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# IMPLEMENTATION OF MERDEKA CURRICULUM BY PHYSICS TEACHER IN SMAN 1 PANCUR BATU

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***Abstract***

The aim of the research is to discover how teachers participate in physics learning using the Merdeka Curriculum through Science Process Skill of X2 students. The research is descriptive quantitative research method. Based on the results, the assessment concluded that student participation in the learning process at SMA Negeri 1 Pancur Batu is 45.7%, which is considered good. However, the student effective learning percentage at SMA Negeri 1 Pancur Batu is enough, at 37.1%. The indicator of no students being unable to comprehend at SMA Negeri 1 Pancur Batu is 45.7%, which is considered very good. Overall, the Merdeka Curriculum implementation indicators from the evaluation of students in the good category are 57.1%. According to the observation form results, 24 statement items of the 30 are accomplished, with 6 statement items not complying, indicating that the physics teacher's implementation of the Merdeka Curriculum in the X2 class is very good. For Science Process Skills of students X2 are categorized as good with a percentage of 67.71%. So, it can be defined that the Physics Teacher's implementation of the Merdeka Curriculum to students in class X2 using a Science Process Skills method is considered good.

**Keywords:** *Merdeka Curriculum, Physics Teacher*

A study conducted by UNESCO in 2018 highlighted the importance of education quality in unlocking individual potential. The process of discovering, stimulating, and optimizing an individual's common abilities, skills, and capabilities is called unlocking individual potential. The study found quality education can allow individuals to fully improve their potential (UNESCO, 2018).

As highlighted by Wahyuni & Berliani (2019), the curriculum is utilized to achieve educational goals in Indonesia. A deliberate intention and plan are served by the curriculum, and its execution takes place through the teaching and learning process intended to improve students.

The Merdeka Curriculum aims to unleash the untapped potential of teachers and students, thereby enhancing the quality of Merdeka learning. As a result, it is expected that the Merdeka Curriculum will contribute to the acceleration of national educational goals, with a specific focus on the improvement of human resources who possess superior and competitive qualities, as well as noble character and advanced reasoning abilities (Asmarawati, 2022).

The Merdeka Curriculum is an intra-curricular learning curriculum that is characterized by its diversity and optimization of content, providing students with sufficient time to explore concepts

and enhance their competencies. Flexibility is given to teachers, allowing them to choose from a range of educational tools to adapt the learning model to suit the specific learning needs and interests of students (Amiruddin et al., 2022).

The Merdeka curriculum focuses on project-based learning through a Process Science Skills approach. Indicators of basic process skills include seeing, classifying, measuring and manipulating numbers, making conclusions, planning, and communicating. However, in the research conducted, scientific process skills were not properly trained in learning activities or embedded with models and assessments. It refers to students capacity to comprehend and apply scientific approaches in describing phenomena in nature. The major goal is to have a better understanding of science, including how it is developed and implemented in everyday life (Aditiyas, S. E., & Kuswanto, H., 2024).

Following what is stated above, this research is required to determine how physics teachers exploit the Merdeka Curriculum in the learning process in the classroom. As well as that, however, this study was also designed to assess teachers' performance in implementing the Merdeka Curriculum in the classroom when teaching physics.

## METHOD

The research will be conducted in SMAN 1 Pancur Batu by non-participant observation instrument. The type of research is quantitative with the method used in this research being a descriptive method. After gathering all of the data, the following step is to evaluate it so that a conclusion may be derived from it. This study employs descriptive percentage data analysis approaches. The relative frequency % is used in data analysis (Sugiyono, 2013):

$$P = \frac{F}{N}\, x\, 100\ \%$$

Information: P = Percentage; F = Frequency; N = Number of Respondents

Categories in the assessment of the management of research results are determined by conversion criteria, according to Arikunto (1993) then the data is interpreted into five levels, namely:

