

Analysis Of The Interests And Learning Outcomes Of Class XI Students Of MIPA SMA Negeri 100 Jakarta In Face-To-Face Learning After The Covid-19 Pandemic

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Abstrak. The purpose of this study is to find out interest in learning and student learning outcomes in face-to-face learning (PTM) after the Covid-19 pandemic. This research was conducted at SMA Negeri 100 Jakarta in the even semester of 2022/2023. The type of research used is pre-experiment with the research design used one group pretest posttest group design. The population in this study was class XI MIPA SMA Negeri 100 Jakarta, totaling 108 people. The sample in this study was 36 students, namely class XI MIPA 3. The sampling technique used cluster random sampling. The instruments in this study consisted of tests and non-tests. For the test instrument in the form of multiple choice questions as many as 25 questions to see student learning outcomes. For non-test instruments in the form of questionnaires and interviews, the questionnaire consists of 22 statements to see students' interest in learning and the interview consists of 16 questions to strengthen the results of the questionnaire. The results obtained were based on the analysis of questionnaire data, namely, students' interest in face-to-face learning (PTM) after the Covid-19 pandemic, namely the average percentage for aspects of interest was 79% in the good category. For student learning outcomes in pretest the lowest score is 12 and the highest score is 60. As for the value of posttest student that is, the lowest score was 56 and the highest student score was 92. It was concluded that during face-to-face learning after the Covid-19 pandemic, student learning outcomes had increased from pretest to posttest. The conclusion of this study is that students' interest in face-to-face learning after the Covid-19 pandemic reaches a good category. For student learning outcomes, namely experiencing an increase from pretest to posttest, of N-Gain 0.56 in the medium.

Keywords: in Learning, Learning Outcomes, Face-to-face Learning (PTM) post-covid-19 pandem

I. Introduction

The Covid-19 virus has become an astonishing phenomenon in this universe, a time that has changed almost all orders of human life. Almost all aspects have undergone a transition, including in the field of education as a result. Learning, which generally takes place in school zones, immediately had to move to Distance Learning (PJJ) with the outbreak of the virus in March 2020 [1]. Distance Learning (PJJ) is held with the intention of reducing the spread of Covid-19 in the world of education.

There are many obstacles when learning online that are felt by teachers, students, and parents who accompany students while studying at home.

Although there are many obstacles faced during distance learning, learning activities must not stop because of the importance of the world of education to develop learners as long as they will not stop learning to realize the potential of learners. Therefore, reliable teachers, the right programs, and the right collaboration between schools and parents are needed to meet educational challenges during the Covid-19 pandemic [2].

In order to keep learning running optimally, one of the public schools in Jakarta, SMA Negeri 100 Jakarta, carries out face-to-face learning faster than other schools in the school environment. PTM as a learning order that is considered efficient to improve these habits, because in it there is a reflex relationship between teachers and learners. Face-to-face learning during the endemic period is not a simple problem to do, it all requires adjustments, be it from teachers/teachers, educators, parents, and also adequate infrastructure to support the learning process itself. Face-to-face learning is really helpful for some students because student competencies are limited when learning online. During the learning process carried out by SMA Negeri 100 Jakarta, in preventing the spread of Covid-19 so that it does not spread again and again SMA Negeri 100 Jakarta still maintains the health protocols recommended by the government. The habits carried out during this pandemic include the use of masks, hand sanitizers, and not shaking hands between teachers and students. It is hoped that with the re-enactment of face-to-face learning, learning activities of students can also return to normal in the school environment, as well as interests and learning outcomes greatly affect the quality of education for the students themselves.

Interest in learning is really beneficial for students who are going to learn, because interest in learning is a desire or interest in learning. Interest can be in the form of an activity or the result of involvement in an activity. Because interest in learning is the desire to acquire information, knowledge, and skills through effort, teaching or teaching [3].

Learning outcomes are competencies that a person obtains after the learning process, which can cause changes in student behavior in terms of knowledge, insight, attitude, and skills, making them better than before [4]. Therefore, learning outcomes are the final assessment of the process and learning. Learning outcomes are repeated and maintained for a long time, not even forever, because they always form the good results that are to be achieved. This changes the way of thinking and leads to better work behavior [5].

