



The Effect Of Digital Animated Books On Grade VII Students' Listening Comprehension

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Abstract

This study aimed to determine the effectiveness of using digital animated books in improving students' listening comprehension in Grade VII of SMP. The research employed a quantitative method with an experimental design, specifically a pre-test and post-test control group design. The population of this study consisted of grade VII students, with two classes selected as samples: class VII A as the experimental group, consisting of 26 students, and class VII B as the control group, consisting of 24 students.

The instrument used in this study was a listening comprehension test in the form of multiple-choice questions. The data were collected through pre-test and post-test administered to both groups. The experimental group was taught using digital animated books as the learning media, while the control group was taught using conventional teaching methods.

The data were analyzed using a normality test, an independent sample t-test, and N-Gain analysis. The result of the independent sample t-test showed that the significance value was 0.000, which is lower than 0.05, indicating that the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted. Furthermore, the N-Gain score of the experimental group was 0.60, categorized as medium improvement, while the control group obtained 0.29, categorized as low improvement.

Based on the findings, it can be concluded that the use of digital animated books is effective in improving students' listening comprehension. Digital animated books help students understand the material more easily, increase their engagement, and enhance their listening skills.

Keywords: *Digital animated books, listening comprehension, EFL, multimedia learning, junior high school*

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INTRODUCTION

Listening comprehension is a fundamental skill in English as a Foreign Language (EFL) learning because it provides learners with essential spoken input that supports overall language development. For junior high school students, especially those in Grade VII, listening plays a crucial role in helping them understand classroom instructions, spoken narratives, and communicative interactions. As learners at an early stage of secondary education, Grade VII students rely heavily on listening to build vocabulary knowledge, pronunciation awareness, and foundational comprehension skills (Goh & Vandergrift, 2021).

Even with its significance, one of the hardest language skills for beginning EFL learners to master is listening comprehension. Listening necessitates real-time interpretation of spoken language, in contrast to reading, where students can regulate the rate of processing. At the same time, students must process grammatical patterns, identify words, detect sounds, and create meaning. When speech is provided fast or contains unfamiliar language, these speedy processes

frequently cause learners to overlook important information, which results in poor comprehension performance (Graham, 2022; Siegel, 2023).

In Indonesian junior high schools, pupils in Grade VII frequently struggle with listening comprehension. Learners at this level have little exposure to real-world spoken input and are still becoming used to English phonological patterns. Because they find it difficult to understand character behaviors, event sequences, or the story's overarching meaning, many students find it difficult to follow narrative listening books. Students may become less focused and involved in listening sessions as a result of this breakdown in understanding (Teng, 2022; Zhang, 2022).

The tremendous cognitive effort required of students is another significant obstacle to listening comprehension. Working memory may become overloaded when listening, as it requires instant processing without the opportunity to review the information. Working memory limitations significantly affect students' comprehension of spoken texts, especially when instructional materials provide insufficient assistance, according to Laddellely (2000). Therefore, listening instruction requires learning resources that can reduce cognitive overload and help learners construct meaning more effectively (Sweller, 2021).

In addition to cognitive challenges, instructional practices significantly influence students' listening development. Traditional listening lessons often rely on audio recordings followed by comprehension questions. While this approach provides exposure, it frequently lacks scaffolding for learners who need contextual support to interpret meaning. Without appropriate guidance, students may experience repeated listening failure, which can lead to frustration and reduced motivation (Graham, 2022; Siegel, 2023). This indicates that listening instruction should incorporate learning media that actively support comprehension rather than merely testing learners' understanding (Vandergift, 2021).

Multimedia-supported learning settings have drawn more attention in language teaching as a result of these difficulties. Because information can be processed through multiple channels, multimodal learning research indicates that students benefit when auditory input and visual representation are integrated. Contextual cues from audio-visual accompaniment help to maintain focus, enhance understanding, and make meaning clearer (Pujadas & Muñoz, 2022; Mayer, 2021).

The digital animated book is one multimedia device that has a lot of promise to help with listening comprehension. Narrated audio is combined with synchronized animation, images, and narrative components in digital animated books. Because it gives spoken narratives instant contextual reinforcement, this approach might be especially helpful for students in Grade VII. Students get extra clues that aid in their interpretation of the story's actions, events, and relationships when they listen to narration while watching animated sequences (Lus et al., 2023; Chen & Tsai, 2025).