Table-1. Category Level Percentage

| No | Interval | Category |
|---|---|---|
| 1 | 81% - 100% | Very High |
| 2 | 61% - 80% | High |

| | | |
|---|---|---|
| **3** | 41% - 60% | Medium |
| **4** | 21% - 40% | Low |
| **5** | 0% - 20% | Very Low |

For Science Process Skills observation data analysis the calculation of the percentage using the formula:

$$DP = \frac{n}{N} \times 100\%$$

Information: DP = Descriptive Percentage (%); n = Empirical Score (score obtained); N = Maximum Question Item Score

Based on data obtained from the analysis results observation sheet, so that skill criteria are obtained categorized student science processes to make it easy readable and easy to draw conclusions from categories are very good, good, less, bad and very bad. The categories can be seen in the following table:

Table-2. Category Level Percentage

| No | Interval | Category |
|---|---|---|
| **1** | 81% - 100% | Very Good |
| **2** | 61% - 80% | Good |
| **3** | 41% - 60% | Enough |
| **4** | 21% - 40% | Bad |
| **5** | 0% - 20% | Very Bad |

(Riduwan, 2009)

## RESULT AND DISCUSSION

### *Result Analysis for Merdeka Curriculum*

The histogram below represents the students form results in X2 class implementation Merdeka learning curriculum carried out at SMAN 1 Pancur Batu, which includes the following:

1. Students' Participation in Learning Process

The following is a histogram of indicators of student participation in learning process in the Merdeka Learning Curriculum conducted at SMA Negeri 1 Pancur Batu, which includes the following:

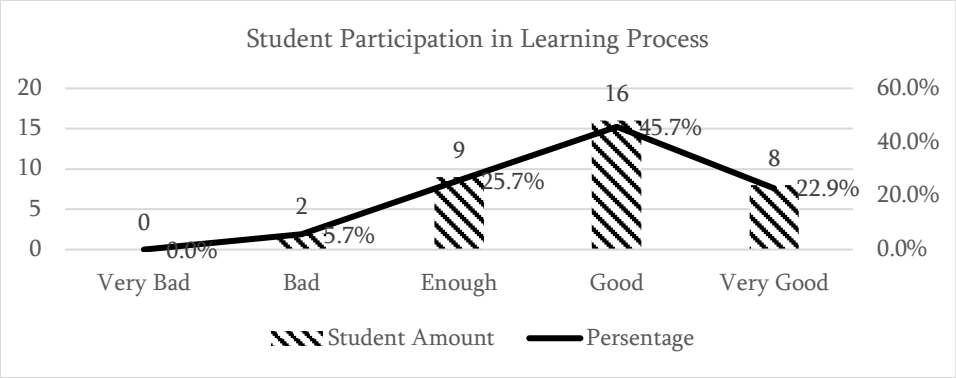


Figure 1. Histogram of Student Participation in Learning Process

Based on the findings of 16 types statements' which is there are 5 statements (Number 1-5) that showed the percentage of student participation in learning process. The percentage in the very good category is 22.9%, the percentage in the good category is 45.7%, the percentage in the enough category is 25.7%, the percentage in the bad category is 5.71%, and the percentage in the very bad category is zero. According to the results of the above histogram, the indicator of student participation in the learning process at SMA Negeri 1 Pancur Batu is in the good category.

2. Effective Learning

The following is a histogram of effective learning indicators in the Merdeka learning curriculum implemented at SMAN 1 Pancur Batu, consisting of the following:

