

## **CORRELATION BETWEEN TEACHER SKILLS IN MANAGING CLASSES WITH PHYSICS LEARNING ACHIEVEMENT**

**Rizka Fauziah<sup>1</sup>, Cecep E. Rustana<sup>2</sup>, Raihanati<sup>3</sup>**

Physics Education Study Program, Faculty of Math and Science, Jakarta State University,  
Rawamangun Muka No. 1 Street, East Jakarta, Indonesia, 13220

Email: \*[rizkaff678@gmail.com](mailto:rizkaff678@gmail.com), [ce.rustana@yahoo.com](mailto:ce.rustana@yahoo.com), [raihanati0608@gmail.com](mailto:raihanati0608@gmail.com)

**Abstract:** Student learning achievement are affected by internal and external factors. Teacher skills in managing class is one of the external factor that would be effect students learning achievement. The purpose of this study is to determine the correlation between teacher skills in managing classes with physics learning achievement of class XI IPA of SMA Negeri 1 Jakarta. The survey research with the correlational approach was applied to 64 students that was randomly sampled from all student population of class XI IPA of SMA Negeri 1 Jakarta. The data that was collected using questionnaires and documentation were statistically analyzed using regression and correlation techniques. Based on the results of the study, it can be concluded that there is no correlation between teacher skills in managing classes with student physics learning achievement of Class XI IPA of SMA Negeri 1 Jakarta

**Keywords:** *Teacher Skills in Managing Classes; Learning Achievement*

### **A. INTRODUCTION**

Education is very important because almost all of the attitudes, skills and knowledge are obtained through education. The success of an educational institution can be seen from the student learning achievement. According to Nabawi, learning achievement are the success of students in learning subject matter at school which is expressed in scores obtained from tests regarding a number of certain subject matter (Susanto, 2016). The 2018 PISA survey results say that Indonesia is ranked 70th out of 78th countries for science and 72nd out of 78th countries for mathematics. The PISA survey was conducted on Indonesian students aged 15 years, which means that it is equivalent to the senior high school level because physics contains mathematics and science in the material so that in general the PISA survey results also describe the learning achievement of physics learning. Senior high school students surveyed by PISA scored 396 points from the international average score of 489 points for science and 379 points from the international average score of 489 points for mathematics (Tohir, 2019). It can be concluded that students' physics learning achievement in Indonesia are low. Therefore, it is necessary to study further about what factors affect student physics learning achievement.

The factors that affect student learning achievement are classified into two types, namely internal factors and external factors (Syah, 2005). Internal factors are factors that come from within the students themselves, including intelligence, interests, talents and motivation. While external factors are factors that come from outside the student, such as the family, school, and community environment. Observations by researchers in class XI IPA SMA Negeri 1 Jakarta show that during learning activities there are students who do not pay attention to the teacher while explaining the lesson. There are students who are sleepy and chat with their friends in class.

The core of a school or class activity is the teaching and learning process. The learning quality of students and graduates is largely determined by the success of implementing the

teaching and learning process or in other words, it is largely determined by the function and role of the teacher. High learning achievement mean that the teaching and learning process is successful (Ayu Triumiana, 2017). In PP No 32 of 2013 in Article 1 Paragraph 19 explained that learning is a process of interaction between students, between students and educators and learning resources in a learning environment. To realize good interactions, teacher professionalism is needed in building and managing the learning process in the class (Yudha, n.d.). The role of teachers in the teaching and learning process as follows: (a) teachers as demonstrators, (b) teachers as class managers, (c) teachers as mediators and facilitators and (d) teachers as evaluators.