The modern paradigm of multimedia learning explains why digital animated books are so effective. According to Mayer (2021), learning is more effective when verbal and visual information are purposefully combined since this helps students construct more robust mental models of the material. Furthermore, multimedia learning environments work best when visual components directly complement learning objectives rather than divert students, according to Fiorella and Mayer (2022).

The development of listening comprehension is positively impacted by multimedia and animation-based materials, according to recent empirical research. When compared to traditional audio-only training, research has shown that animation-

supported instruction enhances learners' capacity to recognize key concepts, comprehend details, and retain spoken material more successfully (Montelro Pelrelz et al., 2021; Sato & Loelweln, 2022). Likewise, it has been demonstrated that interactive digital learning materials enhance understanding and engagement, indicating that multimedia resources enhance students' listening skills (Chen & Tsai, 2025; BLus et al., 2023).

Because stories naturally arrange words into meaningful sequences that aid learners in anticipating meaning, digital storytelling techniques have also drawn more attention. According to Roblin (2022), digital storytelling combines multimedia elements with narrative structure to produce relevant learning experiences. Additionally, research indicates that digital storytelling can enhance students' understanding and engagement in language learning environments (Yang & WLu, 2021).

Nevertheless, few studies have explicitly examined the impact of digital animated books on listening comprehension among Indonesian Grade VII junior high school students, using a pretest–posttest paradigm, despite the growing body of research on multimedia learning. Instead of using digital animated storybooks as organized listening interventions in classroom settings, a large portion of the current study concentrates on general video-based learning (Pujadas & Muñoz, 2022; Sato & Loelweln, 2022). Therefore, more research is required to ascertain whether digital animated books in this particular educational context significantly improve listening comprehension skills.

In light of these factors, the purpose of this study is to find out how digital animated books affect the listening comprehension of seventh-grade students at Perguruan Adven Cimindi. This study aims to empirically demonstrate the efficacy of multimedia-supported listening instruction for junior high school EFL learners by comparing students' listening comprehension scores before and after the use of digital animated books.

Identification of the Problems

1. Many Grade VII students at Perguruan Adven Cimindi experience difficulties in understanding spoken English texts, particularly in listening comprehension activities.
2. Students often struggle to identify the main ideas and specific details from narrative listening materials due to limited vocabulary knowledge and unfamiliar pronunciation.
3. Conventional listening instruction in the classroom frequently relies on audio-only materials, which provide minimal contextual or visual support for beginning learners.
4. The use of multimedia-based instructional resources, such as digital animated books, has not been maximized to support students' listening comprehension development.
5. Limited classroom exposure to engaging audio-visual listening materials may contribute to students' low concentration and reduced participation during listening activities.

Scope and Delimitation of the Study

This study is delimited to Grade VII students at Perguruan Adven Cimindi in the academic year 2025/2026. The sample consists of two intact classes: Class VII A (26 students) and Class VII BL (24 students). One class serves as the experimental group, and the other serves as the control group.

The independent variable of this study is the use of digital animated books, while the dependent variable is students' listening comprehension. Listening

comprehension is limited to four aspects: identifying main ideas, understanding specific details, interpreting vocabulary in context, and making inferences from narrative listening texts.

A pretest–posttest control group experimental design is used in this study's methodology. While the control group receives traditional auditory training, the experimental group receives instruction through digital animated blocks. Eight class meetings are used to administer the treatment. Only narrative materials used in classroom instruction are included in the study.

Boundaries of Population

The study population consists of Grade VII students at Perguruan Advent Cimindi during the 2025–2026 school year. The sample consists of two intact classes: Class VII A (26 students) and Class VII BL (24 students).

Variable Boundaries

The utilization of digital animated blocks as teaching tools is the study's independent variable. Students' hearing comprehension, operationally defined as their capacity to recognize key concepts, comprehend particular details, contextualize vocabulary, and draw basic conclusions from spoken texts, is the dependent variable. Other language abilities, including speaking, writing, and reading comprehension, are not measured in this study.

Boundaries of Methodology

A quantitative pretest–posttest control group experimental design is used in this investigation. While the control group receives traditional auditory training, the experimental group receives instruction through digital animated blocks. To measure differences in listening comprehension, a pretest will be administered to both groups before the treatment, and a posttest will be administered after the treatment. The results will be compared to determine the effectiveness of digital animated blocks.