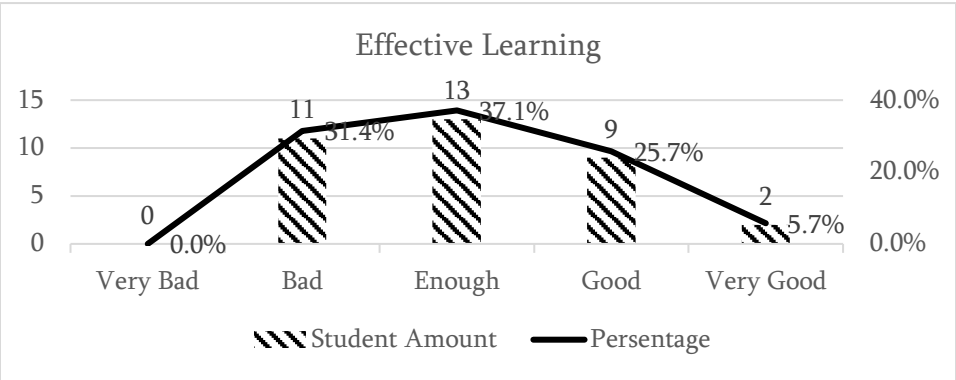


Figure 2. Histogram of Effective Learning

Based on the results of 16 statements and 5 statements (Number 6-10) presented to percentage of effective learning. The percentage in the very good category is 5.7%, and 25.7% in the good category, 37.1% in the enough category, 31.4% in the bad category, and 0% in the very bad category. According to the results of the histogram above, the indicator of student effective learning at SMA Negeri 1 Pancur Batu is in the enough category.

3. No students were unable to comprehend

The histogram below represents the indication of no students are unable to comprehend in the Merdeka learning curriculum carried out at SMAN 1 Pancur Batu, which includes the following:

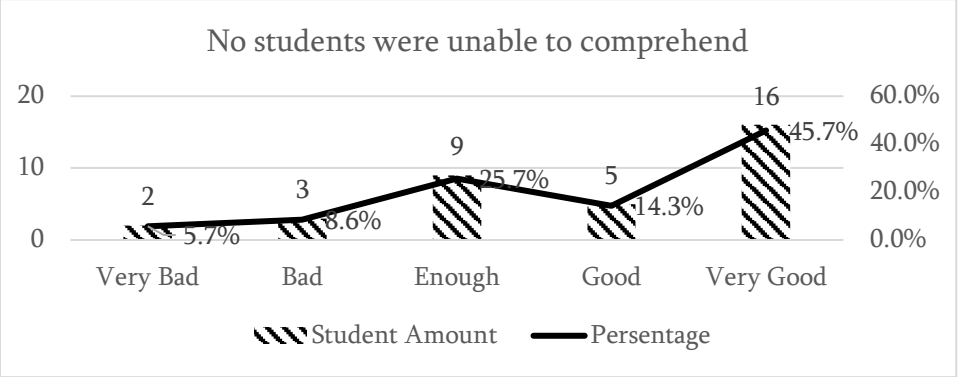


Figure 3. Histogram with no students were unable to comprehend

Based on the results of 16 statements and 6 statements (Number 11-16) presented to percentage of no students were unable to comprehend. The percentage in the very good category is 45.7%, and 14,3% in the good category, 25,7% in the enough category, 8,6% in the bad category, and 5,7% in the very bad category. According to the results of the histogram above, the indicator of students were unable to comprehend at SMA Negeri 1 Pancur Batu is in the very good category.

4. Students Form Results

The histogram below represents the students form results in X2 class implementation Merdeka learning curriculum carried out at SMAN 1 Pancur Batu, which includes the following:

