

The Guided Note-Taking Method Assisted by Video Media on Science Learning Outcomes in Society Era 5.0

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ABSTRAK

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Rendahnya hasil belajar IPA siswa sekolah dasar disebabkan karena kurangnya minat siswa untuk belajar, siswa malas mencatat, serta kurangnya media yang mendukung pembelajaran dikelas. Tujuan dari penelitian ini adalah menganalisis penggunaan metode Guided Note Taking yang berbantukan media video terhadap keberhasilan belajar saintifik siswa dalam materi pendengaran manusia. Penelitian ini menggunakan metode penelitian kuantitatif eksperimen yaitu quasi experimental design. Instrumen pengumpulan data menggunakan dokumentasi, angket dan tes. Populasi yang digunakan dalam penelitian berjumlah 30 siswa. Sampel penelitian ini diambil dalam dua kelas yang ditentukan dengan teknik simple random sampling, masing-masing kelas berjumlah 15 peserta didik. Formulir tes dan angket digunakan sebagai instrumen pengumpulan data. Teknik analisis data yang digunakan yaitu statistic inferensial. Hasil penelitian vaitu ada pengaruh penggunaan metode Guided Note Taking berbantuan media video terhadap hasil belajar IPA di era society 5.0. disimpulkan bahwa penggunaan metode Guided Note Taking berbantuan media video dapat meningkatkan hasil belajar siswa sekolah dasar. Implikasi penelitian ini yaitu metode Guided Note Taking berbantuan media video dapat diterapkan guru dalam pembelajaran IPA sehingga dapat meningkatkan minat siswa dalam belajar dan berdampak pada hasil belajar siswa.

ABSTRACT

Elementary school students' low science learning outcomes are caused by a lack of student interest in learning, students' laziness in taking notes, and the lack of media that supports learning in class. This study aimed to analyze the Guided Note Taking method assisted by video media on the success of students' scientific learning in human hearing material. This study uses a quantitative experimental research method, namely a quasi-experimental design. Data collection instruments use documentation, questionnaires and tests. The population used in the study amounted to 30 students. The sample for this research was taken in two classes determined by a simple random sampling technique; each class consisted of 15 students. Test forms and questionnaires are used as data collection instruments. The data analysis technique used is inferential statistics. The study results show the effect of using the Guided Note Taking method assisted by video media could improve the learning outcomes of elementary school students. This research implies that teachers in science learning can apply the Guided Note Taking approach assisted by video media to increase students' interest in education and impact student learning outcomes.

1. INTRODUCTION

Superior human resources can be one of the components to be achieved, of course, through education. Education can be seen as a process in which teachers guide students to ensure that they learn helpful information that will further their growth (Emilzoli et al., 2021; Nugraheni et al., 2021). Through learning activities, students are expected to obtain information, understanding, skills, attitudes, and human values. Teachers and students participate in learning activities that shape education (Kholifah, 2020; Silvia et al., 2019; Winarni et al., 2021). The instructor must instruct, whereas the student's activity is to learn; hence, these two actors exhibit distinct behavior (Lee & Martin, 2020; Sudirman, 2019). Learning is also

inextricable from Education, which occurs through various ties between teachers and students. Teachers and students can interact directly through personal activities or indirectly through educational media by seeing, observing, and understanding to achieve goals (Churchill et al., 2013; Yemi et al., 2018).

Learning outcomes, in general, can be used as material and benchmarks for the teacher's success in learning so that it can also be used as an evaluation of performance (Kintu et al., 2017; Purwanita et al., 2019; Rahayu & Sukardi, 2021). The mastery and talents of a teacher can impact the outcomes of instruction. Especially when studying science, students can become bored and unmotivated to learn if they are subjected to monotonous content explanations (Arnas et al., 2021; Winarni et al., 2021). Effective teaching and learning approaches contribute to one of the most efficient and inclusive learning outcomes. Adapting the provided content to the conditions of the pupils and the available options is a successful strategy. Participation of students in the learning process is required, for instance, to record what the teacher explains (Blanchard et al., 2016; Riska et al., 2018).

