

THE IMPLEMENTATION OF SCIENTIFIC APPROACH USING DISCOVERY LEARNING IN TEACHING REPORT TEXT

1st Abdullah Azzam Akbar and 2nd Ahmad Syafi'I 3rd Haris Dibdyaningsih, M.Pd.
1st School Teacher in Banyuangi, 2nd 3rd STKIP Al-Hikmah
Indonesia
Azam11@gmail.com

***Abstract:** A newly designed curriculum called as K-13 (Curriculum 2013) was officially implemented in the beginning of 2013. A scientific approach becomes the most significant part of it. Five steps of scientific approach such as, observation, questioning, experimenting, associating and communicating will be studied in this research. One of the learning methods that is often used is discovery learning. This study aims to determine how the learning process uses the scientific approach with discovery learning methods in learning report text. Qualitative methods are used to see how this learning takes place. The research subjects were students of SMP IT Ibnu Sina grade 9. To obtain the data, observations, questionnaires and documentation were used. The results of the questionnaire showed that 5.26% (very positive), 56.39% (positive), 35, 33% (quite positive), and finally 3% (not positive). The analysis obtained shows that from the questionnaire given and the results of observations, students have very positive responses to learning using the scientific approach and discovery learning methods.*

But in practice it is not as easy as imagined. From 5 steps in the scientific approach, only 3 steps can be applied. This is influenced by learning that is carried out online. Suggestions that can be given are the teacher's ability to know what aspects must be considered before teaching and online learning must be better prepared because many materials are not easily explained without meeting students face to face.

Key words: Descriptive Qualitative, Scientific approach, Discovery Learning, Report Text

INTRODUCTION

A newly designed curriculum called as K-13 (Curriculum 2013) was officially implemented in the beginning of 2013. A scientific approach becomes the most significant part of it. Some researchers had researched about implementation of scientific approach in the classroom and they found that the implementation is not optimal (Zaim, 2017). There are many teachers who are not able to implement scientific approach perfectly, the teachers use less than five steps that actually must be implemented in the classroom. Most of teachers had difficulty in implementing scientific approach because they have a little knowledge about it.

Moreover, from the students they are not ready with new process of implementation of scientific approach (Kartikawati, 2015). Apriauny (2016) mentioned that, teaching English using scientific approach should get more attention, especially upgrading the teacher in knowledge and skill aspects. Many teachers are not able to implement scientific approach in teaching English. Wahyono (2017) also stated, the learning outcomes are low, those are influenced by teacher. Teachers' less involvement in arranging k13 and most of teacher adopted from other schools and teachers are not able to connect the learning material with student's ability and condition. Most researchers stated that applying scientific approach is not easy as thought.

Besides, the researchers above mostly concern on the implementation of scientific approach that done by teacher. Therefore,

this research will also concern on the implementation of discovery learning in teaching report and students view in implementation of scientific approach using discovery learning in teaching report to fill the gap of previous studies. Discovery is similar with scientific approach, seeing this point and consider with new variable that can be added in this research, it will give more information that will be helpful in the education further. Researcher hopes there is a difference that as useful finding on the study to be used in the next learning.

LITERATURE REVIEW

The scientific approach that used in curriculum 2013 today is adoption of scientific method (Puspita, 2016). Lake & Bryant (2006) stated that, scientific method has six steps such as, asking question, doing background research, building background research, test the hypothesis by analyzing data and sketch a conclusion then communicating the result. Based on Kemendikbud (2014) stated that, scientific approach has five processes, they are observing, questioning, experimenting, associating, and communicating. Scientific approach that applied in curriculum 2013 is coming from modification of scientific method (Puspita, 2016).

In observing process, teachers may use the real phenomenon, challenging, and attracting process, (Puspita, 2016). Hosnan (2014) the process of observing is a strategy using contextualized approach because needs media. Media that used can be real media brought in the classroom or topic that. Using real phenomenon, a challenging, and attracting process is purposed to connect regalia with the material that will be learned in the classroom. Teacher can stimulate student by showing picture or video then students observe it. The teacher tries to facilitate them to be more active, increasing their critical thinking, and stimulate

to speak up. Priyana (2014) stated that, this stage teachers have some rules, such as:

Questioning

The next step is questioning. It is the process of building knowledge. It is used for asking about the social function of text that discussed. From this step, it's hoped to develop the curiosity and the critical thinking of the student. So that the question must be able to stimulate thinking skill of the students.

Experimenting

The purpose of this step is to make the students feel that they have learned skill. In this step, they will practice and express what they learned using language in the real life by using simulation, dialogue, role play, discussion, presentation or playing game.

Associating

This is the process of students to develop their ability to classify and compare. The role of the teacher here as the guider. Teacher guides students to classify and compare text based on the social function, the generic structure, and language feature then connect information in the text for enriching when creating text. According to Priyana (2014), teachers' role is helping students to know the pattern on the material. Helping students to draw conclusion.

Communicating

This is the step for students communicate what they have got in the learning process that day. Present and elaborate what students observed based on their analysis along the learning process, (Hosnan, 2014). In this step teacher will facilitate everything to make the students more active. (Priyana, 2014) stated that, the role of teacher here is to give correction, correct and enrich students' knowledge. After all, teacher will give the correct information and conclusion based on the topic discussed. instead of a final form. In this learning model teacher has a role as guider and lets the students to be more active in the learning process.

