

The Influence of Guided Inquiry Learning Model with LKPD Assistance on Attitude Competencies of Class XI Students of SMAN 1 Sungayang

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Abstract -This research is motivated by a learning process that is still passive and only highlights the intellectual aspect. The learning model used by the teacher is still conventional so that changes in student attitudes are less noticed. To overcome this problem, researchers want to apply a guided inquiry learning model that is assisted by LKPD which aims to improve the competency domain in the attitude of class XI students in Sungayang 1 High School. This type of research is quasi-experimental research with design Randomized Control Posted Only Design. The population in this study was all students of class XI IPA 1 Sungayang. Data analysis techniques to test hypotheses using Mann-Whitney test. The results of the hypothesis test obtained the value of Asymp. Sig for 0.017. This shows that the Guided Inquiry learning model assisted by LKPD is better than the learning competencies in the realm of students who take conventional learning.

Keywords - Guided Inquiry, LKPD, Attitude.

I. INTRODUCTION

National education has an important role in determining the success of a nation. The role of the world of education in preparing young people who are able to compete in the global era is very important for the progress of a country in the future. According to UU No. 20 of 2003 article 3 states that education has a very large function and role in order to realize a capable Indonesian society and strong character.

The reality in the field, the implementation of the goals and functions of education has not been fully implemented properly. This is due to the declining attitudes and character of the nation due to lack of examples, reporting in print and electronic media that is not educational, and education that has not provided optimal contribution in the formation of student attitudes and character.

Thus education must be directed to produce quality

human beings, able to compete, and have good moral and moral character. In the context of science, according to the nature of learning it contains four important things namely content or product, process or method, attitude and technology. Science as content or product means that in science there are facts, laws, principles and theories that have been accepted. Science as a process or method means that science is the process of gaining knowledge. Apart from being a product and process, science is also an attitude, which means that in science there are attitudes such as perseverance, openness, honesty, and objectivity. Science as technology implies that science is related and used in everyday life (Astuti et al., 2012; Sudarisman, 2015; Ayu, et al., 2018).

Based on observations made by researchers at SMAN 1 Sungayang, information was obtained that the learning process still highlights aspects of knowledge without seeing

how changes in the nature of students. One reason this can happen is that the learning model used by teachers is still conventional. Learning is still dominated by the lecture system and assignment assignments so that the competency aspects of student attitudes are less noticed. This results in the low application of attitudinal values such as honesty, discipline, responsibility, tolerance, politeness, and self-confidence in students and students further highlighting more selfish individual attitudes.

The application of the 2013 curriculum which emphasizes a competitive approach requires students to balance the ability of knowledge, attitudes, and skills. Teachers are not only required to teach knowledge, but also demand to produce skilled and scientific students. To improve scientific attitude skills in learning it is necessary to use a learning model that has scientific steps. One learning model that supports the improvement of student competence in accordance with the scientific approach is guided inquiry.

Guided inquiry learning model is a teaching model that emphasizes the process of finding concepts and the relationship between concepts in which students design their own experimental procedures so that the role of students is more dominant, while the teacher guides students in the right direction. Guided inquiry models can improve student learning motivation because students discover their own learning concepts through direct experience. Students are formed in several groups and faced with a problem, from that problem there are students who seek answers to the problem. To prove the answer to the problem, students conduct experiments and analyze the data obtained so that they find the cause of the symptoms logically and can be connected with the facts that occur today so that they can develop honesty, discipline, responsibility, tolerance, politeness and confidence in students (Derlina and Mihardi, 2015; Wahyuni, et al., 2016; Riyadi, et al., 2015; Purwanto, 2012).

The guided inquiry learning model consists of six stages (phases): (a) planning, (b) information, (c) processing information, (d) making information, (e) communicating information, and (f) evaluating (Hapsari et al, 2012). Guided inquiry learning enables students to build knowledge independently and help them develop an understanding of their representative concepts and scientific literacy practices (Stricklyn, 2011; Lee, et al., 2010; Minner, et al., 2010; Wilson, et al., 2010, Wardani, et al., 2016).

