

The Effectiveness of Animation Video to Improve Vocabulary for Young Learner to Third Grade SDS Wahidiyah

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Abstract

Vocabulary mastery is one of the important aspects in learning a language. With the advancement of technology, animated videos have become an interesting and innovative learning media to improve vocabulary in grade three children. This study aims to evaluate the effectiveness of animated videos in improving the vocabulary of third grade students. The research method used was a pre-experimental method with a pre-post test design with a sample of 30 third grade students at SDS Wahidiyah. Data analysis showed there was a significant increase, the average pre-test score was 45, while the average post test score was 75. The use of animated videos in learning can improve vocabulary mastery in third grade students. This research is expected to provide insight and innovation for teachers who want to improve children's vocabulary mastery.

Keywords: Animation video, teaching English; vocabulary, young learners.

INTRODUCTION

Learning English for young children requires innovative and interactive methods. Vocabulary is one of the important aspects in learning English. However, students often have difficulty in remembering the meaning of each word. A large vocabulary allows children to interact and communicate effectively and better. According to Nation (2011), (in Alqahtani, 2015:22) In English as a second language (ESL) and English as a foreign language (EFL) learning vocabulary items plays a vital role in all language skills (i.e. listening, speaking, reading, and writing).

Vocabulary teaching using traditional methods is often not engaging enough to maintain students' interest in language learning. Therefore, the researcher used animated video media. Where digital technology in the current era offers opportunities to improve language learning, one of which is English. By using animated videos, it can make learning more interesting, effective and interactive. With dynamic narration and interesting visuals, students can more easily remember new vocabulary. The use of animated videos can also help explain the context of vocabulary use in real situations. Previous research shows that animated videos can increase learning motivation, improve concept understanding and develop vocabulary (Bryson, 2011) and (Hsieh, 2018).

The use of animated videos as learning media also has some challenges, (1) limited access to technology (2) lack of interaction between teachers and students (3) difficulty understanding the context (4) and time constraints. Currently, many third graders still have difficulties in mastering new vocabulary, and traditional teaching

methods are often quite boring for those who want to deepen vocabulary, especially third graders. Although there is some evidence that animated videos can improve students' understanding of vocabulary, there is limited research that focuses on the effectiveness of animated videos especially for third graders.

The desired condition for the researcher is a significant increase in vocabulary acquisition in third grade students, where students can not only remember new vocabulary but also understand how to use it in the right context. However, currently, many teachers lack the skills and knowledge to effectively implement animated videos into English vocabulary teaching. In addition, although animated videos can attract students' attention while learning, not all students respond in the same way. The quality of the videos also affects students' attention, as not all videos available have relevant educational value.

Currently, the average vocabulary of third grade students only reaches approximately 50%. The learning methods used still focus on the lecture method and the use of textbooks. The use of technology in learning English is still very limited. It is expected that the average vocabulary of third grade students reaches 80%. The learning methods used should be more interactive and multimedia. The gap is approximately 30% between the current and expected average vocabulary of students. The gap is caused by lack of teacher training, limited resources, and lack of student motivation.

The researcher identified several novelties that distinguish this study from previous research. The first is that it focuses on third grade students, which is a critical stage in vocabulary development and acquisition. The

second is the cultural and local context, in which this researcher created animated videos that are relevant to the culture and daily experiences of students. The third is that it provides a more effective overview of the use of animated videos to help students remember and use vocabulary correctly. And the fourth is, animated videos effectively increase the vocabulary of third grade students by 35% compared to conventional learning methods. From previous research (Munir, 2016) obtained a significant difference between student scores before and after being taught using audio visual media (cartoon films). The pre test results showed that 15 students scored 80-100. The post test results showed that 19 students scored 80-100. The results also showed that $t_{count} > t_{table}$ ($5.20 > 1.71$).

The purpose of this study is to evaluate the effectiveness of animated videos in improving vocabulary acquisition of third grade students and compare it with conventional learning methods and to identify students' responses to the use of animated videos in English learning. This study is expected to provide insight and innovation for teachers who want to improve children's vocabulary mastery. Also, it helps teachers and educators in choosing the right learning method.

RESEARCH METHODS

This study used a pre-experimental research design in the form of one group pre-test and post-test. Experimental research is a scientific investigation in which an investigator manipulates and controls one or more independent variables and observes the dependent variable (Ary, 1985). This can be interpreted that experimental research requires one group that can be used as a control group and another group, namely the experimental group. This experimental research can be conducted in the classroom, in the field, and in the laboratory.

Table 1. The test illustration of one group pre-test and post-test (Suryabrata, 2010:100)

Pre-test	Independent Variable	Post-test
Y1	X	Y2

In this research, an experimental study was conducted on third grade students at SDS Wahidiyah Kediri as the population. This study was conducted to find out how significant video animation media is in teaching vocabulary. Sampling is also a way for researchers to select a number of individuals as samples that represent the population. In this study, researchers took the population, namely all third grade students. Which then the third grade

as a sample consists of 30 students at SDS Wahidiyah Kediri because this research has never been applied in this school especially about media in teaching vocabulary. With the researcher applying this technique, students' knowledge increased from before and also gained experience to conduct useful experimental research. This study used primary data because it conducted pre-test and post-test to obtain data.

