

An Experimental Study on The Use of Short Animation Study in Enhancing Students' Vocabulary

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ABSTRACT

This research investigated the effectiveness of short animation videos in enhancing students' English vocabulary at SMP Katolik Hati Kudus Manado. The study aimed to determine whether multimedia-based instruction could improve vocabulary mastery, retention, and motivation among junior high school students. A mixed-method approach was employed, combining quantitative and qualitative techniques. The quantitative phase used a pre-experimental design involving 23 eighth-grade students, while the qualitative phase included interviews with teachers and students. Data were analyzed using descriptive statistics, normality testing, and paired-sample *t*-tests with SPSS version 26, supported by thematic analysis for the qualitative data. The findings revealed a significant improvement in students' vocabulary performance, with mean scores increasing from 35.07 in the pretest to 68.41 in the posttest ($p < 0.001$). The qualitative results indicated that short animation videos enhanced understanding, memory retention, and learning motivation through visual and auditory engagement. The study concluded that short animation videos effectively transformed vocabulary learning into an engaging and meaningful experience, leading to improved comprehension, confidence, and active participation. The research implies that multimedia learning can serve as an effective pedagogical tool for fostering cognitive and affective development in English language education.

INTRODUCTION

English has long been recognized as an essential global language that connects people across cultures and disciplines. Its role in education is particularly vital, as it enables students to access knowledge, express ideas, and participate in international communication. Among the various aspects of language learning, vocabulary acquisition serves as the foundation for mastering the four language skills: listening, speaking, reading, and writing. Without an adequate vocabulary, learners face difficulties in understanding texts, constructing sentences, and engaging in meaningful communication. This issue is closely linked to the challenges identified by Rohmatillah (2014), who emphasizes that many learners experience persistent difficulties in acquiring vocabulary due to reliance on memorization, limited contextual understanding, and restricted exposure to English beyond the classroom. However, in many Indonesian schools, especially at the junior high school level, students continue to struggle with vocabulary learning. This situation becomes even more evident when Maru et al. (2021) highlight that traditional, text-centered teaching methods often fail to create engaging or meaningful learning experiences, particularly when they lack the support of digital or multimedia tools that can stimulate students' motivation and comprehension in modern English language teaching settings. In the era of digital education, the integration of multimedia technology has become increasingly important in transforming how students learn languages.

One innovative approach is the use of short animation videos as instructional media. Unlike static visual aids, animation videos integrate motion, sound, and storytelling, creating a dynamic and immersive learning environment. This approach is supported by Mayer's Cognitive Theory of Multimedia

Learning (2005) and Paivio's Dual Coding Theory (1991), which argue that information is more effectively processed and retained when presented through both visual and verbal channels. These theories suggest that multimedia learning can enhance understanding, retention, and motivation, which are key elements often missing in traditional classroom instruction.

The initial observation at SMP Katolik Hati Kudus Manado revealed that students faced considerable challenges in learning English vocabulary, stemming from both cognitive and affective factors. From the students' perspective, many struggled to remember new words because they relied mainly on rote memorization, often memorizing lists without understanding how the words were used in real contexts. This resulted in rapid forgetting and made vocabulary lessons feel monotonous and difficult. Students also reported confusion in pronunciation, noting that differences between spelling and sound reduced their confidence to speak, which led to hesitation during classroom activities. Meanwhile, the teacher observed that limited exposure to English outside the classroom, minimal use of interactive media, and the dominance of textbook-centered instruction contributed to low motivation and weak retention. The teacher explained that students tended to be passive during vocabulary lessons, showing boredom and disengagement because the material did not feel meaningful or connected to real-life situations. These findings from the observation align with patterns later confirmed in interviews, which highlighted that the main obstacles included a lack of contextual learning, low confidence, limited exposure to English, and an overreliance on traditional memorization-based methods.