Discovery Learning in Teaching Report

According to (Irawan, 2015) he stated that discovery learning stimulates students to optimize their way of thinking. Discovery learning and report text become the way to reach the goal of learning. Combination of discovery learning and teaching report text are suitable because will combine the process of getting the goal wanted.

Teacher who wants to apply this method can use six steps from Syah (2004):

1. Stimulation

Teacher stimulate students by giving picture, video or information to make them think. It is purposed to make the students wants to observe further.

2. problem statement

After giving stimulation, teacher give chance to the students to identify as much as possible.

3. Collection

When students exploring the material, teacher also give chance to the students to collect information as much as possible to prove which true or not the hypothesis.

4. Processing

All information are processed and classified so the students are able to form a concept from the data they got.

5. Verification

In this step students verify or check all of the data carefully to prove which true or not hypothesis with alternative findings.

6. generalization

A step to make a summary that can be a general principle and acceptable in any conditions.

Result and Discussion

There are fifteen steps in the lesson plan that the teacher has made at least, but only five can be implemented. Although the plan cannot run well, but students are able to reach the learning objectives, specific statements that are embodied in writing to describe the expected learning outcomes (Kemp, 1977) and (Kapel, 1981). Alhamdulillah class can walk fluently too. For the next discussion is scientific approach term. Scientific approach has five processes, they are observing, questioning, experimenting, associating, and communicating (Kemendikbud, 2014). In reality in the classroom, not all scientific approach steps have been

implemented properly. Teacher only implemented three steps during the learning process.

Some researchers had researched about implementation of scientific approach in the classroom and they found that the implementation is not optimal (Zaim, 2017). The obstacle faced by teachers and researchers is the pandemic that is currently spreading widely. How the implementation of learning that should be carried out face-to-face at this time can only be done virtually using a cell phone. Besides, how students' responses the questionnaire shows us the difference between them, they have difference, opinion, understanding, and interest, like, concentration, attention and activity.

The following is a table of student responses about the implementation of the scientific approach using discovery learning in text report lessons

Table 8 all of students' choice according to the students' response of implementation scientific approach using discovery learning in teaching report

Very	Like/Concentration/ Attention/Interested/ Active/Easy/Increase	Less	Not
7 choosers	75 choosers	47 choosers	4 choosers
5,26%	56,39%	35,33%	3,00%

Table 8 all of students' choice according to the students' response of implementation scientific approach using discovery learning in teaching report.

If we look at the table above. We can divide the table into two major parts, where one part is the choice of students who show a good response and the other part responds poorly. Which means, responses of the students mostly good and the implementation of scientific approach using discovery learning in teaching report is good too. From the data that has been submitted by researcher and through the modification process, it can be concluded that previous researchers who stated that the scientific approach cannot be applied in a comprehensive manner can be supported by the findings in this study.

But it should be noted that even though it cannot be applied fully, learning objectives can be achieved quite well if we look at the scores and responses of existing students. Furthermore, from seven questionnaires only point ability of understanding shows negative. Means, only this part most of the students feel they got difficulties on understanding the material. Researcher assumes that, it is about the way of learning. Teacher provided video in the learning process, it influences the students. They are more concentrate and active during the learning process because they can imagine the material by watching video. The video provides picture, explanation from some resources and there is music during the explanation, so students very enjoy it. Abraham (2015) stated that video has benefits such as keep class more live and update, more than that video provide a real-world to the students. That is why students very concentrate and active during the lesson.

One thing that we must focus, even they enjoy it does not mean they understand the material completely. We can take a look at the ability of understanding the material, it showed that more than half of the

students their ability is not increasing. Researcher assumed it is because of the further explanation of teacher is very little, even no feedback both from teacher and students. Halim (2016) stated that video can give a real life for students during the lesson.

The theory is not same with the reality. Researcher assumes, video can be a good media for teaching but teacher must give time for students to ask based on the material, the media as well. Because without feedback lesson will never give impact for both students and teachers. If the learning process conducted in normal classroom teacher can guide the students directly, but in reality it is more difficult because teacher only has short time to teach and explain the material. Every student who has right to ask or give their opinion cannot do that in online classroom.

In this research, the researcher also has a gap. Where this gap becomes the differentiator between ongoing research and previous research. Researchers focus on different learning model points, namely discovery learning models. The researcher hopes that there is a difference between previous research and ongoing research that can be a material for further discussion. Where the current results show good progress if we refer to student responses. With the combination of the scientific approach as a mandatory approach that teachers must implement in the classroom, teachers can use the discovery learning model as an additional if desired.

In learning k13 should use the student center model. But in fact, this model class cannot be implemented properly. There are many things that cause, such as student ability and online learning because of the pandemic. Scientific approach in Indonesia has purpose to make the students has high thinking level (Lutfiyah, 2015). according to (Chuntala, 2019) The bloom taxonomy focuses not only on c1 - c4, because based

on the revision from Krathwoll and Anderson the abilities that students must possess are not only LOTS (c1 - c4) but also HOTS (c5 & c6). Students at SMP Ibnu Sina do not apply the entire process. Therefore, it can be said that the application of concepts and reality cannot be said to be good.

The reality in the field is not all the same as in theory. The progress that is expected in students, the level of thinking, the emergence of interactive learning with the student center model and many other things that cannot be implemented in the study above are lessons for us. The design that has been made can be evaluated and studied to make a better learning process in the future.

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