

# ASSEMBLING DISCOVERY LEARNING MODEL OF LEARNING TO INCREASE ACTIVITY AND RESULTS OF LEARNING GEOGRAPHY IN CLASS X MIPA 1 SMAN 3 PADANG PANJANG

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**ABSTRACT:** Discovery method is a component of educational practices that include teaching methods that promote active learning, the orientation in process, directing his own, find your own and reflective, Use of discovery learning, wants to change the conditions of passive learning to active and creative, learning teacher oriented to student oriented, and change the ekspository mode students only receive information from the student's teacher Discovery mode to find information themselves. The learning result is the ability of the students after receiving a learning experience. With action research methods class through two cycles of data obtained an increase in the results of class X MIPA 1 SMAN 3 Padang Panjang, amounting to 29 students from the mean value approximately 52% of students scoring above the classical minimal value, and 48% of students are below the classical minimal value, bethe average value approximately 86% of students scoring above the classical minimal value, and 14% of students are below the classical minimal value, learning discovery in learning geography will increase the activity of students in learning, both of individually and classical. Increased activity of students in learning makes students more enthusiastic about learning and will improve student learning outcomes.

*Keywords: Geography, Discovery Learning Model, Activity and Student Results*

## 1. INTRODUCTION

Law of the Republic of Indonesia Number 20 the year 2003 on National Education aims to develop students' potentials to become a man of faith and devoted to God Almighty, morals, knowledge, physically and mentally healthy, skilled, creative, independent, responsive to the leading of the changing times and is responsible to the nation and the State. Learning is the duty of every human being. Almost all of the knowledge, skills, habits and attitudes are formed and developed due to learning [1] [2].

The problem of learning in SMAN 3 Padang Panjang main thing is lack of implementation of active student learning. Based on the results of preliminary observations made in SMAN 3 Padang Panjang known that the minimum completeness criteria classical minimal value (KKM), geography subjects in class X MIPA 1 is 73. There are still many students who have not been able to reach the predetermined classical minimal value,. The results of the evaluation of learners who performed at the end of the learning activity geography shows that of 29 students 15 of them scored above the classical minimal value. And only 14 students who scored below the classical minimal value.

One method of teaching geography used in class X MIPA 1 SMAN 3 Padang Panjang is the

method of discovery, it is because the method of discovery: (a) It is a way to develop student learning active, (b) In finding himself, investigating themselves, the results obtained would be loyal and long-lasting in the memory, it will not be easily forgotten by students, (c) definition of self-discovery is a notion that is really controlled and easy to use or transferred in any other situation, (d) using the strategy of the invention, child learning to master one of the scientific method that will allow for the development itself, (e) the method of this invention, too, children learn to think and try to solve the analysis problem faced its own, this habit will be transferred in public life. It is hoped that this discovery methods known and used in various occasions that allow the learning process, so that students can learn active and get the hoped results [3-7].

According Education and Cultural of Cabinet Minister discovery learning model, a learning model that governs such a way that learners acquire knowledge of the unknown had not been through a notification, in part or wholly invented himself. So that this method has the following advantages: (a) the technique is able to assist students to develop, multiply preparedness, panguasaan skills in cognitive processing/recognition of students, (b) Students acquire knowledge that is very personal /

individual that can be solid or deep left behind in the spirit of the students, (c) to enhance the students' learning enthusiasm. Puse of total discovery learning model will improve the learning activities and learning outcomes of students [8-10].

According to [3] discovery learning model to apply the method in the class, there are some procedures that should be implemented in the learning activities, generally as follows:

- 1) *Stimulation*. First of all at this stage students are exposed to something that causes confusion, then proceeded to not give a generalization, that the desire to investigate itself. Besides, teachers can start learning activities by asking questions, suggestions reading books, and other learning activities that lead to the preparation of troubleshooting. Stimulation at this stage serves to provide the conditions of learning interaction that can develop and help students to explore.
- 2) *Problem statement*. After stimulation, next steps are teachers allowed students to identify as much as possible the agenda of issues relevant to learning materials, and then select one of the problems and formulated in hypothetical form (temporary answer to the question of the problem). Giving students the opportunity to identify and analyze problem they face, is a useful technique in building students' understanding in order to get used to locate the problem.
- 3) *Data collection*. Tahap serves to answer questions or to prove the validity of the hypothesis, the chance of students gather relevant information, read the literature, observing the objects, interviews with informants, conducting their own trials and so on. The consequence of this stage is the students learn actively to find something related to the problems faced, thus inadvertently connect students with the knowledge problem that has been owned.
- 4) *Data processing*, is an activity to process the data and information that has been obtained by the students through interviews, observation, and so on, and then interpreted. All informai readings, interviews, observations, and so on, all processed, randomized, classified, tabulated, even if it is calculated and interpreted in a certain way at a certain confidence level. Data processing is also called coding coding / categorization which serves as the formation of concepts and generalizations. The generalization of the student will gain new knowledge about alternative answers / settlement that needs proof logically.
- 5) *Verification*, at this stage students examine carefully to prove whether or not the hypothesis set forth by finding alternatives,

associated with outcome data have been processed. Verification aims to make the process of learning to walk properly and creatively if the teacher gives students the chance to find a concept, theory, rules or understanding of the examples he encountered in his life.

