; student perception; multimedia learning; EFL.

INTRODUCTION

In learning a foreign language, vocabulary serves as the foundation for all communicative skills. Without sufficient vocabulary, students face challenges in expressing ideas, comprehending texts, and participating in discussions. As Nation (2001) states, vocabulary knowledge is central to language acquisition and communicative competence. In the Indonesian EFL context, vocabulary mastery remains a persistent challenge due to limited language exposure and reliance on traditional teaching methods.

Conventional teaching often relies on rote memorization, where learners are asked to memorize word lists without meaningful context. This approach tends to demotivate students and results in short-term memory retention. In contrast, interactive learning strategies—especially multimedia-based instruction—have been found effective in stimulating learners' curiosity and active participation (Surjono, 2017). Interactive video combines auditory and visual stimuli, allowing students to understand word meanings contextually while improving recall.

Research by Supriyadi and Pradana (2024) demonstrated that interactive multimedia in English classrooms significantly improved vocabulary achievement and engagement. Similarly, Subiyantoro and Mulyani (2020) found that the implementation of interactive multimedia increased students' motivation and comprehension. Thus, this study investigates how interactive videos influence vocabulary mastery and explores students' perceptions of this method.

RESEARCH QUESTIONS

1. Is there any significant difference between students' vocabulary mastery before and after using interactive video?
2. What are students' perceptions toward learning vocabulary through interactive video?

LITERATURE REVIEW

Vocabulary is defined as the total number of words that a person understands and uses (Horn, 1998). According to Rahayu and Srirahayu (2020), vocabulary enables learners to understand both receptive and productive language skills. McCarten (2007) highlights that

vocabulary learning involves exposure, repetition, and contextualization rather than rote memorization.

In vocabulary teaching, teachers should introduce new words in meaningful contexts, using strategies like visualization, games, and multimedia resources. According to Graves (2006), vocabulary mastery involves not only understanding meaning but also knowing pronunciation, usage, and collocation.

Media in language learning refers to any tool that facilitates the delivery of educational content. Heinich et al. (2002) classify media into three types: visual (pictures, diagrams), audio (songs, recordings), and audiovisual (videos, animations). Arsyad (2002) argues that visual media can motivate students and enhance comprehension. Mayer's (2009) multimedia learning theory states that combining visual and verbal information improves memory and understanding.

Interactive video is a digital learning medium that allows learners to control and engage with the content actively. Kolås (2015) defines interactive video as one containing features such as clickable elements, embedded questions, and subtitles that guide learners' attention. This type of media supports active learning and enhances student motivation.

Descriptive text, as part of English curriculum materials, aims to describe people, animals, or objects in detail (Gerot & Wignell, 1994). Integrating descriptive text videos enables students to learn vocabulary contextually through visual representation and authentic examples.

Previous studies (Nurrahmah et al., 2020; Puspitasari, 2023) have shown that audiovisual media, including subtitled videos, positively affect vocabulary retention. These findings support the notion that visual and auditory cues help learners infer meanings and strengthen memory.

RESEARCH METHOD

This study used a quasi-experimental design with two groups: an experimental group and a control group. The population consisted of first-grade students at MTs Al-Ikhsan

Arjasari, totaling 36 students. Two classes were selected as samples: class A (experimental) and class B (control), each with 18 students.

The instruments used were a pre-test, post-test, and questionnaire. The pre-test and post-test contained of 20 items: 10 multiple-choice questions, 5 matching questions, and 5 fill-in-the-blank questions covering nouns, verbs, and adjectives. The reliability of the test was calculated using Cronbach's Alpha ($r = 0.82$), indicating high internal consistency. The questionnaire using the Guttman scale will distribute after conducting pre-test, treatment and post-test to the experimental group. The questionnaire consist of 15 *yes/no* questions and aim to gather students' responses toward the use of video-based learning.

The treatment lasted for four meetings. The experimental group learned vocabulary through interactive videos with English subtitles, quizzes, and visual matching tasks, while the control group was taught through traditional explanation and textbook exercises. Data from pre- and post-tests were analyzed using the t-test to measure statistical significance, and the questionnaire was analyzed descriptively to evaluate students' attitudes.

FINDINGS AND DISCUSSION

The pre-test results showed that both groups had similar initial vocabulary levels. After the treatment, both groups improved, but the experimental group gained a higher mean score.

Table 1. Students' Pre-test and Post-test Mean Scores

Group	Pre-test Mean	Post-test Mean
Experimental	65.3	75.6
Control	64.8	73.2

The computation of the t-test resulted in $t\text{-value} = 1.516$ and $t\text{-table} = 2.032$ ($df = 34$, $\alpha = 0.05$). Since $t\text{-value} < t\text{-table}$, the null hypothesis (H_0) is accepted. This indicates that interactive video did not significantly improve vocabulary scores compared to traditional methods.

Table 2. Students' Questionnaire Responses

Statement	Positive Response (%)
Interactive video helps me understand new words easily.	91%
Learning with video is more interesting than textbook only.	88%
I feel more motivated when learning vocabulary through videos.	93%

The questionnaire results revealed that over 90% of students in the experimental group expressed positive responses toward interactive video learning. Students reported that visual and audio support helped them connect words with real-life contexts. This aligns with Mayer's (2009) theory that multimedia learning activates both verbal and visual channels, leading to better understanding.

Although the t-test did not show a statistically significant improvement, observational data indicated that students in the experimental group were more active and attentive during lessons. This suggests that interactive videos enhance affective factors such as motivation and interest, which are essential for long-term vocabulary development.

CONCLUSION

The findings demonstrate that interactive video did not yield a significant difference in test scores between the experimental and control groups. However, qualitative results confirmed its effectiveness in increasing engagement, motivation, and contextual understanding. Teachers should integrate interactive video as a supplementary tool in vocabulary teaching to promote a more engaging and meaningful learning experience. Future studies should extend the duration of treatment, incorporate speaking and listening assessments, and explore other interactive technologies such as gamified learning environments.

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