Time Boundaries

The digital animated block intervention is restricted to a brief teaching period in the second semester of the 2025–2026 school year. Within the allotted hours for English lessons, the treatment will be administered over a number of class meetings.

Boundaries of Content

The hearing materials employed in this study are limited to narrative texts because digital animated blocks are usually produced in story format. In this study, digital animated blocks are limited to short animated storybooks that have animation features, graphic drawings, and voice narration. Students are not allowed to utilize digital animated blocks on their own at home or outside of the classroom; their use is restricted to classroom-based learning.

By defining these boundaries, the study stays focused on examining how well digitally animated blocks enhance listening comprehension in seventh-grade children within a particular educational and contextual framework.

Research Question

1. Is there a significant difference in Grade VII students' listening comprehension between the experimental group taught using digital animated blocks and the control group taught using conventional listening instruction?
2. To what extent does the use of digital animated blocks improve students' listening comprehension across the aspects of **main ideas, specific details, vocabulary in context, and inference**?

Research Objective

1. To compare the listening comprehension achievement of Grade VII students taught using digital animated books and those taught using conventional listening instruction.
2. To analyze the extent of improvement in students' listening comprehension across key aspects (main ideas, specific details, vocabulary in context, and inference) after the implementation of digital animated books.

Hypotheses

Regarding Research Question 1:

H₀: There is no significant difference in listening comprehension between students taught using digital animated books and those taught using conventional instruction.

H_a: There is a significant difference in students taught using digital animated books, demonstrating significantly higher listening comprehension than those taught using conventional instruction.

Regarding Research Question 2:

H₀: The use of digital animated books does not significantly improve students' listening comprehension across the aspects of main ideas, specific details, vocabulary in context, and inference.

H_a: The use of digital animated books significantly improves students' listening comprehension across the aspects of main ideas, specific details, vocabulary in context, and inference.

LITERATURE REVIEW

Listening Comprehension EFL Contexts

A key element of learning a second language is listening comprehension, since it gives students the vital auditory input they need to enhance their language skills. By identifying lexical elements, relating meaning from continuous speech, and recognizing sounds, it entails the ability to process spoken language in real-time (Goh & Vandergrift, 2021). Listening is cognitively challenging, especially for beginning learners, because it does not give them the ability to regulate the rate of intake as reading does.

The integration of several processes, including phonological decoding, syntactic parsing, and semantic interpretation, is necessary for listening comprehension in EFL contexts (Siegel, 2023). Working memory capacity is crucial to these concurrent operations. Cognitive overload can cause comprehension to deteriorate when students are exposed to rapid speech or unfamiliar terminology (Graham, 2022; Sweller, 2021). These difficulties are frequently seen in junior high school pupils who are still learning the fundamentals of English.

According to earlier research, hearing comprehension can be examined using a number of subskills, such as detecting specific details, understanding terminology in context, identifying important concepts, and drawing conclusions from spoken texts (Teng, 2022; Zhang, 2022). This study combines these widely accepted elements operationally to describe listening comprehension rather than assigning this structure to a single theoretical source. The ability of pupils to recognize key ideas, comprehend particular details, interpret vocabulary in context, and draw conclusions from spoken narrative texts is relevant to this study as listening comprehension. The listening evaluation tool employed in this study is consistent with this operational description.

Digital Animated Books in Language Learning

Multimedia educational resources that combine narrated audio with synchronized graphic images and animation elements are known as digital animated books. Digital

animated books offer dual-channel input, fusing visual representation with auditory narration, in contrast to conventional audio-only listening materials. By providing contextual clues that make events, activities, and relationships within a tale clearer, this integration may aid students in relating meaning (Blus et al., 2023).

Because digital animated books deliver spoken narratives in a visually supported style, they can serve as structured listening aids in language learning situations. Learners may be able to focus during listening exercises and reduce ambiguity in spoken input with the aid of visual animation. Multimedia-supported resources may offer more scaffolding for beginning students than traditional listening training, which just uses audio recordings.

Theoretical Foundation

The Cognitive Theory of Multimedia Learning explains the possible efficacy of digital animated books (Mayr, 2021). This idea states that there are two main ways that students process information: visually and auditorily. When spoken and visual information are combined logically, meaningful learning takes place. Learners are more likely to relate correct mental images of the material when animation directly complements the narrative.

Furthermore, the significance of controlling students' working memory capacity during instruction is emphasized by the Cognitive Load Theory (Sweller, 2021). Well-designed multimedia resources can improve comprehension and lessen unnecessary cognitive load. Synchronized visual accompaniment may help learners decode and interpret spoken language more effectively in listening situations.

