



Analysis of Reading and Writing Ability in terms of Student Learning Independence in the VARK assisted by Animation Video in Lower Class

Priyanti Heriastuti^{1*}; Kartono²; Syafruddin³

Terbuka University^{1*}, Semarang State University², Terbuka University³

Email: 1priyharyanto@gmail.com , 2kartono.mat@mail.unnes.ac.id , 3syafruddin@ecampus.ut.ac.id

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Abstrak

Penelitian ini bertujuan untuk menganalisis kemampuan membaca dan menulis siswa kelas II SD yang ditinjau dari kemandirian belajar dan gaya belajar VARK (*Visual, Auditory, Read-Write, Kinesthetic*) dengan bantuan video animasi. Penelitian ini menggunakan metode Sequential Explanatory dengan Simple Random Sampling, menggabungkan pendekatan kuantitatif dan kualitatif untuk memberikan gambaran yang komprehensif tentang pengaruh variabel-variabel tersebut terhadap kemampuan membaca dan menulis. Pada fase kuantitatif, desain penelitian eksperimen diterapkan dengan menggunakan Simple Random Sampling untuk memilih sampel dari populasi siswa kelas II. Data dikumpulkan melalui kuesioner kemandirian belajar, tes kemampuan membaca dan menulis, serta kuesioner gaya belajar VARK. Penggunaan video animasi dalam pembelajaran juga dinilai melalui observasi. Analisis data dilakukan menggunakan statistik deskriptif dan inferensial untuk mengidentifikasi hubungan antara kemandirian belajar, gaya belajar VARK, dan kemampuan membaca serta menulis siswa. Pada fase kualitatif, dilakukan wawancara mendalam dan observasi untuk mengkaji lebih dalam bagaimana video animasi dan gaya belajar mempengaruhi proses pembelajaran siswa. Data kualitatif diolah dengan analisis tematik untuk mengidentifikasi pola dan tema yang relevan. Hasil penelitian menunjukkan bahwa terdapat pengaruh signifikan antara kemandirian belajar dan gaya belajar VARK terhadap kemampuan membaca dan menulis siswa. Video animasi terbukti efektif dalam meningkatkan keterlibatan dan pemahaman siswa. Temuan ini memberikan wawasan penting mengenai bagaimana metode pembelajaran yang dipersonalisasi, berdasarkan gaya belajar dan kemandirian, dapat meningkatkan hasil akademik siswa. Penelitian ini merekomendasikan penggunaan video animasi dan pendekatan gaya belajar yang sesuai untuk mendukung proses pembelajaran di kelas rendah.

Kata Kunci: Kemandirian Siswa, Kemampuan Membaca dan Menulis, VARK, Vidio Animasi

Abstract

This study aims to analyze the reading and writing abilities of second grade elementary school students in terms of learning independence and VARK (*Visual, Auditory, Read-Write, Kinesthetic*) learning styles with the help of animated videos. This research uses the Sequential Explanatory method with Simple Random Sampling, combining quantitative and qualitative approaches to provide a comprehensive picture of the influence of these variables on reading and writing abilities. In the quantitative phase, an experimental research design was implemented using Simple Random Sampling to select samples from class II student population. Data was collected through a learning independence questionnaire, reading and writing ability tests, and the VARK learning style questionnaire. The use of animated videos in learning is also assessed through observation. Data analysis was carried out using descriptive and inferential statistics to identify the relationship between learning independence, VARK learning style, and students' reading and writing abilities. In the qualitative phase, in-depth interviews

and observations were conducted to examine more deeply how animated videos and learning styles influence the students' learning process. Qualitative data was processed using thematic analysis to identify relevant patterns and themes. The research results showed that there was a significant influence between independent learning and the VARK learning style on students' reading and writing abilities. Animated videos have proven effective in increasing student engagement and understanding. These findings provide important insights into how personalized learning methods, based on learning styles and independence, can improve students' academic outcomes. This research recommends the use of animated videos and appropriate learning style approaches to support the learning process in lower grades.

