The Influence of The Use of Visual and Flashcard Media in Language Learning on Increasing Student Achievement

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Abstrak

Penelitian ini berawal dari permasalahan menurunnya prestasi belajar siswa/siswa SD Negeri Sukun 3 Kota Malang Salah satu indikator menurunnya prestasi belajar siswa pada hasil Ulangan Tengah Semester (UTS) ganjil 2023/2024 yang dilakukan pada bulan September 2023. Dari 25 siswa yang mengikuti UTS diperoleh nilai KKM yang belum memenuhi ketuntasan belajar. Pada hasil UTS semester ganjil 2023/2024 yang dilaksanakan pada bulan September 2021 diperoleh data bahwa nilai rata-rata siswa/siswi kelas VI masih di bawah nilai KKM pada mata pelajaran bahasa Inggris. Penelitian ini bertujuan untuk mengetahui pengaruh media flashcard dan media visual dalam pembelajaran bahasa Inggris terhadap peningkatan prestasi siswa di SD Negeri Sukun 3 kota Malang. Metode yang digunakan untuk menganalisis data menggunakan regresi logit dengan responden sebanyak 25 siswa yang aktif. Indikator untuk mengetahui prestasi belajar siswa menggunakan skala likets 1-4. Hasil penelitian yang telah dilakukan pad kelas kontrol dan kelas eksperimen menunjukkan ditemukan nilai thitung = 3,74 dan ttabel = 1,685 dimana thitung> ttabel, sehingga H0 ditolak dan Ha diterima. Maknanya, dapat ditarik kesimpulan bahwa penggunaan media visual dapat dijadikan sebagai media pembelajaran yang dapat meningkatkan prestasi siswa dibandingkan dengan media flashcard. Hal ini dikarenakan media visual memiliki daya tarik yang tinggi dan berwarna sehingga mampu menunjang proses pembelajaran. Media visual membuat proses pembelajaran menjadi mudah dilaksanakan karena dapat menambah fokus anak terhadap materi yang disampaikan.

Kata Kunci: Flashcard, media visual, peningkatan prestasi siswa

Abstract

This research originated from the problem of declining learning achievement of students of SD Negeri Sukun 3 Malang City One of the indicators of declining student learning achievement is the results of the odd 2023/2024 Mid-Semester Exam (UTS) which was carried out in September 2023. Of the 25 students who took part in UTS, KKM scores were obtained that did not meet the learning completeness. In the results of the 2023/2024 odd semester UTS held in September 2021, data was obtained that the average score of Grade VI students was still below the KKM score in English subjects. This study aims to determine the influence of flashcards and visual media in English learning on improving student achievement at SD Negeri Sukun 3, Malang City. The method used to analyze the data used logit regression with 25 active student respondents. Indicators to determine student learning achievement use a Likert scale of 1-4. The study Control class and experimental class results showed that the value of count = 3.74 and table = 1.685 where tcal> ttable so that H0 was rejected and Ha was accepted. This means that it can be concluded that the use of visual media can be used as a learning medium that can improve student achievement compared to flashcard media. This is because visual media has a high appeal and is colorful so it can support the learning process. Visual media makes the learning process It is easy to implement because it can increase the child's focus on the material presented.

Keywords: flashcards, Visual Learning Media, increased student achievement

INTRODUCTION

In the current era of globalization, language skills, especially English, are becoming increasingly important because they are a vital international communication tool. However, learning English at the elementary school level is often faced with various challenges, including a lack of adequate resources, difficulties in maintaining students' attention, and variations in students' ability levels, especially in mastering English.(Fransiska et al., 2023)

According to(Nurfadillah et al., 2021)"Learning media is anything (be it humans, objects, or the surrounding environment) that can be used to convey or channel messages in learning so that it can stimulate students' attention, interest, thoughts and feelings during learning activities to achieve goals.(Sanaki, 2013)said "learning media is stated as a component of learning resources that can stimulate students to learn". Based on the various opinions regarding learning media above, it can be concluded that learning media is anything that can convey messages so that learning objectives can be achieved well.

One of the learning media that can be used is visual media, which according to Sanjaya is media that can only be seen, does not contain sound elements.(Sanjaya, 2008)Visual media is media that involves the sense of sight. This media can only convey messages through the sense of sight or can only be seen with the eyes, other senses such as the ears cannot be used for this visual media.

According to(Mayasari et al., 2021)states that visual media itself has the meaning of media that only involves the sense of sight. Included in this type of media are print-verbal media, print-graphic media, and non-print visual media. First, visual-verbal media is visual media that contains verbal messages (linguistic messages in written form). Second, non-verbal-graphic visual media is visual media that contains non-verbal messages, namely in the form of visual symbols or graphic elements, such as images (sketches, paintings and photos), graphs, diagrams, charts and maps.