Based on the results of investigations at SD Negeri Mangunrejo 1, examples frequently occur in teaching. Learning approaches involve the traditional delivery of material by teachers, where interaction in the learning process is predominantly unidirectional. Provide learners with the opportunity to expand their knowledge. As a result, student learning outcomes did not exceed the KKM standards established by SD Negeri Mangunrejo 1, which required a minimum score of 70. In the meantime, teachers were free to employ various teaching approaches and methodologies that foster the development of subjects, skills in the activity, student attention, and participation, enriching the educational process (Puspasari, 2017).

In traditional learning or delivery of conventional content, the teacher or teacher typically writes definitions, hypotheses, and proof of the material being addressed on the blackboard while delivering informal and quick conversational explanations to help pupils comprehend a lesson (Suharti et al., (Ihsan & Saputra, 2019; Wulandari et al., 2019). Students must take notes as a result of studying this strategy. However, there are preeminent enrollment issues with this traditional teaching method. Often, students need help comprehending the information delivered in class because they are too preoccupied with their books and note-taking. Because several students need to incorporate the instructor's verbal instructions in their notes, it might be challenging to comprehend the material's content (Ma'mun, 2021).

Conventional learning is also allegedly dull for students, especially young students, for example, elementary school students, because of repetitive or repeated teaching (Muhammad et al., 2016; Suryaningsih et al., 2017). Moreover, elementary school students are at an age where children prefer to play and explore many new things to improve their social and cognitive abilities (Basri, 2018; Nathalia et al., 2015; Putriani et al., 2014). Because in conventional learning styles, teachers are valued not giving or channeling the knowledge they know to students but rather delivering repeated material (Novianta, 2022). This causes students' ability to master material tends to be lacking and also the minimal ability to think critically (Dewi, 2020; Pertiwi et al., 2019).

Based on this description, teachers must be innovative in creating a comfortable and structured learning atmosphere to improve student learning outcomes in science lessons (Suantara et al., 2019; Widani et al., 2019). The guided note method, or Guided Note Taking, is a learning method in which the teacher creates schemes or charts that can help students record the material provided by filling in points in the learning process (Fadhashar et al., 2017; Riska et al., 2018). Students can focus and contribute to learning by filling in the dots on the worksheets provided, so students do not just listen or take notes while studying. However, when the material is presented, students are encouraged to read the results of their worksheets or collect them (Christianti et al., 2012).

The Guided note-taking method that is collaborated through the use and integration of online learning video media as part of teaching and learning activities has the potential to be effective in attracting students' attention (Puspasari, 2017; Rahmawati, 2021). This method can motivate them to learn, positively affecting learning outcomes. One of the hallmarks of education in society 5.0 is the use of online-based learning media facilities, which are regarded as capable of maintaining the function of current education (Bhakti, 2018). Video is an audio-visual medium that simultaneously displays images and sound (Maryam et al., 2020). The purpose of using this media is to assist teachers in explaining the material and providing more apparent illustrations than book illustrations.

Compared to the guided note-taking method, conventional learning will appear more straightforward and more efficient in conveying the material to students. However, we must be aware and mindful that standard learning approaches can only be practical for some pupils due to variances in individual focus levels (Anggreni et al., 2017; Prabaningrum & Putra, 2019). In addition, conventional learning methods tend to emphasize the memorization of concepts over students' critical thinking skills (Ana, 2017). Conventional learning can happen because sometimes the teacher wrongly assumes that a successful learning program is when the delivery of material in the curriculum is complete or complete (Arisantiani et al., 2017; Puspasari, 2017). In this case, teachers often use telling mode (providing the

information) rather than direct performance and demonstrations (providing opportunities for direct performance). In other words, by strictly following the order of material suggested by the curriculum, teachers more often use lecture or drill procedures or methods.

Guided note-taking has increased student learning activities and outcomes (Mansur & Loli, 2019). In line with the results of research conducted by Angga et al., obtained through the pretest and posttest, then analyzed using the t-test. The hypothesis is that the Guided Note Taking model affects the thematic science learning outcomes of class V SD Negeri 29 Dompu learning 2021/2022 (Putra et al., 2022). In other words, taking notes is better than not taking notes if we want our students to remember and understand more of what they learn in our classes. It is based on the idea that taking notes requires hard work and spurs effort on the part of students. With the Guided note-taking method, the teacher or teacher actively encodes information into words or pictures for students rather than passively absorbing it. In addition, by storing information in a new place, this teaching method allows students to review that information later and reinforces the learning that occurred the first time. Based on this background, the purpose of this study was to analyze the effect of using the Guided Note Taking method assisted by video media on the success of students' scientific learning in human hearing material.

