EFFORTS TO IMPROVE SCIENTIFIC ATTITUDES AND INDONESIAN LANGUAGE LEARNING OUTCOMES BY USING *ACCELERATED LEARNING* APPROACH *TYPE MASTER* IN CLASS XI MAN 1 KERINCI

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ABSTRACT

This research is motivated by the low scientific attitude of students resulting in low learning outcomes for class I students of MAN 1 Kerinci, which is caused by the slow learning process in the class due to the lack of students' ability to absorb and understand new information, and difficulty retaining information that has been obtained. To overcome this problem, efforts were made using the *Accelerated Learning approach* which can result in better information absorption and understanding. This research is a classroom action research *that* aims to determine the improvement of scientific attitudes and Indonesian language learning outcomes of students. This research was conducted in 3 cycles using the *Accelerated Learning approach* . The subjects of this research were 22 first-grade students of MAN 1 Kerinci. The implementation time was the first semester of the 2019/2020 academic year. The techniques used in data collection were observation sheets, and evaluation. Based on the results of this study, it shows an increase in scientific attitudes and Indonesian language learning outcomes of students in each cycle. The increase in students' scientific attitudes can be seen from the average percentage of students' scientific attitudes in each cycle, in cycle I the average percentage of students' scientific attitudes was 62.2%, in cycle II it increased to 71.8 %, in cycle III it reached 81.3 %. In addition to scientific attitudes, the average Indonesian language learning outcomes of students and the number of students who completed also increased in each cycle, in cycle I the average student score was 63.64 with 7 students completing the course, increasing in cycle II to 70.45 the average student score with 10 students completing the course, and increasing again in cycle III to 83.52 the average student score with 19 students completing the course. Based on the results of this study, it shows that the *accelerated learning approach* can improve the scientific attitudes and Indonesian language learning outcomes of students in class I MAN 1 Kerinci.

Keywords : *Accelerated Learning Approach , Scientific Attitude, and Indonesian Language Learning Outcomes*

INTRODUCTION

The learning process is a deliberate activity aimed at changing a child's behavior. Behavioral change here refers to a shift from a *preexisting condition* , the knowledge that existed before encountering an experience, to *an existing condition* , the knowledge that exists after encountering an experience. Some people equate the meanings of educating and teaching, but in reality, the two words have different meanings. Educating focuses solely on increasing a person's maturity, while teaching focuses on increasing brain capacity (intelligence).

Improving student learning outcomes is greatly influenced by the quality of the teacher. Optimal learning outcomes can be achieved by selecting the right strategies and approaches. Teachers are not only required to be able to select the right strategies but also to master strategies and approaches that suit their students' characteristics to achieve optimal results.

The learning process at MAN 1 Kerinci has been varied in its learning methods, not only limited to lecture methods. The problem is that there are still several classes that have an average score below the curriculum standard, namely 67. The average score for the MID semester 1 exam for class I students at MAN 1 Kerinci in the 2018/2019 academic year can be seen in the following table:

Table 1. Average Mid-Semester Exam Scores for Class I of MAN 1 Kerinci

Subjects	Average
Religious education	73.50
Civic education	73.50
physical education	75.00
Indonesian	65.50

Source: MI27/E3 Kerinci Class I Mid Semester Exam Data

The table above clearly shows the difference between Indonesian language scores and other subjects. The low Indonesian language scores are due to the slow learning process in class. This is due to students' inability to absorb and understand new information and difficulty retaining what they have learned. This is based on students' low scientific attitudes, as evidenced by their lack of courage to ask questions, their lack of willingness to take notes on important points presented by the teacher, and their lack of courage to express their opinions.

Therefore, in addition to being equipped with knowledge, students should also develop adaptive skills to cope with change by developing a scientific attitude and learning to solve problems early on. *Accelerated Learning* is an educational approach that aims to fully awaken students' learning abilities, making learning enjoyable and satisfying, contributing fully to happiness, intelligence, competence, and success.

METHODS

1. Research Design

The research used is a type of classroom action research (CAR), namely reflective research conducted by educators themselves on curriculum, school development, improving learning achievement, developing teaching skills, and so on with the aim of improving the quality of

learning practices in a cycle. According to Iskandar (2009), "Classroom action research is a part of action research *conducted* by teachers and lecturers in the classroom (school and college) where they teach which aims to improve and increase the quality and quantity of the learning process in the classroom."

This research was conducted in several iterative cycles. The research stages are as follows:

1. Planning

Action planning is what explains what, why, when, where, by whom, and how the action is carried out.

2. Action (acting)

Action is the implementation of all plans that have been made previously.

3. Observation (observing)

Observation is conducted simultaneously with the action, where data is collected. The data collected includes the actions carried out and the action plans that have been made, as well as their impact on the instructional process and results, which are collected using observation instruments developed by the researcher.