Short animation videos offer an effective solution to the vocabulary learning challenges identified during the initial observation because they present words through meaningful visual, auditory, and contextual cues that help students overcome difficulties with memorization, pronunciation, and retention. Unlike static textbook explanations, animation videos provide concrete representations of vocabulary through actions, characters, and storylines, enabling students to understand word meanings naturally without relying on translation. This approach is strongly supported by Fajruri and Wulandari (2024) and Hikmah (2021), who found that animated videos significantly improved vocabulary comprehension and long-term retention by embedding words within visual and narrative contexts. Similarly, Irawan (2023) demonstrated that animation-based instruction enhances vocabulary achievement because students process information through both verbal and visual channels, consistent with Dual Coding Theory and multimedia learning principles. In classroom practice, short animation videos can be integrated by selecting clips aligned with lesson objectives, pausing at key scenes to highlight target words, asking students to repeat and use new vocabulary, and engaging them in short discussions about the storyline. Through this guided interaction, students not only hear correct pronunciation but also see how words function in real contexts, making vocabulary learning more engaging, memorable, and motivating for junior high school learners.

Although previous research has examined multimedia use in English language teaching, studies focusing specifically on the application of short animation videos for vocabulary learning in junior high school contexts remain limited, particularly in Indonesia's post-pandemic educational setting. A growing body of literature supports the use of multimedia for vocabulary development. Studies by Hikmah (2021) and Fajruri and Wulandari (2024) demonstrated that animated videos improved students' vocabulary retention and comprehension by presenting words within visual and narrative contexts. Similarly, Liya et al. (2024) and Maulana and Rini (2025) found that multimedia learning not only enhanced linguistic performance but also increased learners' motivation and confidence. Nevertheless, most of these studies emphasized general language skills such as speaking or writing, leaving a gap in understanding how short animation videos specifically influence vocabulary mastery at the secondary school level. Furthermore, few investigations have combined quantitative and qualitative data to examine both the cognitive and affective dimensions of multimedia learning in vocabulary instruction.

To address this gap, the present study explored the effectiveness of short animation videos in enhancing students' vocabulary achievement at SMP Katolik Hati Kudus Manado. The research sought to determine whether short animation videos could significantly improve students' vocabulary mastery and how these multimedia tools influence learners' comprehension, retention, and motivation. The present study combined quantitative data from pretests and posttests with qualitative insights from teacher and student interviews to obtain a comprehensive understanding of the learning process. This research contributes both theoretically and practically to the field of English language education. Theoretically, it extends the application of multimedia learning frameworks, specifically the Cognitive Theory of Multimedia Learning, Dual Coding Theory, and the ARCS Motivation Model, within the context of vocabulary instruction for English as a Foreign Language learners. Practically, it provides an evidence-based strategy for teachers to integrate short animation videos into their lessons, creating more engaging, multimodal, and student-centered classrooms. By demonstrating that animation-based

instruction can improve vocabulary comprehension, confidence, and motivation, this study offers a valuable contribution to the development of effective and enjoyable English language teaching practices aligned with Indonesia's *Merdeka Belajar* vision.

METHOD

This research employed a mixed-method approach using a pre-experimental method with a one-group pretest–posttest design combined with in-depth interviews to provide a deeper and more comprehensive understanding of the impact of short animation videos on enhancing students' vocabulary. The qualitative aspect of the study was conducted through in-depth interviews with students and English teachers to gain insights into their perspectives on the effectiveness of short animation videos in vocabulary learning. The quantitative research design followed a one-group pretest–posttest structure, as illustrated in Image 1 (Quantitative Research Design).