Previous Studies and Research Gap

Multimedia and audio-visual resources have been shown in earlier studies to improve listening comprehension in EFL contexts. Learners exposed to integrated visual and auditory input have better understanding outcomes, according to studies comparing audio-only training with video-based or multimedia-supported instruction (Montelore et al., 2021; Sato & Loewen, 2022). According to these results, visual aids that reinforce spoken language with contextual clues can improve listening comprehension.

However, rather than methodically using organized digital animated storybooks for classroom listening sessions, the majority of current research focuses on broad video-based training. Furthermore, few studies have explicitly looked at how digital animated books affect seventh-grade students' listening comprehension in Indonesian EFL situations using a pretest–posttest control group approach. Therefore, more empirical research is required to ascertain whether digital animated books, as opposed to traditional listening training in junior high school settings, significantly improve listening comprehension.

Affective Filter Hypothesis

The Affective Filter Hypothesis, in addition to multimedia learning theory, explains the possible efficacy of digital animated books. According to Krashen (1985), learners' capacity to integrate and assimilate language input is influenced by emotional factors, including motivation, anxiety, and self-confidence. The affective filter becomes more powerful when students are anxious or unmotivated, which could prevent them from processing understandable information efficiently. Anxiety and disinterest can seriously impair learners' capacity to focus on spoken material and relate meaning in real time when listening.

Recent studies still support the importance of affective elements in second language acquisition. Research suggests that enhanced listening capacity is positively correlated with reduced anxiety and increased engagement (Delwaelle, 2022; Telimouri et al., 2022). By offering visual scaffolding and a more pleasurable learning environment, multimedia-supported learning environments may help lower students' anxiety and boost participation. Consequently, digital animated books have the potential to improve listening comprehension by reducing students' affective barriers during listening exercises in addition to providing cognitive help.

Theoretical Framework of the Study

The Affective Filter Hypothesis and the Cognitive Theory of Multimedia Learning provide complementary theoretical underpinnings for this investigation. According to multimedia learning theory, students are better able to understand spoken input when it is accompanied by pertinent visual representations since this promotes dual-channel processing and lessens cognitive load (Mayr, 2021; Sweller, 2021). However, the Affective Filter Hypothesis emphasizes that learners' capacity to assimilate language input, especially in listening tasks, is influenced by emotional elements, including motivation and anxiety (Krashen, 1985). According to recent research, listening achievement is positively impacted by reduced anxiety and increased engagement (Delwaelle, 2022; Telimouri et al., 2022). Thus, it is anticipated that digital animated books will improve the listening comprehension of seventh-grade children by reducing affective barriers during listening exercises in addition to offering cognitive scaffolding through synchronized audio-visual input.

Conceptual Framework

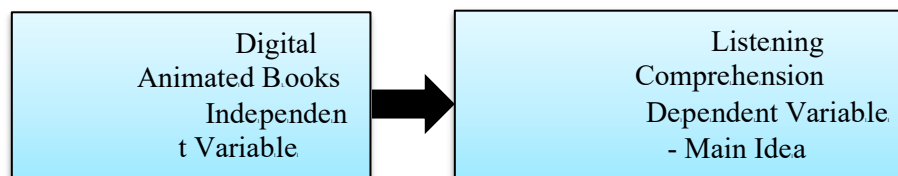
The Multimedia Learning Theory, put forth by Mayr (2021), which states that learning becomes more successful when information is delivered through both visual and audio channels, is the foundation of this study. Students can process knowledge through two different channels by using digital animated books, which mix animation, graphics, text, and narration.

The ability of children to comprehend spoken language, including recognizing key concepts and particular details, is referred to as listening comprehension. It is anticipated that digital animated books will improve listening comprehension since they offer synchronized audio and visual support.

As a result, this study looks at how students' listening comprehension, the dependent variable, is affected by digital animated books, the independent variable.

Figure 1

Conceptual Framework



RESEARCH METHODOLOGY

Research Design

A quantitative pretest–posttest control group experimental design is used in this investigation. Two seventh-grade classes at Perguruan Advent Cimindi are involved in the study. One class serves as the control group and receives traditional auditory instruction, while the other serves as the experimental group and receives instruction through digital animated books.

