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IMPLEMENTATION OF DISCOVERY LEARNING MODEL TOWARD STUDENTS' CURIOSITY STRENGTHENING ON ECOSYSTEM SUBJECT IN MTsN SABANG

IMPLEMENTASI MODEL DISCOVERY LEARNING TERHADAP PENGUATAN KARAKTER CURIOSITY PESERTA DIDIK PADA MATERI EKOSISTEM DI MTsN SABANG

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ABSTRAK

Penelitian dengan tujuan untuk mengetahui penguatan karakter *curiosity* peserta didik dengan implementasi model *discovery learning* pada materi ekosistem telah dilaksanakan di MTsN Sabang, Aceh. Metode penelitian yang digunakan adalah *mix methods*. Populasi dalam penelitian ini adalah seluruh peserta didik kelas VII. Sampel dalam penelitian ini adalah kelas VII_4 yang berjumlah 25 orang. Pengumpulan data dilakukan dengan menggunakan angket *curiosity*. Data dianalisis dengan menggunakan rumus persentase. Hasil penelitian menunjukkan bahwa rata-rata dimensi *curiosity* peserta didik setelah dibelajarkan melalui implementasi model *discovery learning* tergolong dalam kategori sangat baik, yaitu antusias mencari jawaban 83,6%, perhatian pada objek yang diamati 89,3%, menanyakan setiap langkah kegiatan 85%, dan antusiasme pada proses sains 84,6%,. Jadi disimpulkan bahwa model *discovery learning* dapat menguatkan karakter *curiosity* peserta didik pada materi ekosistem di MTsN Sabang, Aceh.

Kata Kunci: *Curiosity*, *Discovery Learning* dan Ekosistem.

ABSTRACT

Research with the aim of knowing the strengthening of the curiosity character of students by implementing discovery learning models on ecosystem material has been carried out at MTsN Sabang. The research method used is mix methods. The population in this study were all students of class VII. The sample in this study was class VII4, amounting to 25 people. Data collection was carried out using a curiosity questionnaire. The data were analyzed using the percentage formula. The results showed that the average curiosity dimensions of students after being taught through the implementation of the discovery learning model were enthusiastic looking for answers to 83.6%, attention to the observed object 89.3%, asking for each step of the activity 85%, and enthusiastic about the science process 84.6% in very good category. So it can be concluded that the discovery learning model can strengthen the curiosity character of students in the ecosystem material at MTsN Sabang.

Keywords: Curiosity, Discovery Learning and Ecosystem.

INTRODUCTION

Learning is a conscious effort from a teacher to teach students by directing student interaction with other learning resources in order to achieve the expected goals. The achievement of learning objectives really depends on its planning. Careful assessment of the content of the material, possible approach methods, and potential presentation methods should all be considered as important features of the planning process [1].

Good education determines the progress of a nation because education plays a role in educating life and shaping the character and civilization of a nation with dignity. The 2013 curriculum is an educational resource that makes a significant contribution to building character and personality so that it can form students who not only have intellectual intelligence and skills, but also students who are faithful, cautious, noble, independent, creative, democratic and responsible answer [2]. Efforts to strengthen character are the basis for the implementation of the 2013 curriculum. In teaching, teachers not only teach knowledge and skills but also fostering and strengthening the character of students [3].

One of the character values that must be possessed by students to develop their potential properly is curiosity. Curiosity will encourage and motivate students to start learning and find more information. Curiosity development includes integrating the values of curiosity into learning materials in the teaching and learning process. Characters that fit the needs of the 21st century include attention, curiosity, courage, resilience, ethics and leadership [4].

Science learning aims is so that students have the ability to recognize, respond and appreciate science and technology, also to instill thinking habits and show scientific attitudes such as curiosity, criticality, honesty, logic, and discipline through learning. Biology is one of science lessons which is a compulsory subject at the junior high school level (SMP) or Madrasah Tsanawiyah Negeri (MTsN) which is related to systematically finding and

understanding the natural surroundings. Curiosity is a source of internal motivation which is the foundation in the learning process science [5]. Curiosity will motivate students to develop reading, listening, and thinking skills actively so they can understand information well.

The observations at MTsN Sabang, Aceh showed that the average percentage of curiosity of grade VII students in ecosystem subject was 30.55% which belong to low category, so the researcher thinks it is important to improve the curiosity of students in ecosystem subject.

Curiosity is one of the important attitudes of students. Students who have high curiosity can get far more knowledge than students who are only waiting for an explanation from their teacher. Therefore curiosity is something that needs initial attention, because the higher a person's curiosity, the more data or information received or obtained. However, according to the 2013 curriculum, we need an appropriate learning model to strengthen students curiosity effectively and efficiently. One of the learning models in accordance with the 2013 curriculum is Discovery Learning.