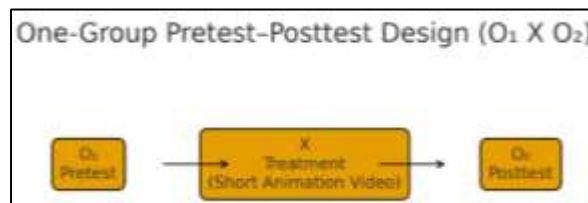


Image 1. Quantitative Research Design

The research was conducted at SMP Katolik Hati Kudus Manado, located on Jalan Sam Ratulangi No. 23, Karombasan Utara, Wanea District, Manado City, North Sulawesi. The study took place over eight meetings in September 2025. The population consisted of all eighth-grade students at SMP Katolik Hati Kudus Manado. The sampling technique used was purposive sampling, in which participants were deliberately selected based on specific characteristics relevant to the study. A total of 23 eighth-grade students were chosen as the sample because they represented the typical profile of Indonesian junior high school EFL learners. The selection criteria included being active eighth-grade students enrolled in English classes, availability to participate in the pretest, six treatment sessions, and posttest, and exhibiting common vocabulary learning challenges such as limited exposure to English, reliance on memorization, and low confidence in using new words. Permission for participation was granted by the school, and the selected students' characteristics aligned with the study's objective of examining vocabulary learning through short animation videos in a real classroom context.

The data collection instruments used in this study consisted of tests, observations, and interviews. The vocabulary test comprised 30 items, and its reliability was confirmed through Split-Half Reliability analysis using SPSS. The analysis divided the test into two equal halves and measured internal consistency. The results showed that Part 1 had a reliability value of $\alpha = 0.843$ and Part 2 had $\alpha = 0.836$, both categorized as good reliability. The correlation between the two halves was 0.784, and the Spearman-Brown coefficient was 0.879, indicating strong internal consistency. These values exceeded the minimum acceptable threshold of 0.70, demonstrating that the instrument was reliable and capable of producing trustworthy results. The interview in this study employed a semi-structured format to complement the quantitative data by providing in-depth insights into participants' experiences with learning vocabulary through short animation videos. Four eighth-grade students and one English teacher participated in interviews consisting of 11 open-ended questions, with five questions for students and six for the teacher, allowing for detailed and reflective responses as well as follow-up probing when necessary. The interview items were constructed by the researcher and guided by established theories, including Mayer's Cognitive Theory of Multimedia Learning (2005), Paivio's Dual Coding Theory (1991), and Keller's ARCS Motivation Model (2009), to address aspects of vocabulary comprehension, retention, motivation, and engagement. In addition, recent empirical studies (Fajruri & Wulandari, 2024; Liya et al., 2024) informed the formulation of the questions to ensure their relevance to current EFL classroom practices, thereby enabling the interviews to meaningfully support the qualitative findings of the study.

Data collection was carried out over eight meetings. A pretest was administered during the first meeting to measure students' initial vocabulary mastery. This was followed by six treatment sessions using selected short animation videos taken from YouTube that aligned with the school's English curriculum. The vocabulary topics were closely tied to the lesson plan and the classroom activities used during the treatment sessions. Students were introduced to everyday vocabulary appearing in the dialogues and scenes of *Finding Nemo*, *Rapunzel* or *Tangled*, *Cars*, and *Big Hero 6* or *Baymax*. The

vocabulary covered expressions related to ability (*can*) and willingness (*will*), actions, abilities, intentions, simple conversational phrases, descriptions of characters and objects, and daily communication expressions presented in authentic contexts through visual storytelling. A posttest was conducted in the final meeting to assess vocabulary improvement after the intervention. Classroom observations were also carried out during the treatment sessions to monitor students' participation and engagement.