2. METHOD

In this study, researchers tried to use quantitative methods with mixed methods combined with quasi-experimental design methods. The experimental research method is used to find or prove something through experiments (Sugiono, 2015). Using this method, researchers can measure the effect of an outcome under controlled conditions. However, by using this quasi-experimental design method, the control group does not play a role in taking control over external variables that can affect the implementation of the experiment. The reference population used in this study were students in class IV, with a total of 30 students at *SD Negeri* Mangunrejo 1. The test sample was selected from two classes using the simple random sampling method, namely, with class IV A as the test class and IV B as the control class, each of which has 15 students. In this study, it was also determined that there were independent variables or independent variables. Variables can influence the dependent variable, in other words, the variable that causes the dependent variable. While the independent variable in this study is the guided note method supported by video media, the other variables. Independent variables that are neither bound nor controllable nor often called independent, in this case, refer to the learning outcomes of class VI students at *SD Negeri* Mangunrejo 1.

In this study, the researcher will first choose a method that can be used as a benchmark to help collect data. The tool is a test question and a questionnaire sheet which will be filled in later. The data analysis technique this time uses SPSS 22 communication capabilities. The results of the values belonging to the 'normal' and 'homogeneity' categories need to be tested again using the method as a requirements test. If the Significance score > α (0.05), Ho is included in the accepted category status, meaning that the data is pretty distributed and homogeneous. After that, nonparametric statistics will be tested again with Mann Whitney to take and get the results as a conclusion. If the acquisition of Sig. (2-tailed) < 0.05, so Ho is the unacceptable status due to the possibility that there may be some differences between the experimental class and the limited class so that the treatment given can be said to be ineffective.

3. RESULT AND DISCUSSION

Result

No	Variance sources	Test	Control
1	Ν	15	15
2	The lowest scores	53	67
3	The highest scores	99	100
4	Average	86.80	83.27

Table 1. Test Class and Limited Class Questionnaire Scores

Based on the results of the data analysis on Table 1, the average score of the results of the questionnaire and the control class test was 83.27. The results of processing the opinion poll data, we obtained the test results are presented in the form of Table 2.

No	Class	Significance value of Kolmogrov – Smirnov	Description
1	Trial class	0.060	Normal
2	Limited class	0.200	Normal

The results of significance can be seen from > 0.05, meaning that Ho's status is accepted and that the data from the opinion poll are included in an appropriate state so that it can be continued with homogeneity. Based on the results of data analysis, the results of the homogeneity test were 0.807. The homogeneity test of the opinion questionnaire shows that the significant value exceeds 0.05. Hence, Ho is in the accepted status, which means that the opinion questionnaires in the experimental and control classes have a similar and equivalent number of values. After the data has passed, proceed to hypothesis testing to draw accurate and credible conclusions.

Based on the results of the Mann Whitney test, which is 0.002. Asymp results. Sig (2-tailed) proves <0.05, so Ho is not accepted/rejected. According to the survey, the experimental class and the control class in using guided note-taking techniques through video media facilities influenced the science learning of class IV students at SD Negeri Mangunrejo 1. Meanwhile, based on the results of the last trial, it can be observed in Table 3.

Table 3. Trial Class and Limited Class Final Test Scores

No	Variance Sources	Test	Control
1	Ν	15	15
2	The lowest scores	69	65
3	The highest scores	87	84
4	Average	78.40	77.27

Based on the results of data analysis, the average final exam score for exam class and limited class was 77.27. Based on the results of processing the questionnaire information that tested, the results obtained from a normality test are attached in Table 4.

Table 4. Final Results of Normality Test

No	Class	Significance value of Kolmogrov - Smirnov	Description
1	Trial class	0,200	Normal
2	Limited class	0,200	Normal

The results of significance > 0.05 so that Ho is accepted, which means that the questionnaire data is normally distributed, so it can be continued with a homogeneity test. Based on the results of the analysis of homogeneity test data, a value of 0.879 was obtained. The homogeneity test is the final test with a significance greater than the limit of 0.05, so it is accepted, which means that the final test scores in the experimental and limited classes have similar variances. Data that has met the prerequisite tests, after which it is tested hypotheses to be able to conclude.

