THE EFFECT OF METHOD DISCOVERY LEARNING
AND LEARNING MOTIVATION ON TEXT WRITING
SKILL REPORT ON OBSERVATION RESULTS

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Abstract
This study aims to describe the comparison of writing skills in the observational reports of VII grade students of 5 Kerinci Junior High School which are taught by discovery learning methods and lecture methods in general, and describe the comparison of students with high learning motivation and low learning motivated students who are taught by discovery methods learning and lecture methods, in class VII students of 5 Kerinci Junior High School, and describe the interaction between discovery learning methods and motivation in the skills of writing observation reports for seventh grade students of 5 Kerinci Junior High School. This study uses a quantitative research design that is a 2x2 factorial experiment. The population of this study was seventh grade students of 5 Kerinci Junior High School. The population of the study was 165 people. Data collected through questionnaires and tests writing text reports on observations. The results of the study stated that the discovery learning method can influence the skill of writing observation report text, and the skill of writing observational report texts of students taught with discovery learning methods of students who are highly motivated is better than low motivated students. However, after testing the hypothesis data, it turns out that there is no interaction between the discovery learning method and learning motivation in influencing writing skills. observation report text of grade VII students of State Middle School 5 Kerinci. This finding shows that between discovery learning methods and motivation is not interdependence between each other in influencing the writing of texts from observation reports.

Keywords: effect, discovery learning method, lecturing, learning motivation, observation report.

Introduction
Writing skills as a component of language and literary skills have a strategic position in education and teaching. The success of students in taking lessons at school is largely determined by writing skills. Besides being able to facilitate students to think critically, writing can also be used by students to communicate their feelings, opinions, and experiences to others. Therefore, intensive learning needs to be done on the ability to write without ignoring other aspects of the language (Ministry of Education and Culture 2013).

There are two types of writing activities, namely writing literature and non-literary writing. (Tarigan 1986; Hagashita; Martha; and Wisudariani; 2015). Both types are classified into writing competencies consisting of five types of text, namely observation report text, text description, exposition text, explanatory text, and short story text (Education and Culture Ministry of Education and Culture, 2013).

The skill to write the observation report text in class VII of junior high school in 2013 curriculum is in the 4th core competency and 4.2 basic competency. The 4th Core Competence reads "Trying, processing, and presenting in the concrete domain (using, decomposing, assembling, modifying, and making) and the abstract domain (writing, reading, counting, drawing, and composing) according to what is learned in schools and other similar sources in viewpoints / theories. "4.2 Basic Competencies reads” Compile text of observation reports, text descriptions, exposition texts, explanatory texts, and short story texts according to the characteristics of the text that will be made both oral or written ”(Kemendikbud, 2013).

The skill of writing observation report text is a writing skill that contains a report of something from the observation (Kokasih; 2013 p. 48). Through writing observation report text, it can be seen the ability to write or describe an object in accordance with the facts obtained in the field (Kusmarni; 2015).
The purpose of writing the text of the observation is to convey information about classifications regarding observations made (systematically and objectively) and to solve a problem in the form of hypotheses observed (Naibaho; 2015). In the 2013 Curriculum students are required to be able to write the text of the observation in accordance with the rules of writing contained in the 2013 Curriculum. However, in reality this is not easy to achieve, because there are still many problems faced by students in learning to write the text of the observation.

Based on the results of pre-research observations and interviews with Effinar, S.Pd., as an Indonesian language subject teacher at Kerinci 5 Public Middle School, information was obtained, that the minimum completeness criteria (KKM) were set at Kerinci 5 Junior High School for Indonesian language learning is 75. The determination of the KKM proves that not all students are able to achieve it. This is caused by the problems faced by students. The problems described by the teacher are as follows. First, the students' low understanding of the material of the text of the observation. Second, the lack of students' understanding of the development of text structures and linguistic elements of the text. Third, the students' low understanding in determining the differences in each structure of the text of the observation. Fourth, students find it difficult to pour ideas or thoughts into text. Fifth, there is a lack of students' motivation for learning to write the text of the observation.