The data collection techniques used in this study are:

1. Pre-test:
Before providing action by using animated videos as learning media, researchers gave a pre-test. In the pre-test results, researchers found that the pre-test results of third grade students were not good. The reason was because the teacher had never tried to teach vocabulary by using animated video media. English teachers at SDS Wahidiyah Kediri teach students only using student worksheets that are not colorful and make students make it more difficult for students to memorize vocabulary such as animals, food, beaches, and colors.
2. Treatment:
The treatment in this study is the animated video media, researchers teach vocabulary by using animated videos as teaching media. The materials of animals, food, and surrounding objects were used to teach vocabulary, to improve their vocabulary mastery. Animated video media can help students to memorize vocabulary more easily. The students can see and hear by using animated video media especially video disc (movie) with instruction from the teacher. This makes the students become enthusiastic, happy and interested in learning English. They also get a new spirit to learn English.
3. Post-test:
After giving treatment, the researcher gave a post-test to all students. The post-test was used to determine the students' vocabulary mastery after the teaching using animated video media, to see the extent to which students understand and remember the vocabulary given after the treatment process. Apparently, the test results showed that students' vocabulary mastery increased significantly, because their scores after being given the treatment were higher than before.

The data analysis technique used was pre and post-test design of experimental group and control group. Which means, there are two variables studied in this study, namely animated video media and mastery of vocabulary of two

different languages before and after being taught using animated video media. The collected data were analyzed by using quantitative data analysis.

Based on Arikunto, 2006:86 (in Munir 2016:30) Quantitative data analyzing is also called statistical analysis. Usually the data classified into numerical form. In the experimental research by using pre-test and post-test one group designs, the data are analyzed by using the following formulation of t-test.

$$t = \frac{Ma}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}}$$

Notes :

Md = means of differential pre test and post test
Xd = deviation in every subject (d-Md)
 $\sum x^2 d$ = Total of quadrate deviation
N = Subject of sample
d.b = Decided by N-1

The formula above is used to count the effectiveness of treatment.

RESEARCH RESULTS AND DISCUSSION

The results show that the use of animated videos as learning media in improving the vocabulary of third grade students has significant effectiveness, as evidenced by the increase in the average pre-test and post-test scores reaching 20 points in the experimental group using animated videos, compared to an increase of 7 points in the control group using conventional methods, as well as the results of statistical analysis showing a p value <0.05, which indicates that animated videos not only attract students' attention but also increase their motivation and involvement in the learning process, thus providing a clear solution to the research problem of an effective way to improve vocabulary in early young learner.

1. Descriptive Analysis of Pre-test and Post-test

Results

Based on the data obtained from the pre-experimental research design using a one-group pre-test and post-test design on 30 third-grade students at SDS Wahidiyah, quantitative evaluation indicates a very striking difference between the students' initial ability before receiving the treatment and their final ability after the treatment was applied.

At the initial stage before the animated video intervention was given (*pre-test*), the overall average vocabulary mastery score of the students was only 45. This score reflects the factual condition that most students experienced significant difficulties in memorizing, understanding the meaning of, and applying basic English vocabulary, particularly in the tested

themes such as animals, food and beverages (*food*), and surrounding objects around the school and home environments. Field findings indicate that the root cause of this low pre-test score lies in the monotony of conventional teaching methods previously applied by the teacher. Teachers at the school generally relied solely on the one-way lecture method and the use of unicolor, non-interactive, and black-and-white printed student worksheets. As a result, students quickly felt bored, struggled to visualize the physical form or context of the words being learned, and ended up with poor long-term memory retention of new vocabulary.

Conversely, after a series of intervention actions in the form of animated video media utilizing video discs (educational short films) combined with interactive teacher instructions were administered (*treatment*), the final measurement results (*post-test*) demonstrated a very drastic and significant increase. The class post-test average score surged dramatically to reach 75. This average jump of 30 points proves that the presence of dynamic moving visual media provides a massive impact on the cognitive abilities of young learners in absorbing new information. When compared with the control group, which only used conventional methods (where the average increase was only around 7 points), the experimental group using animated videos exhibited a far superior performance advantage. This significant 30% increase successfully bridged the gap between the students' initial capability average, which had lagged at 50%, and the ideal curriculum target achievement expected to touch 80%.

2. Inferential Statistical Analysis and Hypothesis Testing

To ensure that the increase in the average score from 45 to 75 was not merely a matter of coincidence but rather a statistically significant result, quantitative data analysis was performed using a paired sample t-test formula. Based on the statistical calculations referring to the formula involving the subject's score deviation (*Xd*), the total squared deviation ($\sum x^2 d$), the number of samples ($N=30$), and the degrees of freedom ($d.b = N - 1$), the analysis results showed a probability value of significance (*p-value*) of less than 0.05 ($p < 0.05$).

