
**DISCIPLINE AND RESPONSIBILITIES CHARACTERS OF SENIOR
HIGH SCHOOL (SMA) STUDENTS THROUGH PROBLEM BASED
LEARNING ON TRANSPORT SYSTEM MATERIAL**

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ABSTRACT

This research aimed to know the development of discipline and responsibility characters of the students at SMA Negeri 1 Suka Makmur Nagan Raya in Biology subject on transport system concept through a problem based learning model. This research used descriptive qualitative method. The samples were students of class XI. Character values obtained from observations using a questionnaire instrument. Data were analyzed using the percentage formula. The result showed that there was a student's character development at each meeting, namely the value of discipline character at the first meeting with a percentage of 65 increased to 88 at the second meeting, while the value of responsibility character at the first meeting with a percentage of 63 increased to 90 at the second meeting. It can be concluded that the problem based learning model can increase the value of discipline and responsibility characters of the students at SMA Negeri 1 Suka Makmur Nagan Raya.

Keywords: discipline and responsibility characters, problem based learning model

INTRODUCTION

The world of education is a place where the formation of students' character develops, however, in fact the character of the nation's children is experiencing serious problems. Through education, it is expected that there will be a transformation that can foster positive character. Character education directs to the formation of moral individuals, capability of making decisions that appears in their behavior and play an active role in building a life together [1]. There are three important things in character education, namely knowledge about goodness (knowing the good), good actions (doing the good), and internal motivation in doing goodness (acting the good) [2].

The learning process, especially Biology learning, must be well designed so that it can become a setting in establishing students' positive characters. Teachers need to be involved in the learning process and discussion as an effort to build students' character. The characters that are built will grow into their identity or personality which is shown through their daily behavior and interactions [3]. If students have a good attitude

and mentality, they will be able to absorb knowledge well and become a sparkling generation.

The character of discipline and responsibility is important to be instilled in students. The character of responsibility has a close relationship with the character of discipline because by having self-discipline, a student will be responsible for everything he does [4].

One of the learning models that can be an alternative in developing students' character for it can stimulate students' positive attitude activities, including discipline and responsibility, is problem based learning model. Problem based learning is a learning model that uses real problems as a context for students to learn and acquire essential knowledge and concepts from the subject matter. The problem-based learning model is a learning model that is based on the number of problems that require authentic investigations. This refers to the investigations which require real solutions to the real problems [5]. The PBL model as learning that focuses on selected problems so that students do not only learn concepts related to

problem but also the scientific method in solving the problem [6].

Problem-based learning can improve learning activities, problem solving skills, and it can develop students' positive character [7]. The result of Purwanto's research stated that the application of the problem-based learning improved the character of students [8]. This is in line with the results of Restino's which found that the application of the problem-based learning can develop character activities in the aspects of discipline, hard work, independence, curiosity, communicativeness and student responsibility [9].

Based on the results of observations and interviews with Biology teachers and students of SMA Negeri 1 Suka Makmur Nagan Raya, the material on the transport system is still considered difficult for students to understand. This is because this material examines Biology at the cellular level which cannot be seen directly without using tools. Therefore, contextual learning that prioritizes the process such as problem based learning is required to improve students' understanding of concepts.

The purpose of this research is to investigate the development of discipline and responsibility characters of SMA Negeri 1 Suka Makmur Nagan Raya students in learning Biology on transport system material through problem-based learning.

METHOD

This research was a descriptive qualitative study.

Place and Time

This research was conducted in SMA Negeri 1 Suka Makmur Nagan Raya in odd semester of the 2021/2022 academic year.

Research Sample

The sample of this research was class XI students.

Instrument and Technique of Data Collection

The data collection was carried out by observing learning activities on the character of discipline and responsibility using a questionnaire as the instrument.

Data Analysis

Data were analyzed by using percentage formula as follows:

$$\text{Percentage} = \frac{\text{Eachived score}}{\text{Emaximum score}} \times 100\%$$

With the following criteria:

Table 1. Criteria of Characters[10]

Score (%)	Criteria
81-100	Very good
61-80	Good
41-60	Fair
21-40	Poor
0-20	Poor

RESULT AND DISCUSSION

In problem based learning model, students learn in groups to understand the problems they are discussing. The process of character education strengthening through

problem-based learning is appeared when students learn in group. The character of students is shown by respecting the opinions of their friends, working together, interacting, and asking questions in discussions in group work, observing, comparing, and communicating ideas they have [11].