Keywords: Student Independence, Reading and Writing Ability, VARK, Animation Video

Introduction

UNESCO through LIFE is committed to increasing global literacy with inclusive and culturally sensitive education. The US National Writing Project shows best practices in teaching writing. Indonesian teachers are advised to adapt this international method to the local context and student needs. Mastering reading and writing skills in the 2nd grade of elementary school is important for student development, even though they often face challenges with independence and different learning styles.

The VARK model can help understand student learning styles in the categories of visual, auditory, reading/writing and kinesthetic to increase learning effectiveness. Animated videos are an innovative and effective tool in education, offering an engaging visual approach to simplifying complex subject matter, especially for 2nd graders.

Student independence is important in learning, including the ability to manage the learning process, manage time, and find solutions to difficulties. Important research analyzes the effect of animated videos through the VARK model on second grade elementary school students' reading and writing abilities as well as students' level of independence.

This research explores the relationship between learning styles, student independence, and the use of animated videos to improve reading and writing skills, providing important insights for educators. These findings can provide recommendations for developing teaching strategies that suit student needs.

The study analyzes the reading and writing skills of students at SD Negeri 02 Kesesi, Pekalongan, using the VARK learning model and animated videos, focusing on Indonesian language material "Expressions, Invitations, Commands, Refusal".

Method

This research uses a Mix Method approach with a Sequential Explanatory design. This method combines quantitative and qualitative approaches in stages, where the quantitative phase is carried out first to collect numerical data, followed by the qualitative phase to explore and explain the results of the quantitative phase. This approach allows researchers to gain a deep and comprehensive understanding of the relationships between the variables studied.

The research location was SD Negeri 02 Kesesi and SD Negeri 01 Sismulyo. The research sample was Class II of SD Negeri 02 Kesesi as the experimental class (class that used the VARK learning model assisted by animated videos) and II of SD Negeri 01 as the control class (ordinary class that used conventional learning models).

The research instrument was prepared to obtain complete data regarding the research topic using operational definitions. There are several instruments used: 1) Questionnaire to measure students' Learning Independence, 2) VARK Learning Style Questionnaire to identify students' main learning styles, 3) Reading and Writing Ability Test, 4) Observations and Surveys to measure the effectiveness of Animation Videos in learning, and 5) Simple Random Sampling to randomly select a sample of students from the class II population as research participants. This is done so that each student has an equal opportunity to be selected as a sample.

In the quantitative phase: data processing using statistical software to process questionnaire, test and survey data. Statistical analysis is carried out using descriptive and inferential analysis, such as t test, ANOVA, and regression analysis, to test the relationship between variables. Qualitative Phase: data

processing using interview transcripts and observation notes. Thematic Analysis uses thematic analysis to identify main patterns and themes from qualitative data.

Results and Discussion

The results of the validity of the reading and writing ability test show 10 valid questions with a reliability of 0.805. The questions are divided into 6 good categories and 4 medium categories with varying levels of difficulty, used in research in experimental and control classes. Experimental class = 27 class II students at SD Negeri 02 Kesesi, control class = 27 class II students at SD Negeri 01 Sidomulyo.

Table 1
 Average Reading and Writing ability

| Paired Sample Statistik | | | | |
|-----------------------------|-------|----|---------------|-----------|
| | Mean | N | Std deviation | Std Error |
| Pair 1 | | | | Mean |
| Sebelum diberikan perlakuan | 46,67 | 24 | 12,740 | 2,601 |
| Sesudah diberikan perlakuan | 82,08 | 24 | 12,151 | 2,480 |

The results of the test statistics can be seen in table 1. Based on the test statistics, the average results of students' reading and writing ability and learning independence in learning Indonesian before being given treatment were 46.67. The average reading and writing ability and learning independence of students in Indonesian language learning after being given treatment was 82.08.

