IMPROVING STUDENT STUDY REPORT AND ACTIVENESS USED DISCOVERY LEARNING METHOD THROUGH DIFFERENTIATION CONTENT AND TECHNOLOGY

Integration Strategy in English Subjects for Class 7B Semester 2 of SMP Negeri 1 Karangawen Demak Academic Year 2022/2023

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Abstract

This research was conducted at SMP Negeri 1 Karangawen, Kab. Demak with class 7B as the research target. This research takes the title "Improving Student's Study Report and Activeness Used Discovery Learning Method Through Differentiation Content and Technology" integration strategy in English Subjects for Class 7B Semester 2 of SMP Negeri 1 Karangawen Demak Academic Year 2022/2023" by collecting quantitative data to measure students' enhancement learning report. English at the 7th-grade level of junior high school is a challenge for teachers because the background of each pupil is different. This is an opportunity for researchers to find out the challenges 7th graders of junior high school face in learning English at school by applying quizzes and small games to create fun learning as the classroom action research. Students tend to have difficulty understanding English subjects because of their limited vocabulary. Giving English sentences to students without a glossary guide is a tricky thing. Therefore, the researcher's classroom action is expected to help students improve their knowledge and skills in learning English. Fun learning is one of the strategies used to support the learning process and attract students' attention so that their active participation is involved in the learning process.

Keywords – Teaching methods, Study Report, Discovery Learning, Fun Learning, English Lesson, Interactive Communicative Activity

Introduction

The research was taken at SMP Negeri 1 Karangawen which is located in Pundenarum Village, Karangawen District, Demak Regency. Students mostly come from villages in the area around the school due to the zonation system. Researchers observed and found that the lack of support or involvement of parents in terms of education is still lacking, this is due to the work of their parents who are mostly farmers, work at factories, building projects workers who leave early in the morning and return late at night. So, a lack of attention to the learning process of students happened. Problems that arise include students being demotivated to study, less active and even tend to be silent, sleeping in class, and disturbing other friends who are already focused on learning, this can be seen when the questions given they tend to be silent, lack confidence, shy, or afraid to answer the question. Especially when they are asked to come forward or participate, it is common for students to look down and tend to be silent waiting for other friends to come forward or for the teacher to choose. Not only that, it turns out that the results of learning English for class VII B students of SMP Negeri 1 Karangawen are still low, based on the results of a diagnostic test at the beginning of the course before start to the new materials, the average vocabulary score is still below the Minimum Learning Mastery (KBM), which is only 70 out of 78. In the sentences and

understanding of the text, many students face difficulty in capturing the meaning of the concept. This research hoped that it can bring change in improving students learning reports and active participation of students in English subjects, especially for class VII B students at SMPN 1 Karangawen for the academic year of 2022/2023. The students will get more challenges in the future if they step in the wrong way.

To overcome these problems, researchers try to use the Discovery learning model with a differentiation content strategy that is integrated through the technology and facilities available in the students' learning environment. Discovery learning is a learning process that is after in the final form, but rather is required to organize it himself (Lefancois in Emetembun, 1986, 103). Learning media and fun activities during the learning process are useful for attracting the pupil's attention and the focus of students to be ready to receive learning material. The use of technology in the learning process can be done to reach the student's world who are closely related to technological advances. This is expected to improve the learning report and the active role of students in the class learning process at SMP Negeri 1 Karangawen for the academic year of 2022/2023, especially in class VII B.

Study reports appear when there is a change in behavior in children that can be observed and measured in the form of changes in knowledge, attitudes, and skills. This change can be interpreted as an improvement and development that is better than before, for example from not knowing to knowing, being impolite to being polite and so on (Hamalik, 2005: 155). Benyamin Bloom (in Nana Sudjana, 2013: 45-55) suggests that in general the division of learning outcomes into three domains, namely the cognitive domain, the affective domain, and the psychomotor domain. In general, the cognitive domain is most widely used by teachers in schools because it relates to the ability of students to master the content of teaching materials.

Based on the understanding of learning outcomes above, it can be concluded that learning outcomes are the abilities possessed by students after receiving their learning experience. These abilities include cognitive, affective, and psychomotor aspects. Learning outcomes can be seen through evaluation activities that aim to obtain evidentiary data that will indicate the level of ability of students in achieving learning objectives.