Based on research by Aprijal et al in 2020 [6], that a relevant impact was obtained between students' interests and learning outcomes. According to research by Rapita Tanjung et al in 2021 [7],

it was found that 80% of students' interest in learning online during the Covid-19 pandemic was not interested. This is because students do not understand the subject matter, students cannot afford to buy internet quotas, some students still do not have equipment such as android mobile phones, and the other 20% are interested because online learning increases student motivation, students can learn at any time, students already have android mobile phone facilities, so that students In the face of internet network failure, students can also buy internet package provisions. According to research conducted by Ika Wahyuni et al in 2021[8] , students' interest and interest in learning determine how students' confidence and commitment to learning are reflected in their regular learning methods and motivations. According to research by Mafudiansyah et al in 2020 [9], the overall value of the psychomotor learning outcomes of the participants was 14.46 with a standard deviation of 1.63 or in the high category. According to research by Ahriana & Maruf in 2016 [10], the learning outcomes of physics participants in class XI MIA SMA Negeri 1 Takalar were in the high category with a percentage of 48.00%.

Based on the results of observations observed directly, conducted by researchers during the Student Work Practice (PKM) period at SMA Negeri 100 Jakarta during distance learning (PJJ), several problems experienced by grade XI MIPA students at SMA Negeri 100 Jakarta during the learning took place. Among them are inadequate internet networks, difficulties with internet quota so that the student cannot take part in learning. And another obstacle is that there are still students who cannot join the class during learning due to the lack of interest in learning from the students themselves during online learning, it can be seen from students who are not active in class when the teacher asks about the material presented, and many students who do not open the camera during the learning process, this makes it difficult for the teacher to see if the student is taking the learning in class seriously.

Other obstacles faced by students during online learning include the existence of economic factors from the family. When studying, students do not have gadgets so that students cannot participate in learning, another factor is that almost 60% of parents receive KJP and live in simple flats. Student learning outcomes during online learning have decreased, this can be seen from the results when students do practice questions and daily exams, several factors that cause this such as a lack of interest in learning because they feel bored and bored with online learning, another thing is the lack of focus on learning experienced by students so that learning is solely focused on the teacher and most students do not listen to the teacher when delivering the material.

In early April 2022 until now, SMA Negeri 100 Jakarta has carried out face-to-face learning which is expected to be able to improve the learning process more efficiently. One of the teachers at

SMA 100 Jakarta said that distance learning during the pandemic did not run effectively because there were several obstacles faced by students. Limited facilities and infrastructure, inadequate internet usage costs, and parental support for online learning is still lacking. And with the changing education system causing interest and learning outcomes from the students themselves.

Based on the above problems, this study is expected to be able to observe how the interest and learning outcomes of students towards 100 face-to-face learning after the Covid-19 pandemic during the teaching and learning process at SMA 100 Jakarta.

II. Method

In this study, the method used is a quantitative method, namely *pre-experiment* and the research design used is research with a "*one group pre test-post test design*" approach as seen in the following pattern:

<i>Pretest</i>	Treatment	<i>Posttest</i>
O	X	O

Information:

O = is a test before and after learning

X = is a form of treatment, namely using the Conventional learning model.

The variables used are *independent* variables, namely face-to-face learning (PTM) and dependent variables, namely students' interests and learning outcomes.

III. Result and Discussion

1. Learning Interest Analysis

Based on the results of research conducted at SMA Negeri 100 Jakarta, especially in grade XI MIPA students who have experienced face-to-face learning, the results of the learning interest data obtained using the research instruments are as follows:

Data analysis reviewed from every aspect

a. Feeling Happy

Table 2. Results of Percentage of Aspects of Happiness

Statement	Number of Respondents	Total Score (F)	Max (N)	Persentase (%)	Category
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Statement 1:	36	130	180	72	Good
Statement 2		154		85	Excellent
Statement 3		142		79	Good
Statement 4		145		80	Good
Statement 5		157		87	Excellent
Statement 6		142		79	Good
Sum	870		842		
Average Percentage				80	Good