One of the external factors that come from the school environment that affects student physics learning achievement is the skills of teachers in managing the class. Class management is a teacher's skill in creating, maintaining, and restoring learning conditions so that class potential can be optimized properly so that the expected objectives of learning activities can be achieved. Class management aims to provide facilities for various student learning activities so that students can learn well so that teaching goals can be achieved. Classroom management activities include two activities which outline consist of student management and facility management. Student management is how to organize and place students in the classroom according to their intellectual potential and emotional development. students are given the opportunity to obtain positions in learning that match their interests and desires. Meanwhile, the management of facilities is an activity that must be carried out by students so that all students are facilitated in their activities in the class. Physical class structuring is directed at increasing the effectiveness of student learning so that students feel happy, comfortable, safe, and learn well. There are two main components in class management that teachers need to pay attention to, namely preventive skills and repressive skills. Preventive skills are skills to create and maintain optimal learning conditions to avoid situations that do not benefit or interfere with the teaching and learning process. In developing preventive classroom management skills, teachers can use their abilities by show responsiveness, distribute attention, keeping time, hold students accountable, give clear instructions, admonish and give reinforcement. Repressive skills, namely skills to return uncertain teaching and learning conditions to effective learning conditions. In developing repressive classroom management skills, teachers can use their abilities by modifying behavior, managing groups, and finding and solving behaviors that create problems.

Teacher should be able to manage the class well because the class is a place for teachers and students to gather in the learning process, with good class management hoped that students will have high motivation and can achieve optimal learning achievements. Djamarah said that the problem faced by teachers, both beginners and experienced ones, is class management. An aspect that is often discussed by professional writers and teachers is also class management. This statement shows that the most difficult teacher assignments is managing the class, while there is no one approach that can be said to be the best in class management. Most of the teachers still less attention to class management and only focus on delivering learning materials (Djamarah & Zain, 2006).

In delivering subject matter to students, the teacher will study and organize the class in such a way that it can be used to carry out the teaching and learning process properly. The teacher will look at the abilities of each student, so that the teacher knows the abilities of students at low, medium or high levels. Teachers are required to be able to manage the teaching and learning process that provides stimulation to students so that they want to learn because students are the main subjects in learning (Daryanto & Rahardjo, 2012). The ability of students will determine what the teacher must do so that the subject matter taught can be accepted, understood, and the teaching goals can be achieved. Students' abilities are not the same as each other are a real factor in the class and cannot be eliminated. Therefore, class management must be carried out by teachers, one of which is to overcome this problem.

If the teacher is not skilled in managing the class, it will have an impact on student failure to learn which causes student learning achievements to be low. As in previous research, Scott D. Gest, et al in their research entitled "Teacher Management of Elementary Classroom Social Dynamics: Associations With 7 Changes in Student Adjustments" showed a positive relationship between class management by teachers and student learning achievements. In this study, it was explained that

teachers who carry out class management effectively have students who show positive behavior in terms of social, academic and attitude relationships. In short, the better the implementation of class management, the higher the learning achievements obtained by students (Gest, Madill, Zadzora, Miller, & Rodkin, 2014). Muhammad Rizal in his research entitled "The Relationship between Teacher Skills in Class Management and Student Achievement of Elementary School Students in Wanareja District" which obtained the result that there is a positive relationship between teacher skills in managing the class and learning achievement with a correlation coefficient of 0.851 (Rizal, 2015). Departing from the various results of these studies and also the theoretical study as described in the previous section, this study was conducted to examine the relationship between teacher skills in managing the class and student learning styles on the physics learning achievements of class XI IPA SMA Negeri 1 Jakarta. So it is hoped that this research can prove that if teacher skills in managing the class is good will produce high student learning achievements.

## B. MATERIAL & METHODS

This research method is a survey research with a correlational approach. The population in this study were all students of class XI IPA of SMAN 1 Jakarta for the 2019/2020 academic year, totaling 180 students. While, the number of samples is determined based on the Slovin formula as many as 64 students with the sampling technique using the Simple Random Sampling Technique which is taken randomly from each class. Data collection techniques in the form of questionnaires and documentation. A questionnaire is used to obtain teacher skills in managing the class data. While the documentation is used to obtain data based on existing data sources in schools in the form of physics learning achievements of class XI IPA of SMA Negeri 1 Jakarta for the 2019/2020 academic year. Furthermore, the data from the results of this study were tested for analysis prerequisites which consisted of a normality test and a homogeneity test. Meanwhile, the data analysis technique uses simple linear regression and Pearson product moment correlation techniques.