4. Reflection

This reflection stage is a stage for reviewing and processing data obtained when conducting observations/observations of actions.

Student learning outcomes can be seen from the results of the cognitive ability test using objective questions in the final test at the end of the cycle. The reason for using objective questions is to avoid the inclusion of subjectivity (personal elements that influence the score) of the assessor.

The test used in this study was a post-test (final test). The final test was administered after the completion of the learning cycle. To ensure the quality of the test, the questions were pre-tested and then analyzed. This analysis was used to determine the test items' validity, discriminatory power, difficulty index, and reliability.

1. Validity

A learning outcome test can be said to be valid if the test material is truly the learning material provided. Validity is a condition that describes the level of the instrument in question is able to measure what will be measured (Arikunto, 2010). The test validity seen is high content validity if the test material is in accordance with what has been provided, in accordance with the curriculum and in accordance with the student's experience.

2. Level of difficulty

According to Arikunto (2010) good questions are questions that are not too easy and not too difficult. The magnitude of the question difficulty index is determined by the formula:

$$P = \frac{B}{JS}$$

Information:

P = Difficulty index
B = Many students answered the question correctly
JS = Total number of students taking the test

To determine the magnitude of the difficulty index, the criteria used are:

$0.00 \leq p < 0.30$: difficult
$0.30 \leq p < 0.70$: moderate

$0.70 \leq p \leq 1.00$: easy

Questions that are considered good are those with moderate criteria, but it should be noted that this does not mean that questions that are too easy or too difficult should not be used (Arikunto, 2010). So, the questions used in this study are questions with difficult, moderate, and easy difficulty level criteria .

3. Distinguishing power

Arikunto (2010) stated that the discriminatory power of a question is the ability of a question to distinguish between students who are intelligent (highly capable) and students who are less intelligent (lowly capable). To calculate the test group, it is divided into two equal groups, 50% of the upper group and 50% of the lower group. The discriminatory power of a question is calculated using the formula:

$$D = \frac{BA}{JA} - \frac{BB}{JB} = P_A - P_B$$

Information:

D = Discrimination index or distinguishing power
JA = Number of upper group participants
JB = Many lower group participants
BA = Number of participants in the upper group who answered correctly
BB = Number of participants in the lower group who answered correctly
P_A = Proportion of the top group who answered correctly
P_B = Proportion of the lower group who answered correctly

With the D value criteria are:

$0.00 \leq D < 0.20$: Bad
$0.20 \leq D < 0.40$: sufficient
$0.40 \leq D < 0.70$: good
$0.70 \leq D \leq 1.00$: very good

D values that meet the poor criteria are discarded and negative D values are discarded (Arikunto, 2010). The questions used in this study were questions with sufficient and good discrimination power.

4. Reliability of questions

A test is said to be reliable if the results show accuracy (Arikunto, 2010). To determine reliability, the Kuder-Richardson 21 formula, abbreviated as KR 21, is used as follows:

$$r_{11} = \left(\frac{n}{n-1}\right)\left(1 - \frac{M(n-M)}{nSt^2}\right) \text{ with } St^2 = \frac{\sum X^2 - \frac{\left(\sum X\right)}{N}}{N}$$

Information:

r_{11} = Question reliability coefficient
$S t^2$ = v variance of the test
n = Number of items
X_i = Total score of test items
N = Number of test participants

$\sum X$ = Total number of correct votes

$\sum X^2$ = Sum of squares of total scores

$M = \frac{\sum X}{N}$ =Average score

The criteria for calculating the reliability of questions are based on the following provisions:

$0.00 \leq r_{11} < 0.20$: very low reliability

$0.20 \leq r_{11} < 0.40$: low reliability

$0.40 \leq r_{11} < 0.60$: sufficient reliability

$0.60 \leq r_{11} < 0.80$: high reliability

$0.80 \leq r_{11} \leq 1.00$: very high reliability

The questions used in this study were those with high or very high reliability. Quantitative data collection was conducted using the student's scientific attitude observation sheet . To calculate the percentage of scientific attitudes using the scientific attitude observation sheet, the following value criteria were used:

0 – 25% = Scientific attitude in the “less” category

26% - 50% = Scientific attitude in the "sufficient" category

51% - 75% = Scientific attitude in the “good” category

76% - 100% = Scientific attitude in the category of "very good"

RESULTS AND DISCUSSION

An overview of the improvement in students' scientific attitudes obtained from the application can be seen in the following table:

Table 2. Improvement of Students' Scientific Attitudes

No	Observed Attitude Indicators	Percentage		
		Cycle I	Cycle II	Cycle III
1	Attitude of respect for data/facts	68.9	75.2	85.1
2	Critical thinking attitude	68.1	75.6	83.7
3	Attitude of discovery and creativity	67.0	73.5	81.5
4	Open-minded and cooperative attitude	63.1	63.1	77.8
5	Attitude of perseverance	63.9	71.8	78.6
	Average	**62.2**	**71.8**	**81.3**

From the table above, it can be concluded that in each cycle there is an increase in students' scientific attitudes which are getting better, so it can be concluded that the application of the *Accelerated Learning approach* in the Indonesian language learning process can improve students' scientific attitudes.