Research questions
Based on the description of the background, the problem in this study is formulated as follows
1. How does the Discovery learning model with a differentiation content strategy integrated with technology support students' achievement in class VII B SMP Negeri 1 Karangawen in the learning process?
2. Does the Discovery Learning model with a differentiation content strategy integrated with technology and facilities can increase the activeness of students' participation in the learning process of class VII B SMP Negeri 1 Karangawen?

The purpose
Classroom action research through the Discovery learning model with differentiation content strategy integrated with the technology available in the students' learning environment at this school aims to improve student learning reports and increase the active participation of class VII B students at SMP Negeri 1 Karangawen through the Discovery learning model. According to Syah (2014: 244) in applying the Discovery learning method in class, there are several procedures that must be carried out in teaching and learning activities in general as follows:
    a. stimulation

Stimulation at this stage serves to provide conditions for learning interaction that can develop and assist students in exploring material. In this case Bruner provides stimulation by using a questioning technique, namely by asking questions that can expose students to internal conditions that encourage exploration. Thus a teacher must master techniques in giving stimulus to students so that the goal of activating students to explore is achieved.

b. Problem statements

After stimulation, the next step is for the teacher to give participants the opportunity to identify as many problem agendas that are relevant to the subject matter, then one of them is selected and formulated in the form of a hypothesis (temporary answers to problem questions) (Syah 2014: 244). Meanwhile, according to the chosen problem, it must then be formulated in the form of the questions asked. Giving students the opportunity to identify and analyze the problems they face is a technique that is useful in building students to get used to finding a problem.

c. data collection

When the exploration takes place, the teacher also gives students the opportunity to collect as much relevant information as possible to prove the truth or prove whether the hypothesis is true or not (Shah, 2014: 244). At this stage the function is to answer questions or prove whether the hypothesis is true or not, thus students are given the opportunity to collect (collection) various relevant information, read literature, observe objects, interview informants, conduct trials themselves and so on. The

consequence of this stage is that students learn actively to find something related to the problems they face, thus students unintentionally connect problems with the knowledge they already have.

d. processing data

According to Shah (2014: 244) data processing is an activity of processing data and information that has been obtained by students either through interviews, observations, and so on, which can be interpreted. All information from readings, interviews, observations and so on, everything is processed, randomized, classified, tabulated, even if necessary calculated in a certain way and interpreted at a certain level of confidence (Djamarah, 2016: 22). Data processing is also called coding/categorization which functions as concept formation and generalization. From these generalizations students will gain new knowledge about alternative answers/settlements that need to be logically proven.

e. verification

At this stage students carry out a careful examination to prove whether or not the hypothesis set earlier with alternative findings, linked to the results of data processing (Syah, 2014: 244). Verification, according to Bruner, aims to make the learning process run well and creatively if the teacher gives students the opportunity to find a concept, theory, rule or understanding through examples they encounter in their lives. Based on the results of processing and interpretation, or available information, the statements or hypotheses that have been formulated earlier are then checked, whether they are

answered or not, whether they are proven or not.

f. Generalizations

The generalization/drawing conclusions stage is the process of drawing a conclusion that can be used as a general principle or applies to all the same incidents or problems, taking into account the results of verification (Shah, 2004: 244). Based on the verification results, the principles underlying the generalization are formulated. After drawing conclusions, students must pay attention to the generalization process which emphasizes the importance of mastery of lessons on broad meanings and principles or principles that underlie one's experience, as well as the importance of the process of setting and generalizing those experiences.

Benefits of the research

Benefits for Students

Through the Application of Discovery Learning in English Learning, it is hoped that it will be useful for students to improve:

- Learner's self-confidence
- Learning outcomes both attitude competence, knowledge, skills
- Communication skills
- Activeness in learning
- Courage to express opinions/answers

Benefits for Teachers

Through the application of discovery learning in learning English, it is hoped that it will be useful for teachers

- improve managed learning
- develop professionalism by assessing himself (self-evaluation) and conducting evaluations after learning for improvement.
- Through the application of Discovery Learning in English Learning, it is hoped that it will be able to make a positive contribution to school progress as reflected in increasing the professionalism of teachers, improving the learning process, increasing motivation and student learning outcomes, as well as conducive educational activities in schools.
- Have experience teaching in a variety of varied and interactive ways
- increase self-confidence and increase active participation in developing knowledge and skills in learning management

Benefits for Schools

Through the Application of Discovery Learning in English Learning, it is hoped that it can make a positive contribution to school progress as reflected in increasing the professionalism of teachers, improving the learning process, increasing motivation and student learning outcomes, as well as conducive educational activities in schools.