The discovery learning model requires students to find a solution based on the problems given by the teacher, by proposing problems or questions, to dig up the data or information they need. Students' curiosity will arise if they are given active learning situations that pose challenges. In the application of discovery learning models, the teacher acts as a guide by providing opportunities for students to learn actively [6]. The question is whether the implementation of discovery learning models can strengthen the curiosity of students in ecosystem subject.

RESEARCH METHODS

This research was conducted at MTsN Sabang, Aceh in the Even Semester of 2018. The population in this study were all students of grade VII consisting of 4 classes while the sample were 25 students of class VII4. Data collection is conducted by giving a questionnaire containing 20 statements. The research method uses

mix methods, while the data were analyzed using the percentage formula.

$$\text{Percentage} = \frac{\Sigma \text{Score Achieved}}{\Sigma \text{Maximum Score}} x\ 100\%$$

With a range of values according to Purwanto, 2012:

Score (%)	Qualification
81-100	Enthusiastically looking for answers
61-80	Attention to the object being observed
41-60	Asking every step of the activity
21-40	Enthusiastic about the process of science
0-20	Percentage of Students' Curiosity

RESULTS AND DISCUSSION

Curiosity is an attitude that always tries to find out more in-depth information than what is learned, seen, and heard. Curiosity measured in this study consists of 4 aspects, which are the enthusiasm in looking for answers, attention to the object being observed, asking every step of the activity and being enthusiastic about the scientific process. The average percentage of each dimension can be seen in Figure 1.

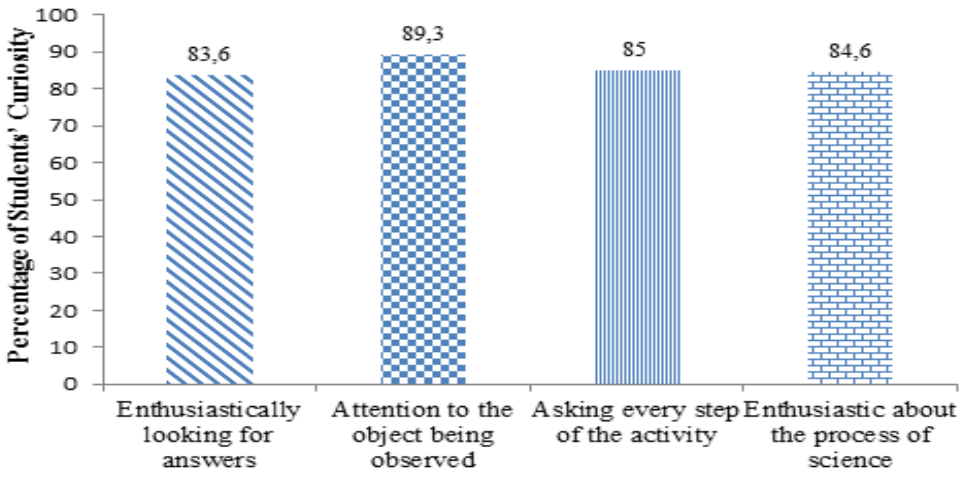

Figure 1. Percentage of Each Aspects of Students Curiosity.

Figure 1. shows that all the curiosity

aspects of students are in the very good category. The aspects of students' attention to the object observed had the highest value, 89.3%. Students who have high curiosity about the subject will try to find deeper and broader information. Students can develop their knowledge by having curiosity about the subject being taught. The higher curiosity of the students, the more information they will get [7]. If a student has curiosity then they will

learn more about something so they will understand it more [8].

Students' curiosity will appear if the teacher conducts a learning situation that poses a challenge to them. In the implementation of the discovery learning model for enhancing students' curiosity, the teacher set a learning process that need students to think independently in finding general concepts and principles with teacher's guidance. Discovery learning can encourage students to discover social phenomena and how to overcome them [9]. Discovery learning model has several learning steps, i.e. simulation, problem identification, data collection, data processing, verification and drawing conclusions. Through these stages, the teacher can strengthen the curiosity of students.

At the simulation stage, the teacher starts learning activities by asking questions or suggestions for reading books that lead to problem-solving preparation. The tendency to ask and look for a problem can develop students' desire to learn. In the problem identification stage, the teacher gives students the opportunity to identify as many problems as possible that are relevant to the teaching material which will then be formulated as a hypothesis. After that, data will be collected to obtain as much relevant information as possible to prove the hypothesis. At the data processing stage, students process data and information that has been obtained through observation. At the verification stage, students carry out careful examinations to prove the truth of the formulated hypothesis in relation to the results of data processing. At the final stage, students conclude the results of problem solving in accordance with the results of verification. So, the application of the discovery learning model not only increases students' knowledge but also encourage students to be skilled in finding solutions independently so it can strengthen students' curiosity. The application of discovery learning can also increase the courage to ask questions that can supports their curiosity [10].

CONCLUSION

The implementation of discovery learning models can strengthen students' curiosity on ecosystem material at MTsN Sabang, Aceh.

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