The use of flashcards and visual media has been widely recognized as an effective strategy in language learning, especially for young students at the elementary school level. Flashcards offer a picture- and word-based learning approach, which can help strengthen connections between visual concepts and words in the language being studied.(Sirait et al., 2023)Meanwhile, visual media, such as pictures, videos, and animations, can enrich students' learning experiences by providing concrete and situational examples of the material being studied, clarifying complex concepts, and improving memory.(Burhanuddin & Fitriani, 2024)

According to(Mayer, 2009)an expert in the field of educational psychology who specializes in the study of multimedia in learning, the use of flashcards and visual media in English language learning can have a significant positive impact on increasing elementary school student achievement. One of the principles put forward by Dr. Mayer's Modality Principle, which states that information presented in multimedia is better processed if the verbal representation is presented auditorily and the visual representation is presented visually. In the context of English learning, the use of flashcards and visual media combines verbal and visual representations in a way that is consistent with this principle, thereby increasing learning effectiveness.

In research (Azhima et al., 2021) stated that the use of flashcards can increase retention and understanding of material, especially in a learning context. Flashcards provide visualization that helps students to remember vocabulary and language structures more effectively. As well as in research(Kustandi et al., 2021)stated that visual media can enrich students' learning experiences by providing concrete examples of the material being studied. For example, images or videos can be used to show real situations in which the language being studied is used, thus clarifying the meaning and context of use. The combination of using flashcards and visual media in learning English can help students more easily remember vocabulary and language concepts, as well as

understand the use of words and sentences in the right context.(Himmawati, 2022)

However, although many studies support the effectiveness of using flashcards and visual media in language learning, not many studies have specifically explored the effect of the combination of the two on increasing student achievement at the elementary school level, especially in the context of language learning.(Kustandi et al., 2021). Therefore, this study aims to fill this knowledge gap by investigating the effect of using flashcards and visual media in English language learning on increasing elementary school students' achievement. By gaining a deeper understanding of the impact of the combination of the two, it is hoped that this research can make a significant contribution to the development of more effective and innovative language learning strategies at the elementary school level.(Anzari et al., 2023)

RESEARCH METHODS

The method used in this research is the experimental method. According to (Arifin, 2020) The experimental research method is a research method carried out by experiment, which is a quantitative method, used to determine the effect of the independent variable (treatment) on the dependent variable (outcome) under controlled conditions. The research method used in this research is quasi-experimental. This research is a type of quantitative research that is very strong in measuring cause and effect (Mukhid, 2021)

The design in this research is a non-equivalent control group design. In this case, subjects are not grouped randomly. This research will better value similar compared groups. In this design there is a pre-test of different treatments and there is a post-test. The advantage in this design is that the classes are used as they are. The possible influence of reactive implementation can be reduced. The experimental design is described as follows (Unaradjan, 2019).

Table 1. Experimental group design

Group	Pretest	Treatment	Posttest
Experiment	O1	X	O2
Control	O3	-	O4

O1 : Experimental class pre-test results
O3 : Control class pre-test results
X : Treatment in the experimental class (Flashcards and Visual Media)
O2 : Experimental class post-test results
O4 : Control class post-test results
------- : Indicates that the subject is not selected at random

This research was carried out at SDN Sukun 3 Malang City. The time for carrying out this research lasted for one month, namely in April 2024. The population in this research was class 5 students at SDN Sukun 3, Malang City 2023/2024, totalling 112 students and the sample in this research was class 5, class 5A and 5B. Totalling 56 children with 28 students in each class.

In general, this research went through several stages in its implementation which include: 1) Initial Stage: This stage begins with determining the sample and choosing which class will be used as the control class and the experimental class. Then, it continues with the instrument preparation stage in the form of multiple choice questions for the pre-test and post-test. However, before entering implementation, the questions first go through several processes such as validity testing, reliability testing, level of difficulty, and distinguishing power. 2) Implementation Stage: a) Carrying out a pre-test in the control class and experimental class to determine the extent of students' understanding of the material to be taught before treatment is carried out; b) Providing English lesson materials for Sub-theme 1 "Greeting" Sub-theme 2 "Formal and Informant Greeting" 6th Lesson; c) Carrying out post-tests in the control class and experimental class to determine the output/learning outcomes of students after treatment. Then, we can see the differences in learning outcomes in the two classes. 3) Data Processing Stage. At this stage,

the output (pre-test and post-test) from the two classes is analyzed so that the differences between the two classes can be seen. After that, conclusions can be made on the results of the analysis.

The instruments used in this research are test and non-test instruments. The test instrument in this research is a multiple-choice objective test with 10 questions. The aspects measured are students' learning outcomes during the pre-test and post-test. This was done with the aim of finding out whether there was an influence or difference between improving learning outcomes using flashcards and visual media. Learning outcome tests are related to learning outcomes which consist of 6 HOTS aspects, namely knowledge or memory (C1), understanding (C2), application (C3), analysis (C4), evaluation (C5), and creating (C6) while non-collection techniques -The tests in this research are in the form of observation, interviews and documentation.(Kusumastuti et al., 2020).