Methodology
Design of the study

The study aims to find out the changes in the Discovery Learning method in the English learning process integrated with technology and differentiated content for Grade VII B in SMP Negeri 1 Karangawen. Researcher chose VII B as the participant with total 31 students. This research has used a daily test report that indicates the student's achievement in mastering the material. The researcher used a quantitative method to collect the data because of the accessibility to meet them regularly and cover the overall target participants who were designed in the study. Besides, another consideration was that they have different levels of comprehension of English due to their previous educational background. This study was done by taking into

consideration what was found in the observation period. The result of this study is to find the improvement in the students' learning report.

Previous Study

A previous study about the effectiveness of discovery learning in improving English writing skill of extroverted and introverted students found that the differences on the result of students' writing skill using discovery learning at the first state senior high school Sale as the research site. The treatment was given to experimental class which then compared to another class – control class. The data were gained through some instruments of the tests such as try out, pretest, and post-test (Sofeny, 2017). The research had same purpose on how to improve the students' achievement and strategy. In the other hand, the research took different place and participants. Meanwhile, this research focusing on improving students' achievement and activeness during the learning process.

In addition, another previous study about the discovery learning method based on the scientific approach in curriculum 2013 in teaching English at Senior High School brings up the implementation of discovery learning method based on the scientific approach in teaching English at Senior High School 2 Padang was good with the various activities, but there were still some problems and difficulties appeared (Efrini, 2016). Meanwhile, this research aims to overcome the challenge of teaching English by using a differentiated content approach that is integrated with technology for Junior High School.

This research to find out the challenges that 7th graders of junior high school face in learning English at school by applying quizzes and small games to create fun learning as the classroom action research. Improving the students' achievement and participation in the learning process by discovery learning method through differentiation content and integrated technology.

The subjects of research

The subject of this research was students of Class VII B SMP Negeri 1 Karangawen. The data was collected in the English class through the learning process of Theme I and Theme II. Those students were chosen as the participants based on the consideration that they are heterogenous classes with various kinds of student characteristics and backgrounds. This research used daily tests of each material to collect the data.

Data collection procedures

The procedure that I did to collect data was the researcher asked for suggestions to take data in the intended class as a reference to the supervisor teacher of the English practical class. Furthermore, the researcher made an appointment with the English teacher who teaches class VII B to collect data in the class. The learning process was held following the lesson study arranged before. The steps are applied gradually to the learning objectives. First, distributed the diagnostic test was a pre-test to collect the student's prior knowledge. After that, analyze the levels and recap the results of each student. The result is to guide the teacher's action that should give to the students. Find out the gap and applied the differentiated content to facilitate the student's needs. Group activities to exchange information between colleagues through discussion. Individual assignment to measure each student's comprehension of the materials. According to the observation throughout the learning process as a consideration in making the Daily Test questions. Then, at the end of the lesson post-test was given to summarize all the sections.

Data Instruments

This study used various forms of question items for the Daily test such as short answers, essays, and fill in the blank. Each Daily test took the same format and was put in 2 cycles of learning process. It was distributed to all students in class that informed in the previous meeting about the test. There are 20 questions with 5 points as a full point for each correct answer. A glossary was given to guide the students to find the meaning of the difficult word. That's to be expected that the student uses their maximum potential to read, think, and conclude the answer to the questions. Although, remedial is possible to be given to those who are not passed the test. The remedial section is made at a lower level than the test question such as multiple choice or matching to reach the student capability level.

Data analysis techniques

The data in this study was quantitative. The result of each daily test was utilized to analyze the research data. Each average of the test was counted and created in diagram form. This helped the researchers to see changes in the results indicating improvement after all the learning process. The result of the research was presented and discussed based on the changes that occurred.