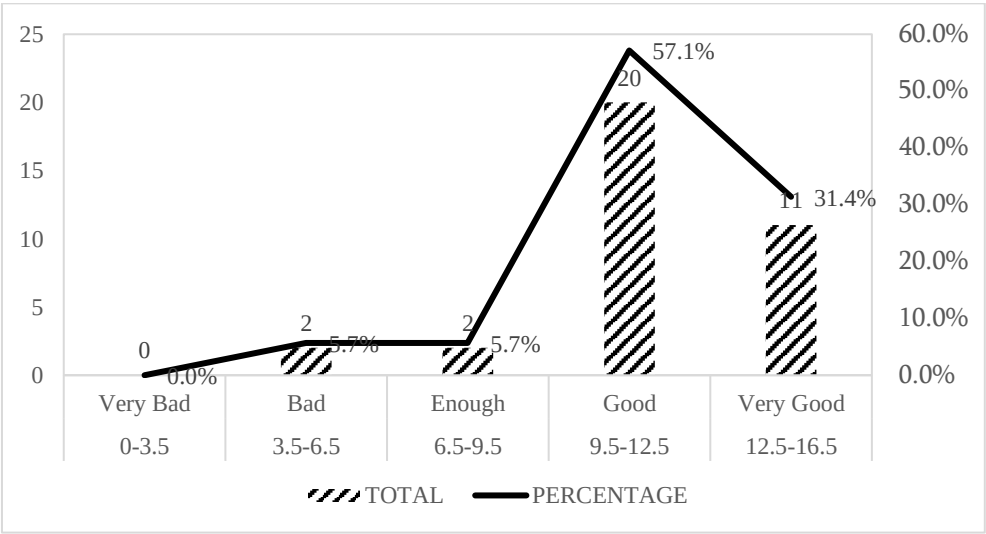


Figure 4. Histogram of Students Form Results

From the evaluation results of the lift questionnaire of 16 statements given to the students in class X2 with the number of 35 people sample can be analyzed and shown that the students answered yes in range 13 to 16 is 31,4% these categories are very good. Students answered yes in range 10 to 12 is 57,1% these categories are good. Students answered yes in range 7 to 9 is 5,7% these categories are les. Students answered yes in range 4 to 6 is 5,7% these categories are bad. These shows that the rating of lifting the students' class of X2 in the category is good.

5. Physics Teacher Form Results

Based on the evaluation results of the survey of 30 statements to observed the teacher teaching in class X2 with the number of 1 person sample can be analyzed and shown that there are 24 statements complied the implementation of Merdeka Curriculum and the remaining 6 statements that not complied. Overall from the survey form, this shows that the rating of lifting the teacher physics class of X2 in the category is very good.

***Result Analysis for Students Science Process Skills***

Data on the overall results of students' Science Process Skills in the practical work and kinetic energy experiments are presented in Table 4.1 below.

Tabel-3. Science Process Skills Percentage

| No | SPS aspects | Percentage (%) | Category |
|---|---|---|---|
| **1** | Observation | 73,14 | Good |
| **2** | Classification | 79,14 | Good |
| **3** | Interpretation | 57,71 | Enough |
| **4** | Prediction | 58,57 | Enough |
| **5** | Asking question | 72,00 | Good |
| **6** | Hypothesize | 68,86 | Good |
| **7** | Planning an Experiment | 69,86 | Good |
| **8** | Using Tools/Materials | 65,52 | Good |
| **9** | Applying Concepts | 67,71 | Good |
| **10** | Communicate | 72,86 | Good |

Based on Table 3 it can be seen that the average percentage of scientific process performance in the observation aspect is 73.14% in the good category, the classification aspect is 70.86% in the good

category, the interpretation aspect is 57.71% in the sufficient category, the prediction aspect is 58,57% in the sufficient category, the aspect of asking questions was 72.00% in the good category, the hypothesizing aspect was 68.86% in the good category, the aspect of planning an experiment was 69.86% in the good category, the aspect of using tools/materials was 65, 52% in the good category, the aspect of applying concepts was 67.71% in the good category, and the communicating aspect was 72.86% in the good category. So from the total number of each aspects it can be seen that students' science process skills are categorized as good with a percentage of 67.71%.

## CONCLUSION

Based on the research conducted in SMAN 1 Pancur Batu, can be concluded that:

1. The implementation of the Merdeka learning curriculum is carried out well. This can be seen from the questionnaire given to teachers in the very good category and the questionnaire given to students in the good category.
2. This is in line with the results of the analysis of students' Science Process Skills which are also in the good category. Based on 10 aspects of science process skills, namely observation, classification, interpretation, prediction, asking questions, hypothesizing, planning experiments, using tools and materials, applying concepts and communicating, there are aspects that are categorized as good, namely aspects of observation, classification, asking question, hypothesize, planning an experiment, using tools/materials, applying concepts, and communicating, while the aspects categorized as sufficient are interpretation and prediction.

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