In addition to the problems described by the teacher, the author also interviewed one of the seventh grade students of Kerinci Middle School 5, who also described the problems he faced in learning to write the text of the observation report. First, the difficulty of developing ideas into text, especially starting to write text. Second, students consider writing activities to be boring activities. Third, the reference source for writing the text of the observation report is incomplete or still guided by the textbook published by the Ministry of Education and Culture. Fourth, the motivation to learn to write text is still low. This process occurs when the teacher gives assignments to students, still found students who do not do it seriously.

Fifth, the selection of learning methods used by the teacher has not varied, meaning that the teacher uses the lecturing method more often in learning to write the text of the observation report, so that students become passive in learning. Problems in learning to write texts, learning processes, unclear student writing such as Keywords and Sentences, lack of completeness of books, lack of information and learning methods used by teachers are still lecture methods (Dewi; Sutama; and Sriasih; 2015).

Furthermore, Hagashita (2015) also states that students write less clear texts, lack of mastery of sentences, so that the topic development is inadequate and not detailed.

Apart from the problems stated above, lack of motivation to learn also influences student learning outcomes. Based on observations of Class VII students of SMP Negeri 5 Kerinci, it is predicted that students have different levels of learning motivation. This is known when the learning process takes place, it can be seen that not all students play an active role in the question and answer process and assignment by the teacher. Thus, it can be said that learning motivation has an important role in improving student learning outcomes.

In the learning process of course students need learning motivation in writing learning. Therefore, learning motivation is considered as a whip to change student learning behavior, for example seeing his friend succeed, students will try to have similarities with other friends (Anggraini, 2012).

In addition, previous researchers also said that the motivation to learn is very important in the learning process. Motivation is an internal process that activates guiding and maintaining student behavior towards a better direction, because in order to achieve writing skills, students must be encouraged and encouraged in learning. That is, learning motivation has a significant effect on achieving student writing success (Andriady; 2015) and Sulihin; (2012).

The problems that have been expressed above indicate that the teacher must pay attention to the level of student motivation in writing. Students must be guided by the teacher to achieve the success of learning in writing the text of the observation report. The teacher must be able to choose a learning method that can involve students to be active, making it easier for students to improve learning motivation on what they learn. In this case the method assumed to be suitable for solving these problems is the method discovery learning. This method is able to solve students' problems in writing and is suitable for use in learning to write text on observation reports (Pasari 2013; Rumijati; 2015).

In addition to the facts revealed by previous researchers regarding methods discovery learning, the reason for choosing this method is also based on Minister of Culture Regulation number 65 of 2013 which says that the learning process in the 2013 curriculum must use learning methods that are appropriate to the characteristics of learners and subjects. Among the methods recommended in the Standard Learning Process are applying scientific methods, or research-based learning, namely (discovery / inquiry learning). The problems discussed above, it can be concluded that students' skills in writing observation reports need to be addressed as material, developing text structures that must be written, grammar, and motivation to learn.
In addition, the learning method used by the teacher must be in accordance with the text and context to be studied. Therefore, the method assumed to be suitable for solving these problems is discovery learning method. This method will help students to assimilate a concept or principle, such as observing, making guesses, explaining, and making conclusions. Perspectives are shown by discovery learning; to lead to the students’ activity in finding the concept of the lesson itself and to require students to play an active role by finding information themselves. This is consistent with the opinion of Cahyo; (2013, p. 101) and Risqi; and Samsul; (2015) who state that discovery learning can change passive learning conditions to be active and creative.

Based on the description, the research objectives are as follows. First, explaining the differences in the skills of writing observational report texts of students who are taught using methods discovery learning with students taught using the lecture method. Second, explain the differences in learning outcomes of students who have high learning motivation and students who have low learning motivation in class VII students of 5 Kerinci Junior High School. Third, explaining the interaction between methods discovery learning and motivation on the text writing skills of observation reports of grade VII students of 5 Kerinci Junior High School.

