Students' Learning Independence in The Problem-Based Learning Model

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ABSTRACT. This research is motivated by the low learning independence of Grade X Phase E students. The purpose of this study is to describe how students' learning independence is in the problem-based learning model. This type of research uses a descriptive qualitative approach with a learning independence questionnaire as the instrument. The subjects of this study are Grade X Phase E9 students for the 2023/2024 academic year. Based on the data analysis conducted, the results showed that the average percentage of students' learning independence in each aspect is 77%, which falls into the good category. Therefore, it can be concluded that students' learning independence in the problem-based learning model falls into the good category.

Keywords: Learning Independence, Problem-Based Learning Model.

INTRODUCTION

Currently, the development of education in Indonesia is undergoing a curriculum change. Previously, the 2013 curriculum was used, but starting in 2022, the government changed it to the Merdeka curriculum. Based on the Decree of the Minister of Education, Culture, Research, and Technology of Indonesia Number 56/M/2022 concerning Guidelines for Implementing the Curriculum in the Context of Learning Recovery, on February 11, 2022, the government launched the Merdeka Curriculum. According to Hidayat, K. (2021), the Merdeka curriculum requires competent educators capable of maximizing students' potential. Therefore, educators play a crucial role in the learning process to uncover the students' potential.

Each student has different potential, leading to varied characteristics in the learning process. These characteristics become habits for students, such as learning styles, learning interests, social status, learning independence, and learning motivation. For teachers, this diversity poses a challenge in creating learning experiences that meet the students' needs amidst these differences.

At SMA Negeri 3 Brebes, most teachers, especially for mathematics, use the direct instruction model, though some also use the Problem Based Learning (PBL) model. Based on an interview on January 2, 2023, Mr. Bambang explained that direct instruction is considered less effective because it makes the classroom teacher-centric, resulting in many students not meeting the Minimum Competency Criteria (KKM) set by the school. In contrast, when students are taught using the PBL model, the classroom becomes more interactive. Students are more confident in answering questions, discussions become livelier, and the classroom atmosphere is more enjoyable. Thus, the use of the PBL model can attract students and encourage them to be more enthusiastic about learning. According to Tan, as cited in Amalia & Isnani (2018), the stages in the PBL model can enhance students' problem-solving skills.

Several factors influence students' problem-solving abilities,

including learning independence. With learning independence, students will practice more and find their own solutions to the problems they face. According to Iwamoto et al., as cited in Hidayat, Roza, & Murni (2018), learning independence is part of the learning process where students actively engage in their learning environment, practice regularly, and maximize their abilities to find solutions to existing problems.

An interview with Grade 10 Phase E9 students at SMA Negeri 3 Brebes on January 2, 2024, revealed that students lack initiative in their assignments, are not punctual during learning sessions (such as being late to class and submitting assignments late), and the classroom atmosphere is less interactive. Some students sleep, talk among themselves, and do not pay attention to the teacher's explanations, resulting in a lack of understanding of the material. Students easily give up when solving problems, often waiting for answers from friends rather than reviewing and understanding the lessons they have not mastered.

According to Asrori (2020:121), learning independence is an activity typically undertaken by students to achieve the desired success. However, it differs slightly from general learning because students are required to have a high level of initiative. This makes them more responsible for completing their tasks well. According to Sulistyani & Roza (2020), learning independence is an important factor in solving students' mathematical problems. If students have good learning independence, their problem-solving skills will also be good, and vice versa. Research by Delyana & PGRI Sumatera Barat (2021) states that the learning independence of Grade XI RPL B students at SMK Negeri 1 Bukit Sundi is strong for each indicator of learning independence and needs to be continuously developed. Based on the explanation above, the author aims to describe students' learning independence in the Problem Based Learning model..

METHODS

The type of research used in this study is descriptive qualitative.

According to Sugiyono (2017:15), qualitative research is a research method based on postpositivism philosophy, used to examine the natural condition of an object where the researcher is the key instrument. The population in this study consists of Grade X Phase E students at SMA Negeri 3 Brebes for the 2023/2024 academic year, totaling 389 students. The sample in this study was randomly selected, consisting of 32 students from Grade X Phase E9.