RESULTS AND DISCUSSION
Pre-test Results

A pre-test is a test carried out before treatment. The purpose of conducting a pre-test is to determine students' knowledge before learning about the material to be studied. The questions in the pre-test consisted of 10 questions in multiple-choice form. The results of the processing can be seen in the following diagram.

Table 2. Pre-test Results in the Control Class and Experimental Class

Information	Control Class	Experimental Class
Lowest Value	42	48
The highest score	68	78
Average	64.31	78.82
Level of Completeness	7	12

Judging from the diagram above, it can be seen that the percentage of average pre-test scores for experimental class students obtained an average score of 64.31 with a completeness level of 36.3%, while those in the control class obtained an average score of 78.82 with a complete level. 40.5%. There is not too much difference between the two classes.

Post-test results

Post-test is a test carried out after treatment or after the learning material has been delivered by the researcher. In the control class, conventional learning was implemented without treatment but was interspersed with the brief use of flashcards and visual media, while in the experimental class flashcards and visual media. The purpose of conducting a posttest is to find out whether there are differences between the learning outcomes of students in the experimental class and the control class after the treatment. The questions in the post-test consisted of 10 questions in multiple-choice form. The results of the processing can be seen in the following diagram.

Table 3. Pre-test Results in the Control Class and Experimental Class

Information	Control Class	Experimental Class
Lowest Value	62	70
The highest score	88	98
Average	64.8	82.7
Level of Completeness	13	21

Judging from the diagram above, it can be seen that the percentage of post-test average scores for experimental class students got an average score of 82.7 with a completeness level of 78%, while the control class got an average score of 64.8 with a complete level. Amounting to 56.5%. There are differences in learning outcomes in the two classes, where the results in the experimental class are higher than the control class.

Normality Test Results

In this study, normality testing was used with the Shapiro-Wilks test formula with a

significance level of 5% or α = 0.05. In the Shapiro Wilks test formula, data can be said to be normally distributed if the T3 value > P value based on the Shapiro Wilks table can be seen in the following table.

Table 4. Pre-Test Normality Test Results

Class	Test Type	T3	P(0.05)	Conclusion
Control Experiment	Shapiro Wilks (T3)	0.95 0.95	0.91	Normally distributed

Table 5. Post-Test Normality Test Results

Class	Test Type	T3	P(0.05)	Conclusion
Experiment		0.92		Normally
Shapiro Wilks		0.96	0.91	distributed
Control	(T3)			

Referring to the table above, the T3 value obtained in the pre-test for the experimental class and control class is 0.95 each, where T3 is 0.95 > P 0.91, which means the data is normally distributed. Apart from that, the T3 value obtained in the experimental class post-test was 0.92 where T3 0.92 > P 0.91, which means the data is normally distributed. Similar to the experimental class, the control class also has T3> P with a value of 0.96> 0.91. This indicates that the data in both classes, both pre-test and post-test, are normally distributed.

Homogeneity Test Results

The results of the homogeneity test on the final data are shown in the following table.

Table 6. Pre-Test Homogeneity Test Results

Data	S2	Fcount	Ftable	Results
Experimental Class pre-test scores	609.2			
		1.02	2.17	Homogeneous
Control Class pre-test scores	594.5			

Table 7. Post-Test Homogeneity Test Results

Data	S2	Fcount	Ftable	Results
Experimental Class post-test scores	332.6			
		1.18	2.17	Homogeneous
Control Class post-test scores	392.4			

Referring to the table above, the calculated F value for the pre-test in both classes is 1.02 while the F table is 2.17. The Fcount value is smaller than the Ftable value. Apart from that, the Fcount value obtained for the post-test in both classes was 1.18 while the Ftable value was 2.17. The Fcount value is smaller than the Ftable value. This shows that the two classes have homogeneous (same) variance. Hypothesis Test Results

a. Two Party Test (Pre-test)

The two-party test aims to prove whether the data used comes from the same initial conditions, where there are no significant differences in the data of the two groups used as research subjects with a significant level of α = 0.05 and dk = n1+n2-2. Proposed hypothesis:

Ho: μ1 = μ 2

Ha: μ 1 ≠ μ 2

Information:

μ 1: Average learning outcomes in the experimental class

μ 2: Average learning outcomes in the control class

The results of the two-party difference test can be seen in the table below.