Methods

The population of this study consisted of all seventh grade students of 5 Kerinci Junior High School enrolled in the 2017/2018 school year, namely 185 people consisting of 6 classes. Sampling in this study was carried out by random sampling technique, namely by determining the experimental class and control class randomly by drawing techniques. The results of the draw, found that students of class VIII B as an experimental class consisted of 30 people and class VII F as a control class with a total of 30 people. Based on the normality and homogeneity test of the research sample, it was found that these two classes were declared to be normally and homogeneously distributed.

The research method used is an experimental method with a quasi-experimental type (experimental quasy). The purpose of this quasi-experiment is to obtain information from experiments based on the treatment (treatment) of an experimental unit within the design limits set in the experimental class, in order to obtain data to describe what is expected. The design used in this study is a 2x2 factorial design.

This study consists of three variables. First, independent variables (independent variables) are methods discovery learning. Second, the dependent variable (the dependent variable) is the skill to write the text of the observation report. The data used for the dependent variable is the score of writing observational report text that is taught using discovery learning methods and lecture methods. Third, the moderator variable is learning motivation. The data used for the moderator variable is the score of learning motivation questionnaire.

The instrument of data collection in this study consisted of two instruments, namely learning motivation questionnaire and performance test skills for writing the text of the observation report. Questionnaire is used to determine the level of student motivation, while the performance test is used to measure the level of students’ skills in writing the text of the observation report. The research procedure conducted by the researcher is as follows. First, the questionnaire is prepared based on predetermined indicators. Second, the questionnaire was validated by the validator, Prof. Dr. Mudjiran, MS. Cons. Third, the questionnaire was tried out to students of class VII C, the questionnaire consisted of 46 statements and after being tested, 38 valid statements and 2 invalid statements were obtained. Data is declared valid if \( r_{table} < r_{count} \). Fourth, after obtaining validity, the next step is to determine whether the data is reliable or not. Based on the research that has been done, it can be concluded that the questionnaire was declared reliable because \( r_{table} < r_{f11} \), which is 0.6 <0.98. Fourth, the valid statement is distributed to the experimental class and the control class.

The test of writing the observation report text in this study is in the form of a performance test. Students are asked to write the text of the observation report. The steps in compiling a test instrument write the text of the observation report, as follows. First, making a grid based on indicators. Second, choose short stories and compile questions or commands according to test indicators. Third, conduct a rational analysis to see the suitability of items with the measured aspects. Fourth, make an assessment rubric on the skill to write text on the report on the observation. Fifth, make a Learning Implementation Plan (RPP) and test the skills to write text on the observation report. Sixth, Learning Implementation Plans (RPP) and test text writing skills test results of the observation results are first validated and consulted with the validator lecturer, namely Prof. Dr Syahrul R, M.Pd. In addition, the Learning Implementation Plan (RPP), and research instruments were also shown to Indonesian language teachers at Kerinci 5 Public Middle School, namely Eflinar, S.Pd.
Findings and Discussion

The findings in this study consisted of three. First, the results of the text writing skills of observation reports are taught by discovery learning methods and lecture methods. Secondly, the results of the skill to write text on the observation report that are highly motivated and have low learning motivation are taught by discovery learning methods and lecture methods. Third, the interaction between methods discovery learning and motivation in influencing the writing skills of the observation report.

Writing Skills of Report Text Results of Observations Taught by Discovery Learning Methods and Lecture Methods

This study consisted of two classes, namely the experimental class and the control class. The experimental class is taught with a class of methods discovery learning and the control class is taught by the lecture method. The number of samples in the experimental class amounted to 30 people and the control class amounted to 30 people, of the 30 students were divided into two, namely 27% of the upper group and 27% of the lower group (Arikunto, 2008, p.216), so that 8 people obtained the upper group and 8 people from the lower group of 30 research samples. The results of the writing skills of the two classes' observation report text are illustrated in the following table.