Procedure of the research

First, collect the data from Daily test 1 and daily test 2, it is possible to save another result task as consideration. Recap based on the student's name and count the average of each test. Manage the data to be the result of the research. Put on the SPSS program to create the diagram. The difference from the average result will take as the percentage of the aims of this research.

Finding and Discussion

Results and discussion presented as much as 35-60% of the length of the article, written by a space 1, Times New Roman with font size 12 pt. The major part of the results contains the data analysis and hypothesis testing. Discussion is an important part of the overall content of a scientific article, load response research problem, interpretation of the findings, integration of findings from research into the existing body of knowledge, the preparation of a new theory or modifying existing theories.

As comparative data, the researcher looked for initial data on problems that occurred in class VII B of SMP Negeri 1 Karangawen through observation activities. The researcher found that the activities and learning outcomes of class VII B students at SMP Negeri 1 Karangawen for the 2022/2023 academic year in participating in English learning material My School Activity. The following is the result of the data that the researcher obtained regarding the initial knowledge of students using the media diagnostic test in the form of multiple choice class VII B even semester of SMP Negeri 1 Karangawen for the 2022/2023 academic year in participating in English lessons as follows.

Based on the results of the initial data obtained, it shows that the learning outcomes obtained were not good enough with 10 children not completing and 21 children having achieved Minimum Learning Mastery (KBM). This is because the learning process has not implemented the Discovery Learning method. The initial conditions for grade VII B students at SMP Negeri 1 Karangawen reached 21 out of 31 total students and achieved 68% for classical completeness. So in the next learning the researcher takes action using the Discovery learning learning method with a content differentiation strategy that is integrated through technology and facilities available in the learning environment it is hoped that student learning outcomes can increase.

Daily tests were given at the end of the learning material. The questions were

made quite challenging for students because of their background which had not been able to reach the stage of quite complex English sentence forms. With different durations and periods of time in providing material on each theme. Two weeks for theme 1, and one week for theme 2 before students face their daily tests. In reality, grade 7B was quite calm and didn't cause chaos in the class, but there were some students who really had difficulty understanding the context of the questions even though they had been given a list of vocabulary words. There is a strong passion and intention to learn and a willingness to try to do the test questions even though it takes a longer duration than other students who easily grasp concepts easily after being given the vocabulary list. Giving clear instructions at the beginning of learning brings guidance for students to pay attention to the different parts of the test. Daily test questions were made with the aim of encouraging students to think such as using short texts, questions based on text, short answers based on school sketches, answering questions from the tables provided, short answers to complete blank sentences, and writing vocabulary related to the material that has been given.

The findings of this research were that in class 7B there was a student who had difficulty comprehending the concept of the test questions but when it come in the form of a short answer vocabulary he was able to write it completely, from that case, the researcher gets the conclusion that this student can memorize the vocabulary given and really give an effort on it, for example the word Paskibra in the theme "This is My School" which discusses extracurricular activities has written as flag hoisting troop. Students tend to face challenges memorizing difficult vocabulary and paskibra is one of the vocabularies that has more than one word. Then, there are students who write up to the word 'Flag' only. However, on the other hand, there are students who are able to write the word 'flag hoisting troop'

in full even though in other parts of the test question they got the wrong answer due to of lack understanding of the concepts besides the vocabulary. The same thing happened to the vocabulary 'PMR' which became Red Cross Youth as written, where the letter has more than one word making it a difficult vocabulary to remember. So, there are students who write up to the word 'red' because this pupil cannot memorize the complete letter of its vocabulary. At the end of the learning process, a Post-test is given as material reinforcement to quantify student learning achievement. Conceptually and understanding of the material in class 7B is quite good, this can be seen from the students' efforts to answer according to their own capabilities. For example, when the question is in the form of fill in a blank sentence with answer instructions in Indonesian, students were asked to write the correct answer in English. According to Nana Sudjana (2013: 45) which defines that learning outcomes are abilities possessed by students after they receive their learning experience. Therefore, learning outcomes have a close relationship with learning. Learning outcomes can also be interpreted as the level of success of students in learning subject matter at school which is expressed in scores obtained from test results regarding a certain subject matter.