Table 1. Observation Table

Observation Focus	Guidelines (How the Observation Was Conducted)
1. Classroom Teaching Learning Situation	The researcher observed classroom conditions during the ongoing English lesson, paying attention to how students interacted with the teacher, learning materials, and classroom environment.
2. Students' Reactions to the Use of Animation Videos	Observations were conducted during the treatment sessions while animation videos were shown. The researcher noted students' facial expressions, attentiveness, motivation, and participation.
3. Students' Comprehension Process	The researcher observed how students responded to vocabulary explained through animated visuals and contextual storytelling.
4. Pronunciation and Speaking Confidence	The researcher monitored students' attempts to pronounce words after hearing them from animation clips, noting hesitation, confidence, and accuracy.
5. Students' Engagement in Activities	Observations included students' participation during discussions, repetition tasks, mini-dialogues, and vocabulary exercises linked to the videos.
6. Advantages of Using Animation Videos	The researcher focused on how animation videos supported learning: attention, motivation, comprehension, retention, and relevance to real-life context.
7. Challenges of Using Animation Videos	Challenges were observed by monitoring students' behavior, classroom limitations, and the media's accessibility.
8. Teacher's Role and Instructional Adjustments	The researcher observed how the teacher guided students throughout the video sessions—pausing, explaining vocabulary, asking comprehension questions, and clarifying pronunciation.
9. Alignment of Video Content with Curriculum	The observation ensured that vocabulary appearing in videos matched the curriculum topics (daily actions, abilities <i>can</i> , willingness <i>will</i> , simple conversations).
10. Classroom Interaction Dynamics	The researcher observed interactions between teacher–student and student–student during video-based learning.

In addition, semi-structured interviews were conducted with four students and one English teacher. The interviews consisted of 11 open-ended questions, with five questions addressed to students and six to the teacher, allowing for probing and follow-up questions when clarification was needed.

Data analysis was conducted in two stages: quantitative and qualitative analysis. Quantitative data from the pretest and posttest were analyzed using descriptive statistics and a paired-sample *t*-test in IBM SPSS Statistics version 26 to determine whether the difference between pretest and posttest scores was statistically significant. Normality testing was performed using the Shapiro–Wilk test to ensure that the data were normally distributed. Qualitative data from the interviews were analyzed using thematic analysis following the procedures outlined by Braun and Clarke (2006). The researcher transcribed all interviews, reviewed the transcripts to identify key ideas and recurring patterns related to motivation, comprehension, and engagement, and coded the data into thematic categories. Triangulation was applied by comparing interview data with field notes and responses from different participants. The analyzed data were then interpreted to draw conclusions addressing the research questions and explaining how short animation videos supported students' vocabulary learning.

FINDINGS

The findings are divided into quantitative and qualitative results, derived from pretest and posttest analyses as well as interviews and observations. The quantitative results demonstrate statistical improvements in students' vocabulary achievement after the implementation of short animation videos, while the qualitative results explain how short animation videos enhance students' retention, understanding, and motivation during the learning process.

Quantitative Results

Test Results

The quantitative data were obtained from the students' pretest and posttest scores, which measured their vocabulary mastery before and after receiving treatment through short animation videos. The statistical analyses were conducted using descriptive statistics, normality testing, and a paired-sample *t*-test in SPSS version 26.

Table 2. Students' Pre-test and Post-test score

Students	Pre-Test	Post-Test
1	43	86
2	33	60
3	53	70
4	40	46
5	56	80
6	23	73
7	33	66
8	40	76
9	46	83
10	36	83
11	30	70
12	33	76
13	23	56
14	20	53
15	30	73
16	23	50
17	43	83
18	30	66
19	43	73
20	16	50
21	50	86
22	30	46
23	26	60
Total	800	1565
Mean	34.783	68.043
Max	56	86
Min	16	46
Std. Deviation	10.558	12.852

Data in Table 2 indicates that the use of short animation videos effectively enhances students' learning and contributes to the improvement of their vocabulary mastery. Compared to the pretest, the posttest results show a higher value. In other words, students' vocabulary learning was effectively developed through the use of short animation videos. As shown in Table 2, the mean score increased significantly from 34.783 in the pretest to 68.043 in the posttest, indicating a substantial improvement in students' vocabulary mastery after the use of short animation videos. The standard deviation values also suggest greater consistency in students' performance following the treatment. Following the comparison between the pretest and posttest results, the treatment process was carried out to support students' vocabulary learning through the use of short animation videos. This treatment was conducted over six meetings, during which students were exposed to a sequence of carefully selected short animated clips that corresponded to their English proficiency level and the topics in the school curriculum. Each video contained simple stories, daily expressions, and visually appealing scenes designed to introduce new vocabulary in meaningful contexts.