<table>
<thead>
<tr>
<th>No</th>
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<th>Class Control</th>
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<td>8</td>
<td>96.67</td>
<td>96.67</td>
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</table>

Based on the data above, before testing the first hypothesis, it is necessary to test the requirements for analysis, namely the normality test and homogeneity test. Data normality test shows that the experimental class and control class data are declared to be normally distributed as evidenced by the results of $L_0 < L_{table}$ 0.1751 and control class data $L_0 < L_{table}$ 0.1161 at level $\alpha = 0.05$. Homogeneity testing found $F_{calculated}$ 1.06 < $F_{table}$ 2.25. This shows that the data is homogeneous.

After the analysis requirements are met, then the first hypothesis is tested in the two classes using the F test. The steps to test the hypothesis with F test are in accordance with the theory (Kidal, E, 2015). The results of the first hypothesis state that the skill to write text on the observation report of students in the experimental class taught by method discovery learning is better than the skill to write the text of the observation report of students in the control class taught by the lecture method. This is evidenced by $t_{count} = 30.52$ > $t_{table}$ at the 0.05 degree of confidence. The results of these calculations indicate that $H_1$ is accepted because $t_{counts} > t_{table}$. This shows that the method discovery learning can influence the writing skills of students' observation reports.

These findings indicate that methods discovery learning provide opportunities for active students, and find their own information about what they learn, so that the material they learn can be permanently embedded in students.

This is consistent with the opinion of Nasution (2005, p. 45; Cahyo, 2013, p. 101; & Sani, 2014, p. 97) which states learning methods discovery learning can lead to student activity in finding the concept of the lesson itself and demanding students to play an active role by finding information themselves and the learning process of methods discovery learning students will obtain learning permanently because they seek themselves with difficulty, especially values and norms will not be owned only by listening, but with their own experiences and discoveries.
The method of **Discovery learning** has six steps in accordance with the opinion of the Shah (in Abidin 2014, p. 177) says the step of implementing methods discovery learning (1) Stimulation (giving stimuli). At this stage students are faced with something that causes confusion and is stimulated to conduct their own investigation activities. This student's confusion in line with the unfinished information presented by the teacher; (2) state the problem. At this stage students are directed to identify as many problems as possible relevant to the lesson material, then one of them is selected and formulated in the form of a hypothesis; (3) data collection. At this stage students are assigned to carry out exploration, search, and browse something in order to gather as much relevant information as possible, to prove the hypothesis that has been proposed. This activity can be done through interview activities, field visits and or library visits; (4) data processing. At this stage students process the data and information they have obtained through interviews, observations and so on, then interpreted. (5) proof. At this stage students conduct a careful examination to prove whether or not the hypothesis is determined, with alternative findings associated with the results of data processing; (6) draw conclusions. At this stage the student draws a conclusion that can be used as a general principle and applies to all the same events or problems taking into account the results of verification.

The test given to students in the experimental class and control class is the same, namely the performance test to write the text of the observation report. This test was conducted to see the effect of the application of methods discovery learning on the writing skills of short story text for grade VII students of SMP N 5 Kerinci. However, the learning process in the experimental class is more active than the learning process in the control class.

During the learning process, the two classes were given different treatments. The experimental class was given treatment with the discovery learning method, while the control class used was given lecture method treatment. In this case there is a different learning atmosphere. Students who are treated with discovery learning methods are more enthusiastic, active, and creative. This is because the way of learning feels different from before. The experimental class students were more active in asking questions related to the subject matter compared to the control class. In addition, students in the experimental class were also active in discussions. Unlike the control class, students are more silent in the learning process. Control class students do not feel an update in the learning process, so they are passive to do questions and answers in the learning process.

Based on the elaboration, it can be concluded that the results of research and data analysis show that methods discovery learning can have a positive impact and impact on the writing skills of the observation report text. The application of methods discovery learning students are more active in learning, makes it easier for students to understand the material, and gives students the same opportunity to think individually and in groups, so that the test results of students' performance of the experimental class are taught using discovery learning is higher than the results of student performance tests who are taught using the lecture method.