The finding of this research were the students actually knew the concept of the intended point, but they had difficulty writing the correct letters. For example, the word IPA on the theme "My School Activity" where material names of subjects as the learning objectives. Students got the concept that the English form of IPA is science knowledge, otherwise, the way they write is still in the original writing form of Indonesian or their own language like 'sayens' which is written like what the sound that they heard besides it should be written as 'science'. It also happens when they did the daily test. It is such an endearing moment when they know and

get the point even if they still lack in writing the correct letter of the word.
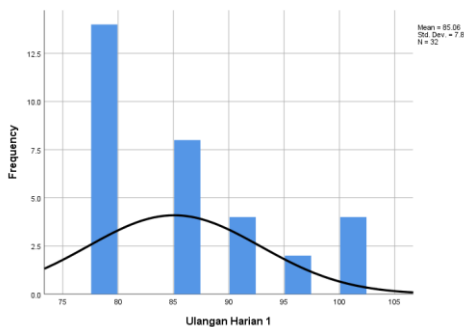
Picture 1. Diagram chart of student's report of daily test 1
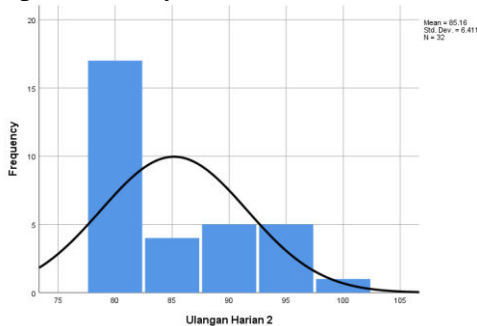
Picture 2. Diagram chart of student's report of daily test 2

So, here are showed diagrams of class 7B learning reports for each theme, namely My School Activity for Daily Test 1, and This is My School for Daily Test 2. The diagram shows that there has been a change in the learning outcomes of students in class 7B. The changes occur after the whole series of learning processes is given and daily tests are carried out to measure students' cognitive knowledge. The results of the class average diagram that develop from the results of Daily Test 1 are 85.06% and Daily Test 2 are 85.156%, which is an increasing point amount of 0.127%.

The picture above shows the administration of action in the form of using the Discovery learning method, improving the learning outcomes of class 7B students of SMP Negeri 1 Karangawen for the 2022/2023 academic year in participating in English lessons, competency activities at school and schedule of activities. Student learning

outcomes are the results obtained from the learning process. Learning outcomes are changes in terms of behavioral skills or abilities that can increase over time and are not caused by a growth process, but by learning situations, embodiment in the form of results of the learning process can be in the form of oral or written solutions, and direct skills and problem-solving. can be measured or assessed using standardized tests. Learning outcomes are the results of the learning process in the form of knowledge and skills that can be measured by tests. Quantitatively, giving action in the form of using the Discovery learning method improves learning outcomes for Class VII B students of SMP Negeri 1 Karangawen for the 2022/2023 academic year in learning English.

Conclusion

Teachers should present a variety of activities to provide variety in learning activities in class, teachers utilize the Discovery learning learning method as an alternative to increase student activity and learning outcomes, and always enrich learning models. Learning methods can be used to train students to be more active, motivated to take part in learning.

Giving action in the form of using the Discovery learning method with an integrated content differentiation strategy through technology and facilities available in the learning environment of students increases the activity and learning outcomes of English for class VII B students of SMP Negeri 1 Karangawen for the 2022/2023 school year activity material at school and schedule activity. The increase in student activeness and study report proved that the method used affected the whole learning process. It was suitable and made based on the student's needs at the beginning result of the survey and observation. The steps applied during the learning process used the discovery learning method, and the result showed

improvement before and after. It presented changes of an increasing point amount of Daily Test 1 and Daily Test 2 was 0.127%.

Furthermore, the limitation of this research is that the findings are limited to the recorded assessment. There can be adjustments to the other kind of assessment to reach the student's learning style. Therefore, this research can be used as references for other researchers to conduct similar research or material for comparison with other learning methods and enrich knowledge and literature, especially regarding current learning methods as a suggestion for the next research.

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