- 6) *Generalization*, generalization is the process of drawing conclusions that can be used as a general principle and applies to all event or the same problem, taking into account the results of the verification.

Based on the above concept, the notion of learning outcomes can be summarized as positive changes in behavior and the ability of students from an interaction act of teaching and learning in the form of learning outcomes of intellectual, cognitive strategies, attitudes and values, innovation verbal and motor learning outcomes. Such changes may mean an increase and a better development than ever before. Activities and learning outcomes of students is an important part of learning, learning outcomes of students is essentially a change in behavior as a result of learning in a broader sense include the areas of cognitive, affective, and psychomotor.

## 2. METHODS

The study was conducted by the method of action research, the method of research done in the classroom to improve the activity and results of class X MIPA 1 SMAN 3 Padang Panjang on Wednesday, October 9, 2019, and October 23, 2019.

## 3. RESULTS AND DISCUSSION

### Cycle I

The following is a description of the observed data student activity learning in class X MIPA 1 SMAN 3 Padang Panjang in cycle I.

#### *Description of learning outcomes in the first cycle*

The thoroughness of the study of students in analyzing the atmosphere and its impact on life on earth by using discovery learning model can be seen in the following Table 1.

Table 1. Complete Classical Learning Outcomes in Cycle I

No	Total Students	(%)	Category Completeness
1	15 people	52%	Complete
2	14 people	48%	Not Completed

Source: Primary Data (2019)

According to the Table 1, mastery learning outcomes of students individually in analyzing the

subject matter of Planet earth as a living space Wednesday, October 9, 2019, in the first cycle of 29 learners, 15 of them have reached completeness classical minimal value 73 while learners who have not completed is 14.

#### Reflection Cycle I

Activities and achievement in the cycle I the necessary repairs on the cycle II, reason for not achieving the necessary improvement targets and goals of research every indicator of learning. Then the improvement will be implemented in the cycle I, among others: (1) Explain and provide understanding to students that the learning process by using the model of discovery learning is a learning process centered on the activities of the learner rather than the teacher, (2) Provide better guidance to students to understand the learning resources that are used, (3) Helping students to process data buffer learning resources, (4) Giving explanation educates students who do not understand the material, and (5) Helping students concluded the course material.

#### Cycle II

Cycle II implemented in class X MIPA 1 on Wednesday, October 23, 2019, with instructional materials on Planet Earth as a living space.

#### Planning Cycle II

Preparations on the second cycle of planning are as follows: (1) Preparing learners observation sheet activities, (2) Preparing teacher activity observation sheet, (3) Preparing the syllabus, (4) Preparing RPP (Lesson Plan) which is characterized by the second cycle of learning by using a model of Discovery Learning, (5) Preparing tools and instructional media will be used, (6) Prepare textbooks and instructional video views, as the stimulus of learning with used discovery learning model.

#### Implementation of The Cycle II

Implementation of the cycle II study was also conducted with the help of a teacher observer (collaborators). Activities undertaken in the implementation of Discovery Learning model is implementing six learning steps: a) Stimulation, b) Problem Statement, c) Data Collection, d) Data rocessing, e) Verification, f) generalization.

Action Cycle II meeting with the following activities: (1) Teachers ask questions to see initial knowledge of learners as a prerequisite before entering the stage of learning about the sea, (2) Teachers provide the learning process by using Model Discovery Learning, (3) Teachers deliver

instructional videos about the formation of the sea and the students watch the video, (4) Teacher directs learners write a problem found with regard to the video about the formation of the sea, (5) The teacher divides the learners on 6 groups, based on the same issue of the remarks learners, (6) Learners read and gather information sources to answer questions written in the respective groups, (7) Learners perform in the discussion group to explain any questions learners, (8) Each group of students explain their findings in turn and other groups respond to the results of focus group discussions appear, (9) Learners conclude then teacher learning material provides reinforcement material before the closing lesson.

Table 2. Complete Classical Learning Outcomes in Cycle II

No	Total Students	(%)	Category Completeness
1	25 people	86%	complete
2	4 people	14%	not Completed

Source: Primary Data (2019)

Classical completeness of the data on the second cycle of learning outcomes can be explained that the increase in the average value.

#### 4. CONCLUSION

Based on results of reseach and discussion of learning can the data presentation and analysis of research data that were research get conclusion learning used discovery learning methode can increase activity and student learning geography in the Class X MIPA 1 SMAN 3 Padang Panjang, this matter proved with increase to convidence, discipline, initiative, responsible and motivation student improvements. completeness of student learning outcomes in the first cycle is 76% increased to 88%, while students who did not complete decline of cycle I is 24% down on the second cycle to 12%.

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