Project-Based Learning Model Assisted by Audio Visual Media Improves Description Writing Skills of Fifth Grade Elementary School Students

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ABSTRACT

Students’ skills in writing descriptions still need to improve. The lack of application of innovative and varied learning models causes it. This study aims to analyze the effect of the PjBL model assisted by audio-visual media on the descriptive writing skills of fifth-grade elementary school students. This type of research is quasi-experimental with a non-equivalent control group design. The population in this study were all fifth-grade students, totaling 310 students. The research sample was determined by cluster random sampling technique with a total of 32 students and fifth-grade students. The method and instrument used in this research was a test of Indonesian writing skills. Research data were analyzed using descriptive analysis techniques and inferential statistical analysis techniques. The result of the analysis is that the PjBL model assisted by audio-visual media affects the description writing skills of fifth-grade elementary school students. It was concluded that the PjBL model, assisted by audio-visual media, improved the descriptive writing skills of fifth-grade elementary school students. The implication of this research is using the PjBL model assisted by audio-visual media to help students learn so that it is suitable for learning, especially in Indonesian language content.

1. INTRODUCTION

As social creatures, humans cannot stand alone. In everyday life, humans need the help of communication tools to interact with each other, which is called language. Language is a communication tool that humans use to communicate and interact with the surrounding community, both orally and in writing (Azmi & Syahrul, 2020; Mulyani & Syahrul, 2020; Puspitasari et al., 2020). With the ability to speak, humans can express their thoughts, desires, or feelings to others (Desimyari & Manuaba, 2019; Indriani, 2016; Yanti, 2022). Anyone commonly uses language anywhere, in formal and non-formal situations, from places to study to places to earn a living. Language is the main factor determining success in studying a field of education. Considering the importance of language in education, language lessons are...
implemented in schools, including Indonesian (Alviolita & Huda, 2019; Sriani et al., 2015). Indonesian is one of the subjects that must be taught at the formal education level, be it elementary school, middle school, or college. It is very important to emphasize Indonesian language lessons, especially in elementary schools, because it teaches students various basic skills needed to develop themselves at a higher level of education (Darmawati et al., 2021; Nani & Hendriana, 2019). Learning Indonesian in elementary school teaches four language skills, which are important assets students must have. The four components of language skills are listening, speaking, reading, and writing. These four skills can never stand alone when used as a communication tool. They are interrelated and determine each other (Aiz et al., 2021; Dewi et al., 2019; Ridwan, 2021). Writing is a person’s skill in expressing all ideas, messages, feelings, or experiences in written form, which are arranged using clear sentences so that other people can understand the meaning conveyed according to the author’s purpose (Akbar et al., 2020; Anriyani, 2019; Isman et al., 2022). When a student wants to say something, it must be connected to reading, listening, and writing skills. Likewise, when a student wants to write, it must be connected to listening, speaking, and reading skills. Students can be language-skilled if they have mastered these four aspects and communicate using good and correct language (Bagus, 2017; Yantta, 2017). Skills can be developed and perfected through continuous practice and practice. One of the language skills that a student needs to master is writing skills. Writing skills in elementary school are usually associated with learning to compose (Ardiansyah & Suryana, 2018; binti Bachtiar, 2016). Writing and composing exercises in Indonesian language learning can familiarize and train students to apply linguistic knowledge such as grammar, style, and spelling (Sukma & Amalia, 2021; Triaji et al., 2019). One form of writing is a descriptive essay. A descriptive essay is a piece of writing that describes or describes an object, location, situation, or thing using words based on the results of observations of our five senses. Therefore, by mastering writing skills, a person can express their ideas, thoughts, and feelings through various writing forms to others.