The impact of learning and the effects that accompany

the inquiry learning model are: (a) Able to develop science process skills, (b) The inquiry model can be developed creatively, (c) Increase the creative spirit and enthusiasm for learning in students, (d) Give freedom or autonomy of learning in students, (e) Allows two-way cooperation (teacher- student and student), (f) Emphasizes the essence of the temporality of knowledge (Simbolon, 2015).

Some advantages in teaching using the guided inquiry method proposed by Bruner (can be explained include: (a) Students know the basic concepts and ideas better, (b) Helps in remembering the new learning process, (c) Motivating students to think and work their own initiative, (d) Encourage students to think intuitively and formulate their own hypotheses, (e) Giving kepuasan is intrinsic, (f) More interesting learning process (Purwanto, 2012).

The continuation of the learning process is also supported by teaching materials that are in accordance with the model used. Here the researcher completes the learning model with the LKPD. Student Activity Sheet (LKPD) is one of the means to help and facilitate teaching and learning activities so that effective interactions between students and educators will be formed and also enhance student activities in improving learning achievement. LKPD is also a sheet containing tasks that must be done by students, the activity sheet is usually in the form of instructions, steps to complete the task (Azmi, Prastowo and Maslena, 2018).

Based on the explanation above, the researcher wanted to see whether the guided inquiry learning model assisted by LKPD was better than the learning competence in the attitude domain of students who followed conventional learning. In terms of the domain of competence of student attitudes referred to here in the form of honesty, discipline, responsibility, tolerance, politeness, and self-confidence.

II. METHODOLOGY OF RESEARCH

This research was conducted in class XI IPA 1 Sungayang High School in the second semester of the 2018/2019 academic year. This study was a quasi-experimental study with a Randomized Control Group Design Only. The experimental class was treated by applying the Guided Inquiry learning model assisted by LKPD, while the control class used a conventional learning model.

The population in this study was Sungayang XI XI grade 1 students consisting of 3 classes namely XI IPA 1, XI IPA 2 and XI IPA 3 with a sampling technique that is purposive sampling, where the sample was deliberately chosen based on certain characters needed. . The sample in this study was

class XI IPA 3 which amounted to 27 students as a control class and class XI IPA 1 which amounted to 30 students as the experimental class.

The independent variable in this study is the question model with the help of the LKPD. The dependent variable in this study is the learning outcomes of student attitudes. Data collection techniques used observation techniques using questionnaires at each meeting with the help of 2 observers. Testing the hypothesis in this study using the Mann-Whitney test or U test. The test was carried out using SPSS 22 with a significance level of 5%.

III. RESULTS AND DISCUSSION

A. RESULTS

The attitude hypothesis is in the fifth hypothesis with the description of the results of statistical tests using the Mann-Whitney Test with the help of SPSS 22 software as follows:

Table 1. Results of Hypothesis Calculation in Attitude

Kelas	Mean	Asymp. Sig.	α	Ket
Experiment	3.20	0.017	0.05	H ₀ ditolak
Control	3.04			

Based on Table 1, it can be seen that the value of Asymp. Sig from attitude learning outcomes obtained at 0.017. This means the value of Asymp. Sig < 0.05, then H₀ is rejected because the basis of the decision in the Mann-Whitney Test is if the value of Asymp. Sig < 0.05, then the hypothesis is accepted and If the value of Asymp. Sig > 0.05, then the hypothesis is rejected. So it can be concluded that the biological learning competencies in the attitude of students who follow the Guided Inquiry learning model assisted by LKPD are better than the realm learning competencies of students who take conventional learning.

B. DISCUSSION

Competence in the attitude domain is a competence related to attitudes, interests, attention, emotions, rewards, internalization processes, and the formation of self-characteristics. The use of guided inquiry models is able to foster and develop scientific attitudes such as: honesty, discipline, responsibility, tolerance, politeness and politeness, and self-confidence through learning activities that emphasize the scientific method.