Based on the results of the Mann Whitney test, a value of 0.000 was obtained. Asymp results. Sig (2-tailed) proves <0.05, so Ho cannot be accepted/rejected. This hypothesis means that the experimental and control classes using the Guided Note Taking method assisted by video media affect the results of learning science acquisition for fourth-grade students at SD Negeri Mangunrejo 1, as indicated by the results of the final test. Based on the hypothesis, along with the questionnaire hypothesis and the results of the final test, it was concluded that the use of the Guided Notes Taking method with the help of video media on the acquisition of science learning outcomes for fourth-grade students at SD Negeri Mangunrejo 1 showed a significant effect.

Discussion

Based on the questionnaire and the final test of learning outcomes, the two data show the impact of the Guided Note Taking method aided by video media in the 5.0 age. The application of the Guided Note Taking method, which is supported by video media to student learning outcomes, is practical. Because during the learning process, the video becomes an instrument that can attract students' attention and cause

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them to concentrate on the teacher's explanation using video media. The use of learning videos makes students enthusiastic about participating in learning (Daryono et al., 2021; Febriani, 2017; Riyanto et al., 2019). This strategy can help train students to be more engaged in teaching and learning, as they must fill in the blanks on the handout while attending to the teacher's explanation (Fadhashar et al., 2017; Rahmawati, 2021). Guided note-taking learning practices can improve the classroom experience to be more exciting and diversified, as well as inspire students' central critical thinking to generate limitless creativity. Students get active because they are participating in teaching and learning, stimulating their desires and focusing their attention on the teacher-provided manual and materials (Hayati & Lailatussaadah, 2016; Ningsih & Gustimalasari, 2018; Yemi et al., 2018).

The academic achievement of fourth-grade learners at SD Negeri Mangunrejo 1 revealed that the class with the most significant score, 87, was followed by the class with the lowest score, 69, with an average score of 78.40. Meanwhile, the gains made by the control group ranged from a high of 84 to a low of 65, with an average of 77.27. Then experiment to test the null hypothesis, where the null hypothesis is rejected if the Asymp. Sig (2-tailed) values are 0.000 0.05. In other words, the existence of these gains demonstrates that there are differences between the experimental and control classes due to the application of the Guided Note Taking method facilitated by video media to the science learning outcomes of fourth-grade students at SD Negeri Mangunrejo 1.

The instructor must prepare students for active participation in learning activities through resources used for student learning and must continue to direct these activities. Assist pupils when the topic matter is unclear. The usage of video media in education can also assist instructors with subject content and explanations (F. F. Dewi & Handayani, 2021; Kamelia, 2019; Prasetya et al., 2021). They can boost students' topic knowledge and creativity more than picture books, encouraging active learning and optimizing outcomes. Video-based online learning tools characterize education in the modern period. 5.0 to keep existing academic responsibilities (Bhakti, 2018; Widiarti et al., 2021; Wijaya et al., 2021).

In current society's 5.0 era, it is evident that all areas, including education, have been digitized and changed into more efficient practices. Educational activities are driven by technological advancements ranging from paper-based texts to e-books (Jamali et al., 2019; Rokhim et al., 2020). Good literacy skills are essential for students to be successful (Asad et al., 2020; Rubini et al., 2018). Reading and understanding is a fundamental skill that allows young children to learn. After reading fluency and comprehension, according to many researchers, comes writing. However, it is not easy to track the reading habits of paper-based students. Moreover, of the lesson, the success of this guided note-taking teaching method is attributable to the era and developing technology that has enabled educators to comprehend the personalities of their students and make classical learning styles, considered tedious and irrelevant, more effective and efficient (Dantas & Cunha, 2020; Lwande et al., 2021). This is proven to help teachers find efficient learning styles.

4. CONCLUSION

In general, based on the analysis of the results of this experiment, it was determined that the guided note-taking method utilizing video media influenced the acquisition of human hearing-related science knowledge by students in Class IV at SD Negeri Mangunrejo 1. The guided notes discussing the approach boost students' comprehension and recall of the material delivered by the teacher by focusing their attention on the media.

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