Based on the results of interviews with each fifth-grade elementary school teacher, information was obtained that students’ skills in writing descriptions still needed to be higher. It is caused by several factors, namely, the need for more implementation of innovative and varied learning models. Learning in the 2013 curriculum is carried out using a scientific approach, which includes learning experiences in the form of observing, asking questions, gathering information (trying), reasoning (associating), and communicating. Minister of Education and Culture Regulation No. 22 of 2016 requires implementing research/discovery-based, problem-solving, and project-based learning models to gain these five experiences. However, the reality is that Several learning models required by the government to be implemented in the 2013 curriculum have yet to be implemented in the learning process regarding writing descriptive essays. Students need help expressing their ideas in written form, which also becomes an obstacle in making an essay. Sometimes, other students who already have ideas also experience difficulty when asked to express their thoughts or thoughts in the form of an essay. This is due to the students’ low mastery of vocabulary. In addition, students need help arranging words into coherent sentences and paragraphs. Usually, the average student can only write an essay with a maximum number of sentences of 6 to 8 sentences and a minimum of 4 to 5 sentences. Facing this problem, innovation is needed to improve students’ learning to write descriptive essays. One innovation teachers can provide is implementing a project-based learning model assisted by audio-visual media during learning. The Project Based Learning model is a form of innovative 21st-century learning that is student-centered, which positions the teacher as a facilitator and gives students the freedom to carry out independent learning (Sudana et al., 2019; Yusti et al., 2021). In this learning model, students can determine solutions to problems related to real life, increase creativity, find unique solutions based on their experiences and thoughts, and create more meaningful and memorable learning activities (Aranti, 2018; Mahpudin, 2021; Melindawati et al., 2021). Through project-based learning, the learning process begins by asking determining questions and guiding students through collaborative projects that bring together various learning materials. Project Based Learning is a learning model that uses problems as the first step in learning and product creation as the final step, which aims to provide an understanding of critical, creative, innovative thinking and other positive activities (Guo et al., 2020; D. Handayani et al., 2021). This strategy is very suitable for improving descriptive writing skills because it requires students to work together to solve a problem and think to produce a real product in the form of writing from the problem. Learning will be easy to understand if learning media supports learning activities. Learning media is divided into three types: audio, visual, and audio-visual (Baharan et al., 2020; Irawan & Suryo, 2017). Technology is no longer foreign to the millennial generation. The audio-visual media is a special attraction for students, especially those with high curiosity in elementary school. Audio visual media is a learning media that has elements of images and sound, so this type of media is said to have better capabilities because it contains two types of media at once, namely audio media and visual media (Ari Cahyani et al., 2019; Artini, 2019; Tondang, 2023). Through audio-visual media that displays the reality of the material,
students can provide real experiences when studying it (Handayani et al., 2017; Karisma et al., 2019). Therefore, audio-visual media can help students when writing an essay because students can directly observe the actual form of objects, observe the process of change, observe color differences, and observe movements accompanied by sound. Based on the background explanation of the problem, this research aims to analyze the influence of the PjBL model assisted by audio-visual media on the descriptive writing skills of fifth-grade elementary school students.

2. METHOD

The type of research carried out in this research is quantitative research. The experimental unit is a class in this research, so the research used is quasi-experimental design. The experimental design used was a non-equivalent control group design. This non-equivalent control group design has two groups: the experimental and control groups. This research was preceded by a pre-test for the control and experimental groups to determine students' initial skills in writing descriptions. After that, treatment was given to the experimental group, namely by giving the PjBL model treatment assisted by audio-visual media. Then, after being given treatment, a post-test was carried out on the experimental and control groups. The post-test is the final test, which is research data that will be analyzed to draw research conclusions. The implementation of this research consisted of three stages: the preparation stage, the implementation stage, and the final experimental stage. In determining research subjects, the first step taken in this research was to determine the population to be studied. The population in this study were all fifth-grade elementary school students in the Patimura Cluster, South Denpasar, consisting of 11 classes in 5 elementary schools with a total of 310 students. Based on the results of interviews obtained during observations from the principal and fifth-grade homeroom teacher at each Gugus Patimura South Denpasar school, information was obtained that the fifth grade of the eleven state elementary schools at SD Negeri Gugus Patimura Denpasar Selatan was distributed evenly academically so that there was no There are superior and non-superior classes in each school at Gugus Patimura Elementary School, South Denpasar. Students with high, medium, and low abilities are placed more randomly in each class to create a heterogeneous learning environment. After knowing the population, the next step is determining the research sample. The aim of using samples is to save time, energy, and costs in conducting research.