Data on the learning independence of Grade X Phase E9 students were collected using a questionnaire. The learning independence questionnaire was administered after the implementation of the Problem Based Learning model. The independence scale was constructed in the form of a Likert scale, which consists of a series of positive and negative statements with the options: Always, Often, Rarely, Never.

RESULTS AND DISCUSSION

The data obtained from this study are in the form of scores derived from the measurement tool, namely the learning independence questionnaire. The questionnaire results are expressed as percentages of overall learning independence and the percentage of each aspect of learning independence. The students' learning independence questionnaire consists of 32 statements covering 5 aspects of learning independence. The calculation of the total data obtained is done using the following formula:

$$P = \frac{F}{N} \times 100\%$$

Sources : Batubara et al., (2020)

where:

P : is the percentage of students' learning independence.

F : is the total score obtained from the learning independence questionnaire.

N : is the maximum possible score based on the learning independence questionnaire scale.

Table 1. Criteria for Learning Independence Questionnaire

Persentage (%)	Kategory
0% - 20%	Very poor
21% - 40%	Poor
41% - 60%	Fair
61% - 80%	Good
81% - 100%	Very good

Here are the results of the learning independence questionnaire completed by the students :

Table 2. Learning Independence Aspects and Results

Learning Independence Aspect	Results(%)	Kategory
Confidence	73%	Good
Freedom and responsibility	79%	Good
Progressive and diligent	77%	Good
Initiative and creativity	80%	Good
Self-control	78%	Good
Mean	**77%**	**Good**

DISCUSSION

Based on the calculations in Table 2, it can be concluded that the percentage of learning independence falls within the range of 73% to 80%. Interpreting these results, the indicators of students' learning independence fall into the "Good" category. Here are the detailed results for each aspect of learning independence:

Confidence aspect obtained 73%, indicating a good category. Although this aspect has a lower percentage compared to others, it still

falls within the good category. This suggests that students have good confidence in their learning. During lessons, students listen attentively to teachers' explanations, actively participate in answering questions, and are willing to share their ideas, though some students may still hesitate and rely on their peers' answers. According to Astuti (2015), students in learning independence need to have self-confidence, take responsibility for their learning activities, and demonstrate initiative.

Freedom and responsibility aspect achieved 79%, categorized as good. In this aspect, students work independently and responsibly on both individual and group assignments. Despite some students being late in submitting assignments, most students diligently complete and submit them on time, as noted by Chareuman (2003).

Progressive and diligent aspect scored 77%, also falling into the good category. Students demonstrate decision-making skills, answer questions based on their own understanding, and strive to comprehend the material thoroughly.

However, some students are reluctant to ask questions when unclear, reflecting on Prayuda, Thomas, & Basri's (2014) emphasis on critical thinking and independence in learning.

Initiative and creativity aspect scored the highest at 80%. Students engage actively in group tasks, discussions, and classroom activities, demonstrating initiative and enthusiasm. While most students utilize discussion time effectively, there are instances where time management could be improved, affecting task completion.

Self-control aspect achieved 78%, categorized as good. Students set learning goals, earnestly complete tasks, and present their work confidently. However, not all students actively participate in presenting their group work, with only a few taking on this responsibility.

Overall, the majority of students indicated that the Problem Based Learning (PBL) model enhances their confidence, responsibility, progressiveness, initiative, and self-control in learning. While students' learning independence falls into the good category, there is room for improvement across all five aspects. Enhancing these aspects could further improve students' mathematical problem-solving abilities and help them achieve their learning targets effectively. One significant factor influencing the quality of learning is learning independence, where students can perform tasks or exercises according to their abilities without relying on others (Yanti, 2017)..

CONCLUSION

Based on the results and discussion, it can be concluded that students' learning independence in the Problem Based Learning (PBL) model falls into the "Good" category. The average score across the five aspects of learning independence is 77%.

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