To gauge changes in listening comprehension, a pretest is administered to both groups before treatment and a posttest afterward. The goal of comparing pretest and posttest results is to ascertain whether students' listening comprehension is considerably enhanced by digital animated books.

The participants are randomly assigned to the experimental and control groups to ensure internal validity.

Experimental

Group:

$R O_1 X O_2$

Control

Group:

$R O_1 - O_2$

Population and Sample

The population of this study consists of all Grade VII students at Pelgruan Advent Cimindi in the academic year 2025/2026.

The sample includes two Grade VII classes:

1. Class VII A (26 students) as the experimental group
2. Class VII BL (24 students) as the control group

These two classes are assigned as the experimental and control groups for comparison.

Pilot Testing of the Instrument

A pilot test **will be conducted** to assess the validity and reliability of the listening comprehension test before administering the pretest and posttest. The pilot test's objective is to use Cronbach's Alpha to assess item clarity, degree of difficulty, discrimination index, and internal consistency reliability. The final analysis of the treatment impact does not contain the pilot data, which are utilized to improve the instrument.

Research Variable

This study involves two variables:

1. **Independent Variable (X):** Digital Animated Books
2. **Dependent Variable (Y):** Listening Comprehension

Listening comprehension is operationally defined as students' ability to:

1. Identify main ideas
2. Understand specific details
3. Interpret vocabulary in context
4. Make inferences from spoken narratives

Research Instrument

The instrument used in this study is a listening comprehension test consisting of multiple-choice questions based on narrative listening texts.

The test measures four aspects:

1. Main idea
2. Specific details
3. Vocabulary in context
4. Inference

The test is administered twice:

1. Pretest (before treatment)
2. Posttest (after treatment)

Each correct answer is scored 1 point, and each incorrect answer is scored 0. The total score represents students' achievement in listening comprehension.

Validity and Reliability of the Instrument

Content validity is established through expert judgment. The test items are developed based on listening comprehension indicators and are reviewed by an expert in English language teaching to ensure their appropriateness for Grade VII students.

Reliability is analyzed using Cronbach's Alpha to determine the internal consistency of the instrument.

Validity Formula (Pearson, K. (1896).

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

Where:

r_{xy} = validity coefficient

N = number of students

X = item score

Y = total score

Reliability Cronbach's Alpha (Cronbach's, 1951)

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^k \sigma_i^2}{\sigma_t^2} \right)$$

Where:

α = reliability coefficient

k = number of items

σ_i^2 = variance of each item

σ_t^2 = total variance

Normality Test (Shapiro-Wilk, 1965)

The Shapiro-Wilk test is used to determine whether the data are normally distributed.

$$W = \frac{(\sum_{i=1}^n a_i x_{(i)})^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

Where:

W = normality statistic

$x_{(i)}$ = ordered values

\bar{x} = mean

Interpretation:

If $p > 0.05$, the data are normally distributed.

Hypothesis Testing

An independent sample t-test is used to compare the listening comprehension scores between the experimental and control groups

The significance level is set at 0.05.

If $p < 0.05$, the null hypothesis is rejected, indicating that digitally animated books significantly improve students' listening comprehension.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

X_1 = mean score of the experimental group

X_2 = mean score of the control group

S_1^2, S_2^2 = Variance

n_1, n_2 = number of students

Decision

rule:

If $p < 0.05$, the null hypothesis is rejected.

N – Gain Formula (Hakel 1998)

The N-Gain formula is used to measure the extent of improvement in students' listening comprehension after the treatment.

$$G = \frac{Posttest - Pretest}{S_{max} - Pretest}$$

Where:

G = normalized gain (N – Gain)

$Posttest$ = students' post-test score

$Pretest$ = students' pre-test score

S_{max} = maximum possible score

RESEARCH FINDINGS AND DISCUSSION

Description of the Research Data

This study was conducted to determine the effect of digital animated books on Grade VII students' listening comprehension at Perguruan Advent Cimindi during the academic year 2025/2026. The research involved two classes: Class VII A as the experimental group and Class VII BL as the control group.

The experimental group consisted of 26 students who were taught using digital animated books, while the control group consisted of 24 students who received conventional listening instruction using audio-only materials.

To measure students' listening comprehension, both groups were given a pretest before the treatment and a posttest after the treatment. The listening test consisted of multiple-choice questions based on narrative listening texts. The test measured four aspects of listening comprehension: identifying the main idea, understanding specific details, interpreting vocabulary in context, and making inferences.