Observation of the student's competency in the attitude of the two observers obtained data that the average attitude

of students in the experimental class was 3.20 with good criteria (B) while the control class 3.04 with good criteria too. The average difference between the experimental class and the control class is not seen so far. In the experimental class, the average student has an honest attitude, discipline, responsibility, tolerance, courtesy, and believes that it is distributed equally. This is because the stages of applying the learning model are carried out systematically according to the steps contained in the guided inquiry model. LKPD teaches students to adjust the time and follow the rules when learning takes place. In line with the opinion of Hapsari (2007) which states that from the first stage of formulating the problem to delivering the results of the discussion, students are required to follow the rules in the applied learning model. These stages require students to be very disciplined and responsible.

In addition to discipline, experimental class students are more confident and able to work together in group discussions, able to appreciate the opinions of others even if they conflict with their opinions in a wise manner. While the attitude of competence in the control class as a whole gets good criteria too, but there are still many students who lack discipline, confidence and responsibility. Many students still do not show good discipline. This is because students have not been trained to be independent in learning. Some students can work together in group discussions, can respect the opinions of others, but some students cannot accept the opinions of other students because they conflict with their opinions. Some students are still silent and not confident in groups.

Hapsari (2007) states that the learning process through inquiry activities can motivate students to develop inquiry skills or process skills so that in the end they can produce scientific attitudes such as: respecting other people's ideas, being open to new ideas, being open to ideas - new ideas, critical thinking, honesty, discipline, thoroughness, responsibility, cooperation and creativity.

The learning process through inquiry activities is very important because it can optimize the involvement of students' direct experience in the learning process and also foster work skills and scientific attitudes towards students. Work ability and scientific attitude developed through a guided inquiry learning model assisted by LKPD include: being careful in formulating problems, formulating hypotheses, designing experiments, conducting experiments, disciplining the learning process, conducting experiments, being open to the opinions of others and teachers. , Responsible for the tasks given by the teacher and present

the material: and work together in solving existing problems.

Organizing students in groups provides opportunities for students to work together in building their understanding and skills through interaction with social environments such as: friends, teachers, and other learning resources. This is in accordance with Vygotsky's learning theory which says that a guided inquiry learning model is able to train student cooperation in groups when the learning process takes place. The skills and attitudes of students who learn in groups will be better than students who study independently (Hapsari, 2012).

Guided inquiry models with the help of LKPD can maximize student attitudes competency. The scientific approach provides a different atmosphere in the learning process, because it requires each student to be responsible, think critically in response to each question related to the learning process so students are asked to ask questions and respond to friends' opinions. In line with Nurtanto and Syofyan (2015) that character education instills good habits so students become aware of right and wrong, and are able to feel good values and can do it.

Learning to use a guided inquiry model involves students to be active in learning so that they can improve the competence of students' attitudes to be better at learning. This is in accordance with the opinion of Nworgu (2013) that a guided inquiry model can improve the competency of students' attitudes or character because they understand, internalize and actualize it through the learning process so that learning is more meaningful. Guided inquiry can make students active in observing, asking questions, trying or gathering information, reasoning, and communicating. This is in line with the demands of the 2013 curriculum which emphasizes the scientific approach.

At the observing stage, students can grow curiosity, so that in observing activities have a high meaning, because the observing stage can find the fact that there is a relationship between the object being observed and the learning material.

In addition, observing is a sensory process activity. In accordance with Andari's opinion (2012) that students can build conceptual understanding of what they see and experience. Observation and experience directly enable students to build their understanding meaningfully, learning that involves the senses, physical and intellectual is an active learning process.

IV. CONCLUSION

From the research that has been done, it can be concluded that learning using a guided inquiry model from the LKPD produces real world competencies which are good attitudes towards students. With a guided inquiry learning model that is assisted by LKPD it can improve honesty, discipline, responsibility, tolerance, politeness, and self-confidence.

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