## C. RESULT & DISCUSSION

### 1. Result

Based on the research, the physics learning achievements of class XI IPA of SMA Negeri 1 Jakarta were classified as very good, as follows:

Table 1. Conversion of student learning achievement score

Average score	Interval score	Qualification	Conclusion
81	81 – 100	Very good	Very good
	61 – 80	Good	
	41 – 60	Pretty good	
	21 – 40	Not good	
	0 - 20	Very not good	

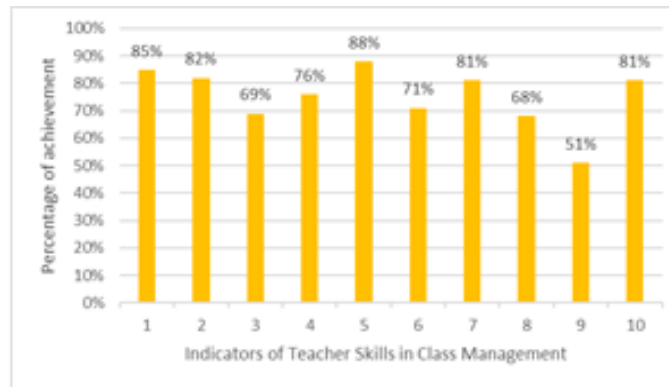
Meanwhile, the teacher skills in managing the physics class of XI IPA of SMA Negeri 1 Jakarta are classified as good, as follows:

Table 2. Conversion of teacher skills in managing class score

Average score	Interval score	Qualification	Conclusion
54	62 - 72	Very good	Good
	51 - 61	Good	
	40 - 50	Pretty good	
	29 - 39	Not good	
	18 - 28	Very not good	

Teacher skills in managing the class are measured using a questionnaire instrument consisting of ten indicators. The following is the achievement of each indicator in the questionnaire:

Figure 1 Achievement of each indicator of teacher skills in class management



Information:

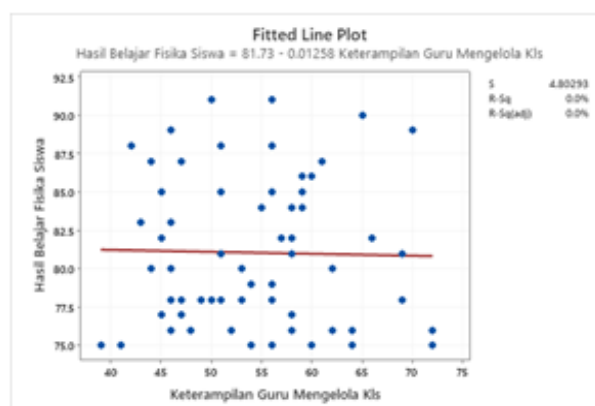
- 1: Show responsiveness
- 2: Distribute attention
- 3: Keeping time
- 4: Hold students accountable
- 5: Give clear instructions
- 6: Give reinforcement
- 7: Group management
- 8: Finding and solving behaviors that create problems
- 9: Arrange the seating and layout according to the strategy used
- 10: Determine the allocation of teaching and learning time usage

Simple linear regression analysis produces the equation model:

$$\hat{Y} = 81.732 - 0.013X_1 \quad (1)$$

for teacher skills in managing the class  $X_1$  and student physics learning achievement (Y) with a significance value of 0.869, which means that the regression model is not significant. The regression model shows that each increase in the variable teacher skills in managing the class  $X_1$  by one value can cause a decrease in the student learning achievements variable (Y) by 0.013 with a constant of 81.732. The relationship between teacher skills in managing the class and student physics learning achievements is illustrated in the graph below:

Figure 2 Simple linear regression model between teacher skills in class management and student physics learning achievement



Pearson product moment correlation analysis produces a correlation coefficient  $r_{x_1y}$  of 0.021 which is included in the very low level of correlational criteria with a significance value of 0.859, which means that there is no correlational between teacher skills in managing the class and student physics learning achievements.