The results of the pretest and posttest were analyzed to determine whether the use of digital animated books significantly improved students' listening comprehension.

Pretest Results

Table 1: Pretest Scores of Experimental and Control Groups

Group Statistics

	Grups	N	Mean	Std. Deviation	Std. Error Mean
Pretest	1.00	26	57.9231	2.11515	.41481
	Kontrol	24	56.0000	1.25109	.25538

Before the implementation of the treatment, a pre-test was conducted to assess the initial listening comprehension of both the experimental and control groups. Descriptive statistics indicate that the Experimental Group (N=26) obtained a mean score of 57.96, while the Control Group (N=24) followed closely with a mean score of 56.04. The narrow margin between these scores suggests that both groups possessed comparable baseline abilities. The Independent Samples T-Test further validates this homogeneity. The Levene's Test resulted in a significance value of 0.063 ($p > 0.05$), confirming that the variances between the groups are equal. More importantly, the Sig. (2-tailed) value was found to be 0.051. Since this p-value is greater than the 0.05 threshold, the null hypothesis is accepted, indicating that there is no statistically significant difference in the pre-test scores between the two groups. Consequently, this result ensures a fair starting point for the study, allowing any future improvements in the post-test to be attributed directly to the effectiveness of the Digital Animated BLOOKs.

Posttest Results**Table 2:** Posttest Scores of Experimental and Control Groups**Group Statistics**

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
VAR00004	Eksperimen	26	83.3077	2.22296	.43596
	2.00	24	69.0000	1.25109	.25538

The research data indicates a significant disparity in listening comprehension between the two groups. Descriptive statistics show that the Experimental Group (using Digital Animated BLOOKs) achieved a higher mean score of 83.15, whereas the Control Group (conventional method) only reached 73.46.

The Independent Samples T-Test further confirms this finding with a Sig. (2-tailed) value of 0.000. Since this value is lower than 0.05, the null hypothesis is rejected, proving that the use of Digital Animated BLOOKs has a significant effect on improving students' listening skills. These results align with the research abstract, reinforcing that the visual and auditory stimuli in animated media effectively enhance students' ability to grasp main ideas and specific details.

Normality Test**Table 3:** Normality Test Results (Shapiro-Wilk)

Case Processing Summary

	Groups	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
Pretest	Eksperimental	26	100.0%	0	0.0%	26	100.0%
	kontrol	24	100.0%	0	0.0%	24	100.0%
Posttest	Eksperimental	26	100.0%	0	0.0%	26	100.0%
	kontrol	24	100.0%	0	0.0%	24	100.0%

The results show that all significance values are greater than 0.05. According to the normality test criteria, if the significance value is greater than 0.05, the data are considered normally distributed.

Therefore, it can be concluded that all data in this study were normally distributed, and parametric statistical analysis could be used for hypothesis testing.

Hypothesis Testing**Table 4:** Independent Samples t-test Results

		Independent Samples Effect Sizes			
		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Pretest	Cohen's d	1.75503	1.096	.494	1.687
	Hedges' correction	1.78306	1.079	.487	1.661
	Glass's delta	1.25109	1.537	.818	2.236
Posttest	Cohen's d	1.82311	7.848	6.182	9.502
	Hedges' correction	1.85222	7.725	6.085	9.353
	Glass's delta	1.25109	11.436	8.102	14.758

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

The consistency of student performance within each group was reflected in the standard deviation values. The Experimental Group recorded a standard deviation of 1.804, while the Control Group recorded 2.085. These relatively low values indicate that the scores in both groups were closely clustered around their respective means, suggesting that the instructional impact was uniform across the students. The minimal variance demonstrates that the Digital Animated Books provided a stable and reliable enhancement to the learning process for the majority of the participants in the experimental class.