Based on the data in table 2 above, the average percentage result in the aspect of feeling happy was obtained as a result of 80% with a good category, this is supported by the results of interviews conducted with respondents of grade XI MIPA 3 SMA Negeri 100 Jakarta which stated that, students feel happy with face-to-face learning (PTM) after the Covid-19 pandemic, students feel happy to be able to meet directly with teachers and classmates, Then students feel happy because studying at school is not boring compared to studying at home, making students feel bored and bored.

b. Attention

Table 3. Percentage Results of Attention Aspects

Statement	Number of Respondents	Total Score (F)	Max (N)	Persentase (%)	Category
Statement 1	36	157	180	87	Excellent
Statement 2		114		63	Good
Statement 3		137		76	Good
Sum	408		266		
Average Percentage				75	Good

Based on the data in table 3 above, the average percentage of aspects results were obtained with a good category of 75%, this is supported by the results of interviews conducted with respondents of grade XI 3 students of MIPA SMA Negeri 100 Jakarta which stated that students pay attention to the teacher's explanation when delivering the material and in the end students can better understand the material delivered by the teacher. In addition, after the teacher finishes delivering the material, students review the material so that the material can be understood clearly.

c. Interest

Table 4. Percentage Results of Aspects of Interest

Statement	Number of Respondents	Total Score (F)	Max (N)	Persentase (%)	Category
Statement 1	36	132	180	73	Good

Statement 2		136		75	Good
Statement 3		150		83	Excellent
Sum		418		231	
Average Percentage				77	Good

Based on the data in table 4 above, the average percentage of involvement aspects obtained results of 77% with a good category, this is supported by the results of interviews with respondents of grade XI MIPA 3 SMA Negeri 100 Jakarta students who stated that students were enthusiastic in participating in learning, one example when asked to answer the practice questions given by the teacher, students answered the questions properly and correctly according to their abilities. In addition, students are enthusiastic about participating in learning in the classroom, the reason why students can be enthusiastic about participating in direct learning in class is because when learning *online* there are many obstacles faced by students such as obstacles on the internet network, the material is not well received, and when learning *online*, students feel bored and burdened with the assignments given.

d. Involvement

Table 5. Percentage Results of Engagement Aspects

Statement	Number of Respondents	Total Score (F)	Max (N)	Persentase (%)	Category
Statement 1	36	168	180	93	Excellent
Statement 2		147		82	Excellent
Statement 3		123		68	Good
Sum		438		243	
Average Percentage				81	Excellent

Based on the data in table 5 above, the average percentage of involvement aspects obtained results of 81% in the very good category, this is supported by the results of interviews with respondents of class XI MIPA SMA Negeri 100 Jakarta who stated that they were very involved in face-to-face learning after the covid-19 pandemic, students were always present at every hour of the lesson so as not to miss the subject matter. In addition, students also play an active role during learning when the teacher asks questions and students always ask if the material presented by the teacher is not understood.

e. Activeness

It can be seen from the data in table 6 above the average percentage in the aspect of activeness obtained a result of 82% with the very good category. Based on direct observation when conducting

research on grade XI students of MIPA 3 SMA Negeri 100 Jakarta that students try to create an active classroom atmosphere when the teacher delivers the material, students play an active role when asked to do practice questions in front of the class.

Table 6. Percentage Results Aspects of the Activeness

Statement 1	Number of Respondents	Total Score (F)	Max (N)	Persentase (%)	Category
Statement 1	36	148	180	82	Sangat Baik
Jumlah		148		82	
Rata-rata Persentase				82	Sangat Baik

f. The role of teachers in educating

Table 7. Percentage Results Aspects of the Teacher's Role in Educating

Statement	Number of Respondents	Total Score (F)	Max (N)	Persentase (%)	Category
Statement 1	36	140	180	78	Good
Statement 2		154		85	Excellent
Statement 3		139		77	Good
Statement 4		140		78	Good
Sum		573		318	
Average Percentage				79	Good