During the treatment phase, students did not merely watch the videos passively. The researcher and the English teacher guided them through each clip by emphasizing target vocabulary, pausing to discuss meanings, and asking comprehension questions. Students were encouraged to repeat the words aloud, identify them within the storyline, and use them in short sentences or classroom discussions. This active engagement allowed learners to connect new words to specific actions, images, and emotions rather than memorizing isolated vocabulary lists.

The classroom atmosphere during the treatment sessions became noticeably more interactive and enthusiastic. The visual and auditory elements of the animations captured students' attention and

curiosity, helping them maintain focus for longer periods and participate more actively. Students were excited to see familiar characters and stories, which made the learning environment feel friendly and motivating. Over time, they showed increased confidence in recognizing and pronouncing English words correctly and began using newly learned vocabulary in spontaneous communication. This process reflects the principles of the Cognitive Theory of Multimedia Learning and Dual Coding Theory, which emphasize that learning becomes more effective when verbal and visual information are processed simultaneously (Mayer, 2005; Paivio, 1991). By combining spoken explanations with rich visual input, short animation videos helped students form stronger mental connections and retain vocabulary more effectively. At the end of the treatment, the posttest results confirmed a significant improvement in students' vocabulary mastery. The use of short animation videos not only supported better retention but also transformed vocabulary learning into an enjoyable, meaningful, and engaging experience. Through this approach, students learned that vocabulary is not merely memorized mechanically but understood, visualized, and applied naturally in real-life communication.

Normality Test

The results of the Shapiro-Wilk normality test indicate that both the pretest and posttest data were normally distributed. The pretest data obtained a significance value of 0.712, while the posttest data showed a significance value of 0.106.

Table 3. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PRE-TEST	,129	23	,200 [*]	,971	23	,712
POST-TEST	,124	23	,200 [*]	,929	23	,106

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Since both values exceed the 0.05 significance level, the assumption of normality was fulfilled. Therefore, the use of a parametric statistical analysis, specifically the paired-sample t-test, was appropriate to examine the difference between students' pretest and posttest scores.

T-test

The results of the paired-samples t-test reveal a statistically significant difference between the pretest and posttest scores.

Table 4. Paired Samples Test

		Paired Samples Test					t	df	Sig. (2- tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post-test – Pre-test	33.33565	10.34725	2.15755	37.81014	28.86116	15.451	22	.000

The analysis showed a mean difference of 33.34, with a standard deviation of 10.34 and a standard error of 2.15, indicating a consistent improvement in students' scores after the intervention. The 95% confidence interval ranged from 28.86 to 37.81, suggesting that the observed difference is reliable and unlikely to have occurred by chance. With 22 degrees of freedom, the obtained t-value was 15.45, and the significance value was less than 0.001 ($p < 0.001$), demonstrating a highly significant increase in scores from the pretest to the posttest. These findings confirm that the intervention had a substantial and positive effect on students' vocabulary mastery. Accordingly, the null hypothesis (H_0), which states that short animation videos do not have a significant effect on students' vocabulary mastery, is rejected, while the alternative hypothesis (H_1), which states that short animation videos significantly enhance students' vocabulary mastery, is accepted.

Qualitative Results

Students' Challenges in Learning Vocabulary

The interviews revealed that students faced persistent difficulties in acquiring English vocabulary. The teacher explained that one of the main challenges in vocabulary learning was students' reliance on memorizing word lists for examination purposes without understanding how to use the words in meaningful situations. She noted, "Students memorize the words for exams, but they forget them quickly

because they do not understand how to apply them in actual contexts.” This pattern of surface-level learning led to weak retention, as students were unable to connect new vocabulary to authentic communication. The teacher further highlighted that students’ exposure to English was extremely limited outside classroom hours, which made it difficult for them to maintain or practice the words they had learned. As she stated, “They only encounter and use English in class; after that, they switch back to their mother tongue.” This lack of consistent exposure prevented students from reinforcing vocabulary through repetition and real-life use, causing rapid forgetting and reduced confidence when attempting to speak or write in English. Together, these insights emphasize how both instructional habits and environmental factors contribute to students’ difficulties in retaining and applying English vocabulary effectively.