Table 2
 Correlation of Ability and Writing

| Paired Sample Correlation | | | |
|--|----|-------------|------|
| | N | Correlation | Sg |
| Pair 1 Sebelum diberikan perlakuan & sesudah diberikan perlakuan | 24 | -.094 | .663 |

Based on the correlation data and average differences in table 4.9, the paired data has an insignificant correlation with a significant level coefficient of 0.663 - 0.05. The average difference in students' reading and writing abilities and learning

independence before and after being given treatment was 9.424 with a significance level of 0.00 - 0.05. Based on the test statistical results, there is a significant difference in the average reading and writing ability of students in learning Indonesian after using the Visual, Auditory, Read Write and Kinesthetic (VARK) learning model assisted by animated videos.><

Table 3
 Differences in Average Reading and Writing Ability

| Pair | Sebelum diberikan perlakuan | Sesudah diberikan perlakuan | Paired Differences | | | | t | df | Sig. (2-tailed) | | |
|------|-----------------------------|-----------------------------|--------------------|----------------|---|-------|---------|---------|-----------------|-------|------|
| | | | Mean | Std. Deviation | 95% Confidence Interval of the Difference | | | | | | |
| | | | | | Mean | Lower | | | | Upper | |
| | | | -35,417 | 18,411 | 3,75 | | -43,191 | -27,643 | -0,424 | 23 | .000 |

Based on the correlation data and average differences in table 4.9, the paired data has an insignificant correlation with a significance level coefficient of 0.663 > 0.05. The average difference in students' reading and writing abilities and learning independence before and after being given treatment was 9.424 with a significance level of 0.00 < 0.05. Based on the test statistical results, there are significant differences in the average reading and writing abilities and learning independence of students in learning Indonesian after using the learning model (VARK) assisted by animated videos.

The control class pre-test average = 66.15 and post-test = 74.1. Experimental class pre-test = 66.42 and post-test = 92.82. Using the VARK model with animated videos improves students' reading and writing skills and their learning independence. The analysis shows a correlation between student independence and reading and writing abilities. The research subjects showed a relationship between students' level of independence and their reading and writing abilities in accordance with Bandura's theory.

Table 4
 Student Independence

| Nomor | Kategori | Banyak Siswa | Persentase |
|-------|----------|--------------|------------|
| 1 | Tinggi | 14 | 53,3 % |
| 2 | Sedang | 8 | 33,3% |

Based on this table, it shows the results of data analysis of students' learning independence at SDN 02 Kesesi experimental class which was obtained based on the scores obtained from the questionnaire results. Of the 26 students, there were 2 students in the low category, 8 students in the medium category, and 16 students in the high category.

Determination of research subjects is based on the scores obtained from the student learning independence questionnaire. Six students were randomly selected as research subjects, namely two research subjects from the high independence category were named Research Subject 1 (SP1), and research subject 2 (SP 2), two research subjects from the moderate independence category were named Research Subject 3 (SP 3); and Research Subject 4 (SP 4); and two research subjects from the low student independence category were named Research Subject 5 (SP 5), and Research Subject 6 (SP 6).

Table 5
Student Independence in Reading and Writing Ability

| No | Subjek Penelitian | Post- Eks | Angket KP | Kategori |
|----|-------------------|-----------|-----------|----------|
| 1 | SP 1 | 90 | 94 | Tinggi |
| 2 | SP 2 | 100 | 93 | Tinggi |
| 3 | SP 3 | 70 | 67 | Sedang |
| 4 | SP 4 | 90 | 40 | Sedang |
| 5 | SP 5 | 60 | 35 | Rendah |
| 6 | SP 6 | 60 | 32 | Rendah |

Based on the table on the level of student independence regarding reading and writing abilities, it can be explained that students who have a high level of independence, they also have high reading and writing abilities. Students who have a moderate level of independence have moderate reading and writing abilities, but their results can be high. Students who have a

low level of independence have low reading and writing abilities. This is in accordance with Bandura's opinion (as quoted in D Septiani, et al, 2014), students with low independence are doubtful about their abilities. People who have low independence or lose independence have negative feelings about themselves, have weak confidence in their abilities and have inaccurate knowledge of their capacities (Winarso W., 2018).