Table 8. Two-Party Pre-test Results

Class	X	S2	Etc	tcount	ttable
Experiment	37.5	609.2	38	-0.386	1,685
Control	40.5	594.4			

Referring to the results of the analysis above, it was obtained -1.685 ≤ -0.386 ≤ 1.685 where according to the test, H0 was accepted, which means there is no difference between the learning outcomes of students who use false cards and those who use visual media.

b. One Party t-Test (Post-Test)

Previously it was known that the statistical prerequisite test results for post-test data were normally distributed and came from homogeneous (same) variances. Then, proceed to parametric statistics using the one-sided t-test formula, namely the right-sided test to find out whether the learning outcomes of students who use flashcards are better than the learning

outcomes of students who use visual media. The following is the hypothesis proposed:

Ho: μ 1 ≤ μ 2

Ha: μ 1 > μ 2

Information:

μ 1: Average learning outcomes in the experimental class

μ 2: Average learning outcomes in the control class

The results of the hypothesis test can be seen in the table below.

Table 9. Difference Test of Two Means (One Party) Post-test

Statistics	Experiment	Control
Number of Students (N)	25	25
Average value*x*)	78	56.5
Variance (S2)	332.6	392.4
Degrees of Freedom (dk)	38	
tcount	3.57	
ttable	1,685	
Decision	H0 is rejected, Ha is accepted.	

Referring to the results of the analysis above, the tcount value is 3.57 and ttable is 1.685. This means that tcount> ttable, so H0 is rejected and Ha is accepted. This means that the use of visual learning media is better than the use of flashcards in increasing student achievement.

Discussion

Based on the results of research tests that have been carried out, it is known that visual media can influence improving the learning outcomes of grade 5 students at SDN Sukun 3, Malang City. This is motivated by students' curiosity to learn new things, namely learning to use visual media. In this research, the visual media used is learning videos, namely animated videos or short documentaries that can explain concepts in an interesting and interactive way. Videos can provide visual explanations that are interesting and easy to understand. Besides that, it is supported by the design of flashcards which contain greeting words or phrases such as

"Hello," "Goodbye," "Good morning," "Good night," "How are you?" etc. In itself, according to students, it is less interesting and resembles monotony.

Furthermore, based on research data that has been carried out, the value of tcount= 3.74 and ttable= 1.685 is found, where tcount> table, so that H0 is rejected and Ha is accepted. This means that the use of visual media is better than flashcard learning media.

In connection with what has been stated above, visual media has been proven to have a positive impact on improving student learning outcomes. This is shown by the high enthusiasm and enthusiasm for learning of students during the research. They discuss with their friends on a forum. Apart from that, students access learning materials and do assignments independently via their respective PCs. In this way, students carry out learning activities well so that they are in line with the learning outcomes obtained. However, behind all of that, of course, they cannot be separated from the obstacles faced during the research, especially since this is something new for them. It is certain that they have not studied how to independently search for visual media that is appropriate to the material being taught.

Then, a pre-test and post-test were carried out to measure the extent of students' understanding before and after being given the lesson. The provision of material was carried out with the help of PowerPoint and Screen Projector. Students read prayers according to their respective beliefs. The researcher also started the learning by providing an apperception regarding the previous learning material and the material to be studied, then continued by answering the pre-test. After that, the material was given regarding Theme 6, Sub-theme 1 "Greeting" and Sub-theme 2 "Formal and Informant Greeting". The 6th lesson was continued by reading the teaching materials available in the archive and then directed to do the post-test. At the end of the learning activity, students draw conclusions about the learning that has been carried out.

After the learning was carried out, there were visible differences between the experimental

class and the control class, especially in increasing learning outcomes (output). In fact, the implementation of learning is carried out the same and there are no differences. The only difference is the form of media. This is because when using visual media students tend to be more interested because they can see directly what is being conveyed in the material it is more complete than flashcards and can make the class more dynamic because it allows interaction between the teacher and students and between their peers in terms of lessons or task.(Yantik et al., 2022). In addition, students' interest in learning in the experimental class was also higher compared to the control class. This is what causes differences in learning outcomes in the two classes.

The same is true of research conducted by(Zyra et al., 2022)The average learning outcomes of students in the experimental class were greater than those in the control class. He also added that the use of visual learning media is more effective in developing students' interests and learning outcomes. The application of visual media not only influences learning effectiveness but can also create a high level of student digital literacy.(Background, 2024).

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research conducted in the control class and experimental class, it was found that the value of tcount = 3.74 and ttable = 1.685 where tcount> ttable, so H0 was rejected and Ha was accepted. This means that it can be concluded that the use of visual media can be used as a learning medium that can improve student achievement compared to flashcard media. This is because visual media has high attractiveness and color so it can support the learning process. Visual media makes the learning process easy to carry out because it can increase children's focus on the material being presented.

From the conclusions obtained, the researcher recommends that schools review the implementation of the chosen learning media to develop increased student achievement. As well as reviewing learning environment factors that

may influence results, such as teacher quality and technology support in schools.

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