Students also agreed with these challenges. They found textbook-based memorization boring and ineffective, as illustrated by one student’s comment: “*Kalau saya cuma baca dari buku, cepat sekali lupa, apalagi kalau katanya panjang.*” (“If I just read from a book, I forget very quickly, especially if the words are long.”) (S1). They also struggled to use words in spoken communication: “*Kadang saya tahu artinya, tapi pas mau ngomong saya lupa lagi karena tidak tahu cara pakainya.*” (“Sometimes I know the meaning, but when I want to speak, I forget again because I do not know how to use it.”) (S3). Pronunciation inconsistencies created further confusion, as another student stated: “*Tulisannya beda sama cara bacanya, jadi susah diingat.*” (“The spelling is different from the way it is pronounced, so it is hard to remember.”) (S2). Similarly, one student added: “*Kalau cuma hafalan dari daftar kata, rasanya cepat bosan dan gampang lupa.*” (“If it is just memorizing from a list of words, it quickly feels boring and is easy to forget.”) (S4).

These challenges are closely connected to Dual Coding Theory (Paivio, 1991) and Mayer’s *Cognitive Theory of Multimedia Learning* (2005). Both theories argue that when vocabulary is taught only through words or translation, learning relies solely on the verbal channel, making it more difficult for students to form strong mental representations. Without visual support or contextual cues, new words remain abstract and are easily forgotten after memorization. In contrast, when verbal input is paired with visuals such as images, actions, or scenes, students process information through both channels, which strengthens understanding and long-term retention. Recent studies support this explanation. Fajruri and Wulandari (2024) found that animated videos improved students’ ability to recall vocabulary more effectively than text-based methods, while Liya et al. (2024) showed that short animation movies helped learners remember and use new words because they were presented in meaningful, story-based contexts. Together, these theories and findings explain why traditional vocabulary teaching often fails to support durable learning.

Improved Vocabulary Comprehension with Short Animation Videos

The introduction of short animation videos helped students understand and remember vocabulary more effectively. The teacher noted that animations enabled learners to see words used naturally in actions and storylines, stating, “Students witness their application in a narrative or activity. This accelerates their comprehension” (Teacher). She further added, “Videos assist them in associating words with actions or contexts” (Teacher). Students confirmed that animations helped them grasp meanings more quickly. One student explained, “*Saya jadi lebih cepat paham arti katanya karena bisa lihat langsung di videonya, misalnya kata ‘jump’, saya lihat karakternya melompat.*” (“I understand the meaning of the words faster because I can see them directly in the video; for example, the word ‘jump,’ I see the character jumping.”) (S2). Another student stated, “*Kalau cuma baca, kadang saya lupa. Tapi kalau lihat di video, saya bisa ingat karena tahu ceritanya.*” (“If I just read it, sometimes I forget. But if I watch a video, I can remember because I know the story.”) (S1). A different student emphasized the benefit of dual processing by noting, “*Kalau dengar dan lihat bersama, jadi lebih gampang ngerti tanpa diterjemahkan.*” (“If you listen and watch together, it is easier to understand without being translated.”) (S3). Students also learned word usage naturally through context, as one remarked, “*Di video, katanya dipakai dalam cerita. Jadi saya tahu kapan dan bagaimana pakainya.*” (“In the video, the words are used in a story, so I know when and how to use them.”) (S4).