Based on the population of fifth-grade elementary school students in the Patimura Cluster, South Denpasar, a cluster random sampling technique was used to determine the sample in this study. Classes are selected as they have been formed without interference from other people, and individual randomization is not carried out. The possibility of influences from the condition of students knowing that they are involved in the experiment can be reduced so that this research truly describes the effect of the treatment given. In this technique, each class has the opportunity or chance to be used as a research sample. Before carrying out the sampling technique using cluster random sampling, the population was first equalized by giving a pre-test to all fifth-grade students in the population. Then, from the pre-test results, prerequisite tests were carried out: the data normality test using the Kolmogorof-Smirnov test and the homogeneity test using the Bartlett test. After the pre-test data is declared normal and homogeneous, it can be continued with an equality test using the Anava test. Data collection methods are methods or techniques used to collect research data. Several types of data collection methods can be divided into two types, namely test and non-test methods. The method used in this research is an Indonesian writing skills test. Data on Indonesian writing skills was collected from fifth-grade elementary school students. The instrument grid contains information used to reference research instrument questions. Preparing the instrument grid is an important step before writing the questions. The indicators contained in the grid are adjusted to the curriculum and teaching materials. The grid of research instruments used can be seen in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Basic competencies</th>
<th>Indicator</th>
<th>Number of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.8 Representing events or actions by paying attention to events that occur in</td>
<td>4.8.1 Write an essay describing</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>printed media or images</td>
<td>events or actions that occur in print media or images using your language</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Description of writing skills test instrument
After the instrument is prepared, it is tested to determine the suitability of the instrument so that it can be used as a research instrument. The descriptive writing skills instrument was tested through several content validity and reliability tests. Data collected during research needs to be analyzed. The analytical techniques used to analyze the data in this research are descriptive statistics and inferential statistics. Descriptive statistical analysis techniques in this research were used to describe test score data for descriptive writing skills in groups of students taught using the PjBL model assisted by audio-visual media and groups not taught using the PjBL model assisted by audio-visual media. The average (mean), standard deviation, and variance are calculated in processing this descriptive statistical data. Inferential statistical analysis is a way of processing data by applying inferential statistical formulas to test proposed research hypotheses and draw conclusions based on the results of hypothesis testing (Agung, 2014). In this case, the data analysis technique used to test the hypothesis is the t-test. Before the t-test is carried out, the analysis prerequisite tests must first be met, namely the normality of data distribution test and the homogeneity of variance test.

3. RESULT AND DISCUSSION

Result

The resulting data in this study describes the average (mean), middle value (median), mode, standard deviation, and variance of post-test score data on students’ descriptive writing skills. From this research, two groups of data were obtained, namely data on the descriptive writing skills of the experimental group and the control group obtained from the results of post-test score analysis. The experimental group in this research was class VB SD No. 3 Sesetan, totaling 32 students. At the start of the research, students were given a pre-test, then continued with treatment by applying the PjBL model assisted by audio-visual media for six meetings. At the end of the research, students were given a post-test. The data that has been obtained is then analyzed to determine the average (mean), middle value (median), mode, standard deviation, and variance. Post-test score data description of the control group’s descriptive writing skills: The lowest score was 45, the highest score was 80, and the average was 66.45. The control group in this study was the VA class of SD No. 7 Sesetan, totaling 31 students. At the start of the research, students were given a pre-test, then continued with learning, as usual, using models other than the PjBL learning model for six meetings. Then, students were given a post-test at the end of the research. The data that has been obtained is then analyzed to determine the average (mean), middle value (median), mode, standard deviation, and variance. Post-test score data description of the control group’s descriptive writing skills: The lowest score was 45, the highest score was 80, and the average was 66.45.