**Writing Skills of Report Text Results of Observations that Have High and Low Learning Motivation taught by the Discovery learning Method and Lecture Method**

Similar to the previous section, before the second hypothesis is carried out, it is necessary to test the normality of the two data groups of students, namely students who have high learning motivation and Low learning motivation in the experimental class and control class. These findings are high learning motivated experimental class students with \( n = 8 \) obtained by \( L_0 = 0.1747 < L_{table} 0.2850 \). Students with low learning motivation with \( n = 8 \) obtained \( L_0 = 0.2258 < L_{table} 0.2850 \). High-motivated control class students with \( n = 8 \) obtained \( L_0 = 0.1170 < L_{table} 0.2850 \). Students who are learning motivated are low with \( n = 8 \) \( L_0 = 0.2119 < L_{table} 0.2850 \). Based on these findings the data is declared normal, because the two study groups obtained \( L_0 < L_{table} \).

Furthermore, testing the second hypothesis, shows the results of the test stated that the observation report writing skills of students who had high learning motivation were better than the skills of writing observational report texts of students who had low learning motivation in the experimental class and control class. This is evidenced by the results of the calculation of the hypothesis test with the F test which shows \( F_{count} (k) = 16.14 > F_{table} (k) = 4.20 \) at the 0.05 degree of freedom. The results of these calculations indicate that \( H_1 \) is accepted because \( t_{count} > t_{table} \).

These findings indicate, that methods are discovery learning able to improve the ability to write the text of the observation report of highly motivated students. This is consistent with the opinion expressed by Yamin (2007, p. 219) suggesting that learning motivation is a psychic driving force from within a person to be able to do learning activities and add skills and experience. Slavin (2009, p. 177) motivation is an important factor in learning as well as a determinant of learning activities undertaken. Learning motivation can be observed through the activities and learning outcomes. Students who obtain good learning outcomes because of their persistence and high learning motivation and students who obtain low learning outcomes
can also be caused by low learning motivation. Furthermore, Iskandar (2009, p. 180) describes learning motivation to provide stimulation and enthusiasm in learning so that it can affect student learning activities and achievement. This results in students who have low learning motivation who are not interested in learning well. In lecture learning, students' opportunities to express their ideas are limited and students do not experience directly the process of pouring ideas into a good narrative.

Based on this it can be concluded, that with the motivation of student learning, students will have the spirit to develop ideas or opinions about the material discussed independently or in groups.

Interaction Between Learning Motivation and Methods of Discovery Learning in Affecting Report Text Writing Skills Observation

Results Two-way ANAVA calculation results for testing the third hypothesis indicate that there is no interaction between methods and discovery learning motivation in influencing the writing skills of observation reports. That is, the main influence of methods discovery learning and motivation each runs independently in influencing the writing skills of the observation report text. This is evidenced by the acquisition of $F_{count} = 1.58 < F_{table} 4.20$. The acquisition of calculations proves, that there is no interaction between methods discovery learning and motivation in influencing the writing skills of the observation report text.

It can be concluded that each learning factor discovery learning method and motivation do not influence one another with respect to the results of learning to write text from observational reports, both experimental and control classes. However, the method of learning discovery seems to be more effectively applied to both levels of learning motivation. In other words, this is also a tool for previous research that discovery learning methods can be applied to students who have high learning motivation and can also be applied to students who have low learning motivation.

Conclusions

Based on the results of the study it can be concluded as follows. First, the writing report observation text skills taught by the discovery learning method are higher than the lecture method. this is evident from the average value of the experimental class is 81.45 in Good qualification (B) while the average value of the control class is 74.79 in Qualification (C). Second, the observation report writing skills of high motivation students in the experimental class get an average score of 85.00 in good qualifications (B) and those who are low motivated in good qualifications (Good) 77.91, while in the control class students who have Motivation high learning obtained an average value of 80.41 in good qualifications (Good), and students who have low learning motivation obtained an average value of 69.16 in qualifications more than enough (D). Third, there is no interaction between discovery methods learning and high learning motivation in influencing text writing skills in observation reports.

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References