Based on the data in table 7 above, the average percentage produced in the aspect of the teacher's role in learning above obtained a result of 79% with a good category, this is supported by the results of interviews with respondents of grade XI students of MIPA 3 SMA Negeri 100 Jakarta which stated that teachers always provide motivation to always be active in learning. In addition, the atmosphere when learning in the classroom presented by the teacher is very interesting, so that students do not feel bored when learning compared to distance learning, students feel bored and bored because they cannot interact directly with the teacher. In this case, the role of teachers is very important in the world of education, especially how the teacher can bring a more interesting learning environment in the classroom so that students do not feel bored when learning.

g. The role of parents in the student learning process

Table 8. Percentage Results Aspects of the role of parents in the student learning process

Statement	Number of Respondents	Total Score (F)	Max (N)	Percentage (%)	Category
Statement 1	36	120	180	67	Good
Statement 2		149		83	Excellent
Jumlah		269		150	
Average Percentage				75	Good

Based on the data in table 8 above, the average percentage in the aspect of the role of parents in the student learning process above was obtained with a result of 75% with a good category, this is supported by the results of interviews with respondents of grade XI students of MIPA 3 SMA Negeri 100 Jakarta who stated that the role of parents is good in providing motivation and guidance in the student learning process, Parents always guide students in doing schoolwork and always accompany students in learning. In this case, the role of parents is also very important in the student learning process. The following is a table of average percentages of each aspect of student learning interest.

Table 9. Average Percentage Yield of Each Aspect

Aspects	Average Score (36 students)	Percentage (%)	Category
Feeling Happy	870	80	Good
Attention	408	75	Good
Interest	418	77	Good
Involvement	438	81	Excellent
Keaktifan	148	82	Excellent
The role of teachers in educating	573	79	Good
The role of parents in the student learning process	269	75	Good
Sum	3,124	547	
Average	446,28	79	Good

Based on Table 9 above the percentage of each aspect, it can be seen that students' learning interest in face-to-face learning (PTM) after the Covid-19 pandemic is reviewed from the average percentage results showing results in the good category with a percentage of 77%. Based on the results of the analysis of questionnaire and interview data above, it can be seen that the learning interest of students in class XI MIPA SMA Negeri 100 Jakarta in face-to-face learning (PTM) is 100% overall as a result of the average percentage produced is included in the good category. Based on the results of the interviews conducted, students are happy with face-to-face learning because they can meet teachers and classmates directly, then students find it easier to understand the material during face-to-face learning than distance learning, because when learning directly in class students can ask directly about material that is not understood when the teacher explains. In the aspect of interest, a teacher has a very important role in bringing a learning atmosphere in the classroom, because if the

learning presented is interesting, students' interest in learning can also increase. According to research [11] it is stated that students' interest in learning in face-to-face learning is most at a low level.

2. Student Learning Outcomes Analysis

Pretest and Posttest Results

The data collected in this study is by providing *pretest* and *posttest* to students on the Rotation Dynamics material, this is done to see student learning outcomes. The type of questions given is a multiple choice of 25 questions that have been validated by expert validators. The following are the *results of the pretest* and *posttest* of student learning outcomes in class XI MIPA SMA Negeri 100 Jakarta, shown in table 10.

Tabel 10. Data *Pretest* dan *Posttest*

N		<i>pretest</i>	<i>posttest</i>
36	Average	33.00	72.78
	Median	30.00	72.00
	Modus	24	72
	Standard Deviation	14.576	8.649
	Varian	212.457	74.806
	Range	48	36
	Lowest Score	12	56
	Highest Score	60	92

Based on the results of *the pretest* and *posttest* in the table above, the lowest score for *the pretest* is 12 and the highest score is 60, for *the posttest* the lowest score is 56 and the highest score is 92, it can be concluded that the initial ability of students when given a *pretest* is very low, as for the factors that cause low learning outcomes when students are given a *pretest* that is, students who do not understand the material because students have not studied the material. And for the results of *the posttest*, students experienced quite an increase, it can be seen from the highest score for *the pretest* of only 60 while the highest score for *the posttest* was 92, it can be concluded that during face-to-face learning after the covid-19 pandemic for student learning outcomes increased from *pretest* to *posttest*, this is due to several factors, including students can understand the material delivered in face-to-face learning with rotational dynamics material, students focus when listening to the material presented so that they can answer each question given and then the seriousness of students in working on the questions. This is based on the results of direct observation when conducting research at SMA Negeri 100 Jakarta in class XI MIPA 3. The increase in grades from *pretest* to *posttest* can be seen in figure 1.