Before testing the hypothesis, assumptions are first tested according to the inferential statistics used. In this study, the hypothesis was tested using the t-test technique with the pooled variance formula, which requires the fulfillment of the prerequisite tests for normality of data distribution and homogeneity of variance. The following describes the results of the normality test of data distribution and the homogeneity of variance test on the descriptive writing skills data for fifth-grade students in the experimental and control groups. The normality test of data distribution is carried out to determine whether the data obtained is normally distributed. If the distribution is normal, then hypothesis testing can be carried out. The normality test in this study uses the Kolmogorov-Smirnov technique at a significance level of 5%, namely by deciding if the maximum value $|A1 - A2|$ ≤ of the Kolmogorov-Smirnov table, then it can be concluded that the data is normally distributed. Meanwhile, if the maximum value $|A1 - A2|$ > the Kolmogorov-Smirnov table, it can be concluded that the data is not normally distributed. The data normality test was carried out on data on the descriptive writing skills of the experimental and control groups. Based on the data analysis, the results of the post-test data distribution normality test for the skills in writing descriptions of the experimental and control groups can be presented in Table 2.

Table 4. Kolmogorov-Smirnov Normality Post-test for experimental and control classes

| No. | Data group of description writing skills | Maximum Score $|A1-A2|$ | K-S Table Values | Description          |
|-----|----------------------------------------|------------------------|-----------------|----------------------|
| 1   | Post-test Experiment                    | 0.132                  | 0.242           | Normally distributed |
| 2   | Post-test Control                       | 0.109                  | 0.242           | Normally distributed |

After being analyzed using a normality test, a homogeneity test was carried out on the post-test data on descriptive writing skills in the experimental and control groups. The data homogeneity test in
Discussion

Based on the results of the t-test analysis, it can be seen that the hypothesis states that there is a significant difference in descriptive writing skills between the group of students who were taught using the PjBL model assisted by audio-visual media and the group of students who were not taught using the PjBL model assisted by audio-visual media in fifth-grade students. SD accepted. Thus, the PjBL learning model assisted by audio-visual media affects the descriptive writing skills of fifth-grade elementary school students. Learning activities in the experimental class using the PjBL model assisted by audio-visual media run optimally and conducive. It is because the PjBL model prioritizes student involvement or what is known as a student-centered learning model, which positions the teacher as a facilitator and gives students the freedom to carry out independent learning (Nurjanah & Suchyadi, 2020; Pratama et al., 2018; Syafira, 2022). The PjBL model encourages students to explore important and meaningful questions through inquiry and collaboration (Marizal & Haftrison, 2020; Rositayani & Surya Abadi, 2019). In the ongoing learning process, students can ask questions, gather information, and create products from the project work. Thus, students participate in problem-solving, which allows students to work either independently or in groups to build knowledge to create a product or work. This strategy is very suitable for improving descriptive writing skills because it requires students to work together to solve a problem and think to produce a real product in the form of writing from the problem.

Based on this explanation, learning using the PjBL model assisted by audio-visual media in this research has the advantage of using audio-visuals in the form of videos as learning media. In implementing learning in the experimental class using the PjBL model, students who create essay projects independently are assisted with audio-visual media in the video (Diawati et al., 2018; Rositayani & Surya Abadi, 2019). The videos shown are themes from essays determined according to the learning material. Video media is a tool used in learning in the form of a combination of audio (sound) and visual (images), which allows students to observe the actual form of objects directly, observe the process of an event or change, observe color differences and observe a movement and so on (Gicilia et al., 2022; Pratama et al., 2018; Wahyuni & Thahar, 2020). By using video media, students can add ideas or imagination within themselves to more easily assemble sentences into a complete essay in the learning process (Kuncoro & Hidayati, 2021; Van Alten et al., 2019).

This research implies that selecting and applying an appropriate learning model can influence students’ descriptive writing skills. The results of the research that has been carried out are evidence that the PjBL learning model makes a good contribution when applied to students’ learning of descriptive writing skills. The PjBL model stimulates students to work together to solve a problem and think to produce a real product through writing from the problem. The results of this research are used as input for teachers, schools, and other researchers who want to improve the learning process of students’ descriptive writing skills. Apart from that, it also serves as reference material for teachers to choose various learning models in teaching, one of which is by implementing the PjBL learning model assisted by audio-visual media in learning descriptive writing skills for students in elementary school.

4. CONCLUSION

The analysis found a significant difference in descriptive writing skills between students taught using the PjBL model assisted by audio-visual media and those taught using conventional learning. It was concluded that the PjBL model, assisted by audio media, could improve the descriptive writing skills of fifth-grade elementary school students.

5. REFERENCES