An overview of the increase in average student learning activities can be seen in the following table:

Table 3. Average Increase in Student Activity

No	Variables studied	Amount/Percentage		
		Cycle I	Cycle II	Cycle III
1.	Average student learning activity	58.35	71.48	74.97

From the table above, we can see the average student activity in the learning process. In the implementation of cycle I, the average student activity was still in the fairly active category, then in cycles II and III, the average student activity increased to active.

An overview of the improvement in student learning outcomes can be seen in the following table:

Table 4. Improvement in Student Learning Outcomes in Each Cycle

No	Variables studied	Amount/Percentage		
		Cycle I	Cycle II	Cycle III
1	Average student grades	63.64	70.45	83.52
2	Number of students who succeeded in	7 people	10	19 people
3	cycle I	31.8%	people	83.4%
4	Student success percentage	15	45.4%	3 people
5	Number of students who were not	people	12	16.6%
	successful in cycle I	68.2%	people	
	Percentage of students who have not		54.6%	
	succeeded			

The table above shows that student learning outcomes improved in each cycle. Therefore, it can be concluded that implementing the *Accelerated Learning approach* in Indonesian language subjects can improve student learning outcomes. In general, improvements in student scientific attitudes, activities, and learning outcomes can be seen in Figure 1 below:

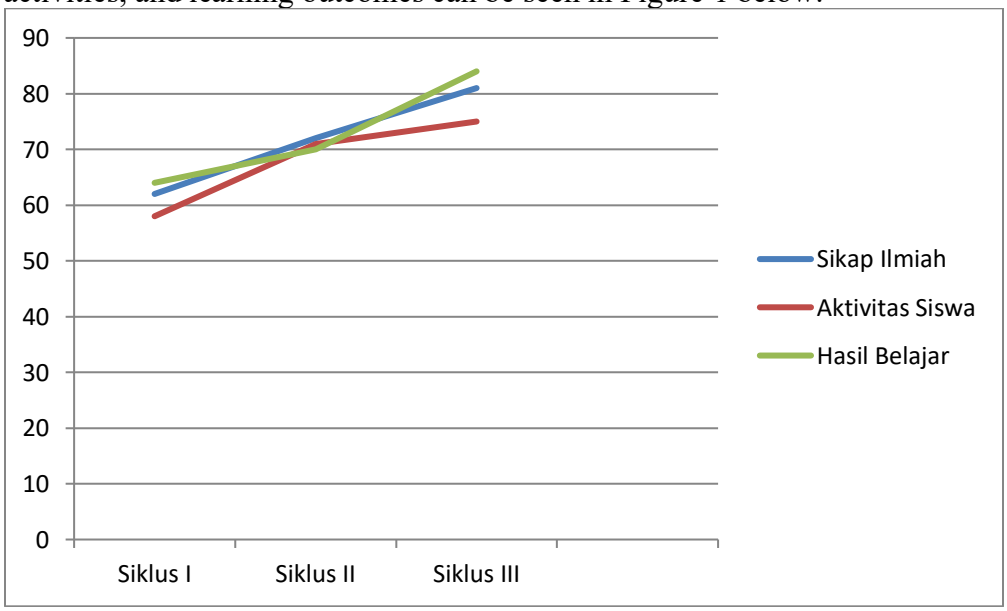


Figure 1. Improvement in Students' Scientific Attitudes, Activities, and Learning Outcomes

An overview of the improvement in students' scientific attitudes in each cycle can be seen in the following table:

Table 5. Overview of Improvement in Students' Scientific Attitudes in Each Cycle

No	Aspects of Attitude Assessed	Cycle I				Cycle II				Cycle III			
		1	2	3	4	1	2	3	4	1	2	3	4
	Attitude of respect for data/facts												
1	Objective/honest		√					√					√
2	Do not manipulate data		√					√					√
3	No prejudice		√					√					√
4	Make decisions based on facts		√					√					√
5	Do not mix facts with opinions		√					√				√	
	Critical thinking attitude												
6	Doubting a friend's findings		√					√				√	
7	Ask about any changes/new things		√					√					√
8	Repeating the activities carried out		√					√					√
9	Don't ignore data even if it's small		√					√					√
10	Searching for truth for a conclusion		√					√					√
	Attitude of discovery and creativity												
11	Using data as the basis for conclusions	√					√					√	
12	Show different reports with classmates	√					√					√	
13	Changing opinions in response to facts	√					√					√	
14	Suggesting new experiments	√					√					√	
15	Describe new conclusions from observation results	√					√					√	
	Open-minded and cooperative attitude												
16	Change opinions if data is lacking		√					√					√
17	Accepting advice from friends		√					√					√
18	Don't feel like you're always right		√					√					√
19	Consider any conclusions tentative		√					√					√
20	Actively participate in groups		√					√					√