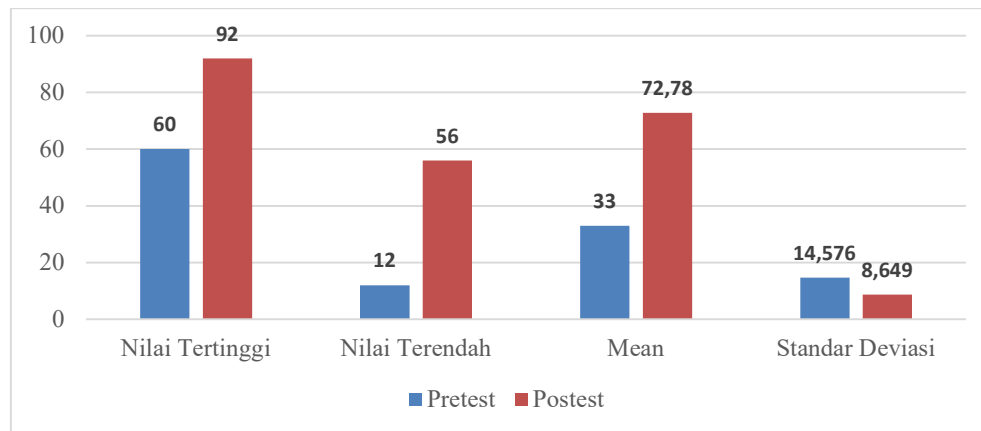


Figure 1. Histogram of *Pretest* and *Posttest* Result Data

N-Gain Test Results

In this study, the aim is to see an improvement in student learning outcomes. Therefore, after obtaining the data from *the pretest* and *posttest*, the N-Gain test was carried out in the *pretest* and *posttest*. The results of the N-Gain test can be seen in table 11.

Table 11. N-Gain Test Results

N-Gain Test Results	Interpretation
0,56	medium

Based on table 11, it can be seen that there was an increase in learning outcomes with an N-Gain of 0.56. So it can be concluded that student learning outcomes from the student's initial ability or *pretest* to *posttest* have increased by 0.56 with the medium category.

When viewed from the elaboration of the interest analysis on the aspect of the role of teachers in educating with an average percentage of 79% with a good category, and for the N-Gain test of 0.56 with moderate interpretation, in this case there is a relationship between learning interest and learning outcomes in face-to-face learning after the Covid-19 pandemic. The role of a teacher is one of the factors to increase students' interest in learning because knowledge is obtained or sourced from the teacher himself and the indicator of the success or failure of the learning process depends on the teacher and the student himself, the teacher plays an important role in efforts to form students' interest in learning. In this study, the learning outcomes and learning interests of students are aligned showing good results, it can be concluded that the role of teachers has succeeded in making a good learning process so that students' learning interests can lead to good results. If the interest in learning from students is good, the learning results obtained will also be good. This is in line with research conducted by Aprijal et al in 2020, that there is a significant influence between students' learning interests and student learning outcomes.

IV. Conclusion

The learning interest of students in grade XI MIPA SMA Negeri 100 Jakarta in face-to-face learning (PTM) after the covid-19 pandemic from the overall average percentage showed a percentage result of 79% in the good category, this is because students feel happy to learn face-to-face directly, students are more focused when learning directly and better understand the material that the teacher conveys, and the other is that students play an active role in learning in the classroom. Meanwhile, the learning outcomes of students in grade XI MIPA SMA Negeri 100 Jakarta from *pretest* to *posttest* when given treatment increased by 0.56 with the moderate category in accordance with the results of the N-Gain test. Thus, it can be concluded that students' learning interests greatly affect student learning outcomes. If the student's interest in learning is good, then the learning results obtained by students will also be good.

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