These findings clearly support *Cognitive Theory of Multimedia Learning* and Dual Coding Theory, which explain that learning becomes more effective when verbal and visual channels are activated simultaneously (Mayer, 2005; Paivio, 1991). In this study, animation videos allowed students to hear new vocabulary while seeing it represented through actions and scenes, enabling them to encode words in dual forms and recall them more easily. This process reflects how Dual Coding Theory strengthens memory and how *Cognitive Theory of Multimedia Learning* promotes deeper processing through multimodal input. At the same time, the motivational effects align with Keller’s ARCS Motivation Model,

particularly the components of Attention and Relevance, because movement, color, sound, and storyline in the videos captured students' interest and made vocabulary learning more meaningful (Keller, 2010). When students find the material engaging and contextually clear, they invest more effort, understand the words better, and retain them longer. Thus, both the cognitive and motivational gains observed in this research are consistent with *Cognitive Theory of Multimedia Learning*, Dual Coding Theory, and the ARCS framework.

Increased Confidence and Classroom Participation

Short animation videos also fostered greater learner confidence. Before using videos, many students hesitated to speak due to fear of mispronunciation. The teacher observed a clear change, stating, "Before using videos, many students were shy. Now they are more confident because they can hear how the characters say the words correctly" (Teacher). She added that students became more active, noting, "They raise their hands, answer questions, and try to use new words in their own sentences" (Teacher). Students described similar improvements. One student stated, "*Sekarang saya lebih berani bicara karena sudah tahu cara pengucapannya dari video.*" ("Now I am braver to speak because I already know how to pronounce it from the video.") (S1). Another student explained, "*Saya jadi percaya diri karena bisa meniru karakter di videonya.*" ("I became confident because I could imitate the character in the video.") (S2). A third student commented, "*Kalau gurunya tanya arti atau contoh kata, saya bisa jawab karena sudah lihat di ceritanya.*" ("If the teacher asks for the meaning or an example of a word, I can answer because I have already seen it in the story.") (S3). Similarly, another student shared, "*Tidak malu lagi ngomong Inggris karena kata-katanya gampang diingat dari video.*" ("No longer embarrassed to speak English because the words are easy to remember from videos.") (S4).

These patterns reflect the Confidence and Satisfaction components of Keller's ARCS Motivation Model (2010) and are consistent with several studies discussed in the literature review of this research. Maulana and Rini (2025) reported that animated videos significantly increased students' motivation and willingness to participate because visual narratives reduced anxiety and made learning more enjoyable. Similarly, Liya (2025) found that animation-based vocabulary instruction helped students understand and remember new words more effectively due to contextual support provided by images and storylines. This finding aligns with Hikmah (2021), who noted that animated videos strengthened vocabulary retention through vivid scenes and sound cues, while Irawan (2023) confirmed that multimedia animation enhances vocabulary achievement by engaging both visual and verbal processing channels. Taken together, these findings support the qualitative themes of this study, demonstrating that short animation videos address both cognitive and affective challenges in vocabulary learning by improving comprehension, strengthening retention, boosting motivation, and increasing students' confidence to speak.

DISCUSSIONS

Improvement in Vocabulary Achievement

The statistical results showed a significant difference between students' performance before and after the implementation of the treatment, confirming that the intervention effectively enhanced their vocabulary achievement. Students demonstrated clearer understanding and better recall of new words after being exposed to animated visual and auditory learning materials, suggesting that multimedia-based instruction supported deeper processing and stronger memory retention.

These results are consistent with earlier research conducted by Fajruri and Wulandari (2024) and Hikmah (2021), both of whom found that animation-based learning significantly improves students' vocabulary comprehension and long-term retention compared to conventional text-based teaching. The improvement observed in this study also supports Mayer's Cognitive Theory of Multimedia Learning, which posits that learning becomes more effective when information is presented through both verbal and visual channels. Through animated storytelling, students were able to process words not only by reading and listening but also by visualizing their meanings within narrative contexts, which strengthened their cognitive connections and enhanced long-term memory formation. The consistency of the students' progress also suggests that the instructional design was successfully implemented and that the instrument used to measure vocabulary achievement was reliable. Taken together, these findings confirm that short animation videos serve as a powerful medium for facilitating vocabulary learning by combining verbal explanation, visual imagery, and contextual meaning into an integrated and memorable learning experience.