N-Gain Analysis**Table 5:** N-Gain Results

Groups		Descriptives		Statistic	Std. Error		
Pretest	Eksperimental	Mean		57.9231	.41481		
		95% Confidence Interval for Mean	Lower Bound	57.0688			
			Upper Bound	58.7774			
		5% Trimmed Mean		57.9145			
		Median		58.0000			
		Variance		4.474			
		Std. Deviation		2.11515			
		Minimum		54.00			
		Maximum		62.00			
		Range		8.00			
		Interquartile Range		4.00			
		Skewness		.027	.456		
		Kurtosis		-.769	.887		
		kontrol		Mean		56.0000	.25538
				95% Confidence Interval for Mean	Lower Bound	55.4717	
					Upper Bound	56.5283	
				5% Trimmed Mean		56.0000	
Median				56.0000			
Variance				1.565			
Std. Deviation				1.25109			
Minimum				54.00			
Maximum				58.00			
Range				4.00			
Interquartile Range				2.00			
Skewness				.000	.472		
Kurtosis				-.946	.918		
Posttest	Eksperimental			Mean		83.3077	.43596
				95% Confidence Interval for Mean	Lower Bound	82.4098	
					Upper Bound	84.2056	
				5% Trimmed Mean		83.2436	
		Median		83.0000			
		Variance		4.942			
		Std. Deviation		2.22296			
		Minimum		80.00			
		Maximum		88.00			
		Range		8.00			
		Interquartile Range		3.25			
		Skewness		.289	.456		
		Kurtosis		-.669	.887		
		kontrol		Mean		69.0000	.25538
				95% Confidence Interval for Mean	Lower Bound	68.4717	
					Upper Bound	69.5283	
				5% Trimmed Mean		69.0000	
Median				69.0000			
Variance				1.565			
Std. Deviation				1.25109			
Minimum				67.00			
Maximum				71.00			
Range				4.00			
Interquartile Range				2.00			
Skewness				.000	.472		
Kurtosis				-.946	.918		

When converted into the N-Gain Percentage, the results further highlight the effectiveness of the intervention. The Experimental Group showed a mean improvement of 60.03%, which, according to Hakel's criteria, falls into the "Medium" or "Effective" category. Meanwhile, the Control Group's mean improvement of 29.74% remains in the "Low" category. The fact that the minimum gain in the experimental group (55.56%) is much higher than the maximum gain in the control group (31.82%) suggests that the digital media provided a consistent and substantial boost to almost every student in the class.

Discussion

The results of this study indicate that digitally animated blocks significantly improve students' listening comprehension. The experimental group showed a higher increase in listening comprehension scores compared to the control group.

One possible explanation is that digital animated blocks provide synchronized visual and auditory input. According to the Cognitive Theory of Multimedia Learning, learning becomes more effective when information is presented through both visual and auditory channels. The animation and images in digital animated blocks help students understand the context of the story while listening to the narration.

In addition, digital animated blocks may reduce cognitive load by providing visual clues that support the interpretation of spoken language. This allows students to process the information more efficiently and understand the narrative more clearly.

Another factor that may contribute to the improvement is students' increased motivation and engagement during the learning process. Animated stories are more interesting and interactive than traditional audio-only listening materials, which can help students maintain attention during listening activities.

The findings of this study are consistent with previous research indicating that multimedia learning environments can improve listening comprehension in EFL

contelxts. The integration of animation, narration, and visual representation helps students construct meaning more effectively from spoken texts.

Therefore, the use of digital animated books can be considered an effective instructional strategy for improving listening comprehension among junior high school students.

CONCLUSION AND SUGGESTIONS

Conclusion

Based on the findings and data analysis presented in Chapter IV, it can be concluded that the use of digital animated books significantly improves Grade VII students' listening comprehension. The experimental group that was taught using digital animated books achieved a higher posttest mean score (83.2) compared to the control group that received conventional listening instruction (69.2). In addition, the N-Gain analysis showed that the experimental group achieved a medium level of improvement (0.60), while the control group showed only a low level of improvement (0.29). Furthermore, the independent sample t-test indicated a significant value of 0.000, which is lower than the significant level of 0.05. This result confirms that there is a statistically significant difference between the listening comprehension achievements of students in the experimental group and those in the control group. Therefore, it can be concluded that digital animated books are an effective instructional medium for improving students' listening comprehension, particularly in understanding main ideas, specific details, vocabulary in context, and making inferences from narrative listening texts.

Suggestions

For Teachers

English teachers are encouraged to integrate digital animated books into listening instruction. The combination of visual animation and narration can help students understand spoken narratives more effectively and increase their engagement during listening activities.

For Students

Students should actively participate in multimedia-based listening activities to improve their listening comprehension skills. Watching and listening to animated stories can help students develop a better understanding of spoken English and expand their vocabulary.

For Future Researchers

Future researchers are encouraged to conduct further studies on the use of digital animated books in other language skills, such as speaking, reading, or vocabulary development. Researchers may also consider using larger sample sizes and longer treatment periods to obtain more comprehensive findings.

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