From the results of the study, it is obtained data as shown in Figure 1 below:

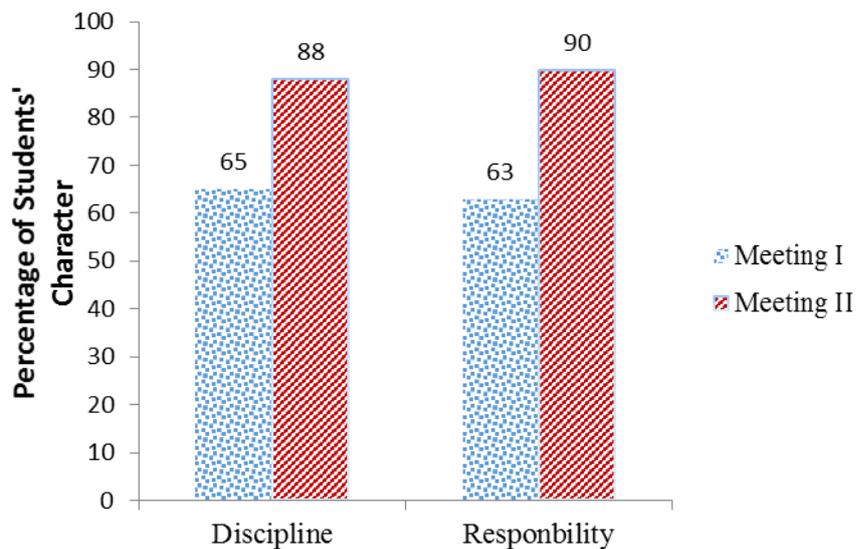


Figure 1. Percentage of Students' Discipline and Responsibility Characters in Each Meeting

Figure 1 shows an increase in students' character at each meeting. Discipline character at the first meeting with a percentage of 65 increased to 88 at the second meeting. The character of responsibility at the first meeting with a percentage of 63 increased to 90 at the second meeting. Application of the problem based learning requires students' high responsibility and discipline. This model provides opportunities for students to be able to construct their knowledge through completing assignments in groups so that they are more responsible for the learning process.

The existence of the increase in the character of students' responsibility and discipline is because in the application of the problem based learning in learning process, students will carry out the duties and obligations given by the teacher so that it will form the character of responsibility. In addition, students will also earnestly seek information with their group members to complete the tasks given by paying attention to

the time limit provided so that it will form a disciplined character.

Science learning can be integrated with character education through various approaches, models, methods, and learning media [12]. The PBL model can stimulate the formation of positive attitudes during learning activities. In the 2013 curriculum learning, an attitude of responsibility must be developed in students according to the provisions of the 2013 curriculum as the core competence (KI) 2 [13]. The forms of students' responsibility in the learning process include mental, emotional, physical involvement in responding to learning activities and supporting the achievement of goals and being responsible for their contribution to learning activities [14]. Discipline is a mental attitude that will make students become familiar with self-control and can familiarize themselves with the rules that exist at school and in the community [15]. Lack of students' discipline can be seen from students who do not submit assignments on time. Meanwhile, the character of responsibility is the attitude and

behavior of a person to carry out his duties and obligations. Responsibility will shape the character of students in a more positive direction and be able to prioritize patterns of character and attitude of discipline and thoroughness so as to provide positive feedback for themselves and others [16]. The lack of students' responsibility can be seen from the lack of thoroughness of the students in doing the assignments given by the teacher.

CONCLUSION

The problem based learning can increase the value of the discipline and responsibility characters of SMA

Thus, the formation of character begins with a knowledge gained, self-actualization and becomes a habit [17]. One of the causes of changes in students' attitudes is due to the learning process. The personality development of students is very dependent on the quality of the learning process (especially social learning) of these students both in the school, family and wider environment [18].

Negeri 1 Suka Makmur Nagan Raya students.

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