Based on analysis of research data, the effectiveness of the Visual, Auditory, Read-Write, Kinesthetic (VARK) learning model assisted by Video Animation shows the results of the ability to read and write material: phrases, command sentences, invitation sentences and refusal sentences for class II students at SD Negeri 02 Kesesi, Individually, they achieved more than 67 levels of completeness, more than 75% of classical completeness, and the effectiveness of increasing the average reading and writing ability was higher, compared to using conventional learning models, namely lectures and questions and answers. The results of this research show that learning using the Visual, Auditory, Read-Write, Kinesthetic (VARK) learning model is effective for improving students' reading and writing abilities.

The Visual, Auditory, Read-Write, Kinesthetic (VARK) (VARK) learning model (VARK) assisted by animated videos has a role in inviting students to be active, think about solving problems by identifying problems and then finding solutions through repeated practice, especially in solving problems related to material: Phrases, command sentences, invitation sentences, and rejection sentences. The application of the Visual, Auditory, Read-Write, Kinesthetic (VARK) learning model assisted by animated videos in experimental classes is able to increase students' reading and writing abilities, because teaching aids will help students capture the understanding given by the teacher, as well as to concretize abstract concepts. become concrete.

Students' reading and writing abilities can be improved through effective learning by achieving learning objectives. Effective learning involves human factors, facilities, equipment, and procedures that positively influence student behavior. The effectiveness of learning is measured by the goals achieved and appropriate

management of the situation. This study shows that the VARK learning model assisted by animated videos is effective in improving students' reading and writing skills. The experimental class with the VARK model shows better improvement than the control class with conventional methods. Student independence also influences reading and writing abilities, where students who have a high level of independence tend to have better abilities than those who have a low level of independence. The VARK learning model with animated videos can increase students' learning activities as well as their reading and writing abilities.

Conclusion

Based on the problem formulation that has been formulated in this research, it can be concluded that the effectiveness of the VARK learning model assisted by animated videos and the VARK (Visual, Auditory, Read-write, Kinesthetic) learning model assisted by animated videos has proven to be effective in improving students' reading and writing abilities. Animated videos support the various learning styles identified in the VARK model, allowing students to receive information in a way that suits their individual learning preferences

This learning model has proven effective in improving students' reading and writing skills. Animated videos support the various learning styles identified in the VARK model, allowing students to receive information in a way that suits their individual learning preferences. The application of animated videos in the learning process results in significant improvements in students' reading and writing skills in class II elementary school. This shows that animated videos can enrich learning

experiences and provide the stimulation needed for the development of literacy skills.

Students' reading and writing abilities in the VARK model assisted by animated videos are also influenced by the level of student learning independence. Students who demonstrate higher levels of learning independence tend to experience greater improvements in reading and writing abilities. Animated videos function as a tool that supports independent learning by providing material that is interactive and can be accessed independently, and allows students to learn at their own pace and learning style. This confirms that independent learning plays an important role in the effectiveness of the VARK model and the use of animated videos in improving literacy skills.

Based on the results of the research analysis, it is recommended that teachers use the VARK (Visual, Auditory, Read-Write, and Kinesthetic) model assisted by animated videos which have been proven effective in learning Indonesian so that it can be used as an alternative in learning Indonesian, especially in improving reading and writing skills. material for expressions, invitations, commands, refusals. To maximize students' potential in reading and writing abilities, it is important to consider and integrate learning techniques that are appropriate to the individual's level of learning independence. Using animated videos as a learning tool can help create an environment that supports all students in improving their reading and writing. Thus, developing learning strategies that support student learning independence is key in efforts to improve overall reading and writing among students. Because the level of student learning independence has a significant influence on their ability to read and write.

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Curriculum Vitae

Priyanti Heriastuti, born in Pekalongan on March 4 1982, is currently pursuing a Master's program in Basic Education. She completed her basic education at Kalimade State Elementary School in 1994, then continued to SMP Negeri 1 Kesesi, graduating in 1997. Priyanti continued her secondary education at SMAN 1 Kesesi and graduated in 2000. After that, she earned a Bachelor's degree from IKIP PGRI Semarang in 2004. Started his profession as a teacher at SD Negeri 05 Kesesi from 2004 to 2015. Then, continued his career as a teacher at SD Negeri 02 Kesesi from 2015 to 2024. Currently, he serves as Principal at SD Negeri Karangrejo.