	Attitude of perseverance			
21	Continuing to research after the truth is lost	√	√	√
22	Repeating an experiment even if it results in failure	√	√	√
23	Complete activities even without friends	√	√	√
24	Class finished early	√	√	√
25	Staying in class even though you feel bored	√	√	√

The table above shows that there was an increase in students' scientific attitudes in each cycle based on observations by the observer, namely the Indonesian Language subject teacher for **Class I MI27/E3 Kerinci** .

An overview of the increase in student activity in each cycle can be seen in the following table:

Table 6. Overview of Increase in Student Activity in Each Cycle

No	Observed Activities	Cycle I		Cycle II		Cycle III	
		Jlh	%	Jlh	%	Jlh	%
	Introduction						
1	Students who enter the class on time	19	86.3	21	95.4	22	100
2	Students who pray together with students	19	68.3	21	95.4	22	100
3	Students present	22	100	22	100	22	100
4	Students who prepare learning preparations, prepare textbooks and other supporting tools	22	100	22	100	22	100
5	Students who pay attention to the delivery of learning objectives	10	45.4	12	54.5	18	81.8
	Core activities Motivating *your mind*						
6	Students who listen when the teacher reminds them of the previous lesson	10	45.4	12	54.5	17	77.2
7	Students listen when the teacher gives an overview of the material that will be studied in this meeting in everyday life, and students answer several questions related to the material.	10	45.4	12	54.5	18	81.8

8	Students pay attention when the teacher shows pictures related to the material to be taught.	12	54.5	14	63.6	17	77.2
	Acquiring information						
9	Students who pay attention when the teacher explains the important points that will be taught	15	68.1	17	77.2	18	81.8
	Searching out the meaning						
10	Students discussing when the teacher asks students to discuss the material being taught with group members	15	68.1	17	77.2	18	81.8
11	Students who listen when the teacher invites students to complete example questions from the material	17	77.2	18	81.8	18	81.8
	Triggering the memory						
12	Students who ask questions when the teacher asks each group to prepare questions and then they are answered by other groups.	8	36.3	12	54.5	18	81.8
13	Students who answer questions when the teacher asks students from other groups to answer quickly and then collect them	8	36.3	12	54.5	18	81.8
	Exhibiting what you know						
14	Students who can follow the quiz well and correctly when the teacher opens the quiz	7	31.8	10	45.4	19	86.3
	Reflecting how you've learned						
15	Students listen while the teacher helps students make a summary of the lesson they have learned.	15	68.1	17	77.2	17	77.2
16	Students who get awards when the teacher gives awards to students who make the best questions	2	9.1	4	18.1	17	77.2
	Closing						
17	Students take notes when the teacher gives homework to students to understand the material that has been studied.	15	68.1	17	77.2	20	90.9

18	Students who pay attention when the teacher tells students to study, search and increase their knowledge about the next material.	15	68.1	17	77.2	20	90.9
19	Students who respond to greetings when the teacher closes the lesson by saying greetings.	22	100	22	100	22	100
	Amount	**263**	**58.35**	**299**	**71.48**	**363**	**74.97**

The table above shows an increase in student learning activities in each cycle observed by the observer, namely the Indonesian Language subject teacher for Class I MI27/E3 Kerinci.

CONCLUSION

Based on the results of the classroom action research that has been carried out, it can be concluded that learning using the *Accelerated Learning approach* can improve the scientific attitudes and Indonesian language learning outcomes of students in Class I MI27/E3 Kerinci .

This can be seen from the average percentage of students' scientific attitudes in cycle I of 62.2%, increasing in cycle II to 71.8% and increasing again in cycle III to 81.3%. While student learning outcomes in cycle I were 63.64, the number of students who succeeded was 7 people with a success percentage of 31.8%, in cycle II increased to 70.45, the number of students who succeeded was 10 people with a success percentage of 45.4%, and increased again in cycle III to 83.52, the number of students who succeeded was 19 people, with a success percentage of 85.4%. Then also observe student learning activities, as well as scientific attitudes and student learning outcomes, student learning activities also increased where in cycle I student learning activities were 58.35%, increased in cycle II to 71.48%, and increased again in cycle III to 74.97%.

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