Cognitive Support Through Multimedia Learning

The combination of pictures, sounds, and contextual storylines in short animation videos helped students understand vocabulary more deeply. According to Paivio's Dual Coding Theory (1991), learning is enhanced when information is encoded both verbally and visually. During the treatment, students associated new words with characters' actions and emotions in the videos. This dual encoding process allowed them to recall and use words more naturally in later activities. Qualitative data also supported this finding. Students mentioned that they could understand words faster because they could see them in action within the video context. The teacher confirmed that students' comprehension improved because they witnessed how the words were used in sentences, not merely memorized from a list. These observations affirm that animation videos provided meaningful context, reduced students' cognitive load, and made vocabulary acquisition more intuitive.

Motivational and Affective Impacts

In addition to improving comprehension, short animation videos also fostered students' motivation, confidence, and classroom participation. Before the treatment, students often felt bored or anxious when learning vocabulary. However, after using animation videos, they became more engaged and confident in speaking English in class. This improvement corresponds with Keller's ARCS Motivation Model (2009), particularly the components of Attention, Relevance, Confidence, and Satisfaction. Attention was enhanced as colorful visuals and dynamic motion captured students' focus and reduced distraction during lessons. Relevance was strengthened because story-based content made vocabulary meaningful and connected to real-life situations. Confidence increased as students gained assurance in pronunciation and usage by imitating characters from the videos. Satisfaction emerged from the enjoyable and non-threatening learning environment, which created positive emotional experiences that reinforced learning. These results are consistent with Maulana and Rini (2025), who found that animated video media increased students' motivation and confidence in English classes. The combination of audio-visual cues and storytelling not only made vocabulary learning enjoyable but also reduced anxiety, encouraging more active participation. The teacher's observation that students became more willing to answer questions without being asked exemplifies this motivational effect.

Pedagogical Implications for English Teaching

The findings of this study have significant pedagogical implications for English language teachers, particularly in junior high school contexts. Teachers are encouraged to integrate short animation videos into vocabulary lessons as a complementary medium to textbooks. By providing a multimodal experience that combines listening, watching, and speaking, teachers can foster deeper understanding and longer retention of vocabulary. Furthermore, this study suggests that teachers should not limit animation to entertainment purposes but should intentionally select videos aligned with lesson objectives. When used strategically, short animation videos can enhance multiple language skills, including vocabulary, pronunciation, and contextual usage, while maintaining student motivation. This approach aligns with Indonesia's *Merdeka Belajar* principles, which emphasize active, joyful, and meaningful learning.

Limitations

The limitation of this study lies in its use of a one-group pretest and posttest design without a control group, which prevents comparison with traditional instruction. The sample was limited to 23 students from one class, restricting generalizability, and the six-session intervention did not measure long-term retention. In addition, the qualitative data were drawn from a small number of participants, which may not capture the full range of learner experiences. Future research should involve larger and more diverse samples, include control or comparison groups, and examine long-term effects. Further studies may also explore the use of animation videos for other language skills or compare them with different digital media tools.

CONCLUSION

Quantitative results of the study show that students' mean scores increased from 35.07 on the pretest to 68.41 on the posttest, with a p-value below 0.001, indicating that the intervention significantly improved their vocabulary comprehension, retention, and recall. Qualitatively, students reported that learning through short animated videos was more engaging and meaningful than traditional memorization techniques, as the animations enabled them to visualize word meanings, observe contextual usage, and connect language to authentic scenarios. The results show that short animated

videos not only support linguistic development but also promote emotional engagement, active participation, and greater self-assurance in language use. Pedagogically, the study highlights the value of integrating animation-based media to create more interactive, student-centered, and context-rich vocabulary learning experiences in line with the principles of the *Merdeka Belajar* curriculum.

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COMPETING INTERESTS

The authors declare that they have no competing interests.

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