Table 3. Guidelines for interpreting the correlation coefficient  $r_{x_1y}$

Coefficient correlation	Coefficient interval	Correlation level	Conclusion
0,021	0,00 – 0,199	Very low	Very low
	0,20 – 0,399	Low	
	0,40 – 0,599	Medium	
	0,60 – 0,799	High	
	0,80 – 1,000	Very high	

The coefficient of determination is 0.04%. which means that the skills of the teacher in managing the class contributed 0.04% to the students' physics learning achievements, while 99.96% was related to other factors.

## 2. Discussion

Based on the research, it was found that there is no correlation between teacher skills in managing the class with students' physics learning achievements. This is not appropriate with the research conducted by Muhammad Rizal which obtained the result that there is a positive correlation between teacher skills in managing the class and learning achievement with a correlation coefficient of 0.851. However, according to research conducted by Iis Supriyati, it was found that there was no significant effect between the skills of class management in learning activities and on academic achievement with a correlation coefficient of 0.310 which is classified as weak (Supriyati, 2015).

The lowest indicator is 51% on the indicator "Arrange the Seating and Layout According to the Strategy Used". Things that seem as simple as the teacher deciding where students sit in the class are often ignored by the teacher. In fact, class seating arrangements can activate or deactivate interactions and influence student behavior and attitudes. Research shows that students who sit farthest from the teacher have the least interaction with the teacher and have the lowest achievement scores (*Effective Teaching and Classroom Management: One and the Same Pedagogical Approach*, 2008). Therefore it is important to arrange seating and layout based on the teacher's knowledge of the students.

The next lowest indicator is 68% on the indicator "Finding and Solving Behaviors That Make Problems". According to D. Moore, class management is a process of collaborating with students by guiding and directing students so that the class is free from distractions caused by students. For this reason, it is important for teachers to pay attention to each student, by finding and solving behaviors that create problems the teacher can create a comfortable and conducive class atmosphere because it is free from various distractions that can be caused by students. Based on the research results, it appears that teachers tend to generalize the characteristics of their students.

This is reinforced by comparing the indicator "Group Management" which has a larger portion, namely 81%. Teachers use a group approach rather than an individual approach. Although teaching is generally a group activity, learning is very individual. Sometimes it is difficult for teachers to realize that all students are different and learn differently. Effective teachers will be sensitive to these differences and take action to accommodate them so that ideally each child is provided with an optimal learning experience. Therefore it is important to pay attention to the characteristics of each student.

The highest indicator is "Giving Clear Directions" of 88%. It appears that the skills of teachers in managing the class tend to be dominant in the delivery of material and assignments. In fact, the teacher's way of teaching, the teacher's attitude, the teacher's personality and the way of communicating were also assessed by students. It is important for teachers to understand what makes a good teacher in the eyes of their students. This student assessment can be used as a reference for the teacher. So that the skills of teachers in managing the class must be optimal on all indicators.

These are the reasons why the results of this study reveal that there is no correlation between teacher skills in managing the class and student physics learning achievement. In other words, the class management that has been carried out in schools has not been effective in

facilitating the learning process in the classroom, so there is no effect or very little effect on learning outcomes. The results of the study even show a tendency although it may not have a significant negative impact on learning achievement. The perception or understanding that so far teachers already have the skills to manage the class well in fact need to be reviewed in order to be able to provide solutions in improving the quality of learning in the class which of course has a general impact on the quality of Indonesian education.

#### D. CONCLUSION

There is no correlation between teacher skills in managing classes with student physics learning achievements of Class XI IPA of SMA Negeri 1 Jakarta. Teachers still less attention to classmanagement and only focus on delivering learning materials.

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