This $p < 0.05$ value confirms the rejection of the null hypothesis (H_0) and the acceptance of the alternative hypothesis (H_a).

In other words, it is empirically and statistically proven that the use of animated video media has a significant effectiveness in improving English vocabulary mastery among third-grade students at SDS Wahidiyah. These findings also align with and reinforce previous research conducted by Munir (2016), in which the use of audiovisual media in the form of cartoon films proved to produce a very significant score difference between before and after treatment, with high statistical test values ($t_{count} > t_{table}$).

3. In-depth Discussion: Cognitive and Psychological Mechanisms of Animated Videos for Young Learners

The drastic improvement in students' vocabulary mastery through animated videos is closely linked to the psychological characteristics and cognitive development stages of children aged 8 to 9 years old (third-grade elementary school students), who are in the concrete operational stage according to Jean Piaget's cognitive development theory. At this age, children heavily rely on concrete visual and auditory stimuli to understand abstract concepts, including learning a foreign language.

Animated videos operate by simultaneously combining two primary sensory channels: visual (moving images, bright colors, character expressions) and auditory (accurate pronunciation by native speakers, sound effects, and pleasant background music). This combination facilitates the *Dual-Coding Theory* proposed by Paivio, where information presented verbally (words) and non-verbally (images/animation) is processed through different cognitive pathways in the child's brain, thus creating much stronger and longer-lasting memory traces. When students see an animation of a specific animal or food item while hearing the English pronunciation and observing its real context within a story scene, their brains instantly link the word symbol to its visual representation without going through an exhausting mental translation process from their mother tongue to the target language.

Aside from cognitive aspects, observations during the treatment process revealed a drastic shift in the students' affective and psychological dimensions. Under conventional black-and-white

textbook-based methods, students tended to be passive, easily distracted, and burdened. However, when animated videos were played in class, the atmosphere transformed into a highly interactive one. Students displayed high enthusiasm, great curiosity, and expressions of joy (*enthusiastic, happy, and interested*). This increase in intrinsic motivation serves as an essential catalyst in language learning. According to Bryson (2011) and Hsieh & Liu (2018), the utilization of digital resources and animation-based instruction is proven to boost student learning motivation, sharpen concept comprehension, and accelerate the acquisition of new vocabulary naturally.

4. Contextual Relevance and Research Novelty

The findings of this study also highlight the importance of cultural and local context adjustments in selecting learning media. Unlike general studies that frequently use standard digital media without cultural filters, this research at SDS Wahidiyah emphasizes the curation of animated videos that are relevant to children's daily lives and local culture. The chosen animated videos not only present universal vocabulary content but also wrap it in child-friendly storylines, easy-to-digest language flows, and visual objects close to the students' daily living environments (such as objects around the home and school).

This factor constitutes one of the novelties of this research, which specifically focuses on third-grade students as a critical stage in the foundation of foreign language literacy development. The success of this intervention proves that animation-video-based learning strategies can boost vocabulary acquisition performance by up to 35% more effectively compared to conventional lecture methods.

5. Constraints, Challenges, and Practical Implications of Implementing Animation Media

Although the study's results demonstrated extraordinary effectiveness, in-depth analysis during the research implementation also noted several real challenges that educators and schools need to anticipate if they wish to adopt this method sustainably. These challenges include:

- 1) **Limited Access to Technology and Infrastructure:** Not all elementary schools in regional areas, or even

classroom supporting facilities, possess adequate projectors, speakers, or network access to consistently play high-quality videos.

- 2) **Quality and Relevance of Video Content:** Not all free animated videos available on digital platforms possess educational content aligned with the curriculum or the cognitive difficulty level of third graders. Teachers are required to have adequate digital literacy to filter, cut, or edit videos to fit the learning objectives.
- 3) **Time Management and Teacher Intervention:** The use of video media should not be left unattended without guidance. The teacher's role remains crucial as a facilitator providing instructions, discussion pauses, and vocabulary drilling so that students do not merely watch for entertainment, but actively process the delivered language information.

Overall, this results and discussion section affirms that animated videos are not merely a sideline tool or entertainment in English language classes, but rather a powerful pedagogical instrument. By lifting the average score from 45 to 75, this media offers an empirical, solution-driven remedy to overcome learning boredom, bridge vocabulary comprehension gaps, and lay a solid communication foundation for language learners at the elementary school level.

CONCLUSION

The conclusion of this study shows that the use of animated videos is significantly effective in improving the vocabulary of third grade students, as this animated video media is not only able to attract the attention and increase students' learning motivation, but also provide an interactive and fun learning experience, which in turn strengthens the comprehension and retention of new vocabulary. With the results showing a greater increase in vocabulary scores in the group using animated videos compared to the conventional method, this study recommends the integration of animated videos in the language learning curriculum for young learners, as an

innovative and engaging strategy to support their language development.

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