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THE DIFFERENCE IN LEARNING OUTCOMES OF CLASS V STUDENTS BEFORE AND AFTER COVID-19 AT PUBLIC ELEMENTARY SCHOOL 095256 PEMATANG BANDAR

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Abstract

This research was motivated by seeing student learning outcomes during the pandemic that had increased compared to learning outcomes before Covid-19 which was seen from the list of odd and even semester test scores for the 2019/2020 academic year at SD Negeri 095256 Pematang Bandar. The objectives of this study are (1) How Student Learning Outcomes before Covid-19 at SD Negeri 095256 Pematang Bandar; (2) What are the student learning outcomes during the covid-19 period at SD Negeri 095256 Pematang Bandar; (3) How are the differences in student learning outcomes before and after covid-19 in SD Negeri 095256 Pematang Bandar. This research is a type of quantitative research type of experiment. The sample used in this study were 27 students and the population used was all class V SD Negeri 095256 Pematang Bandar. Based on the results of the research data analysis, the test scores in this odd semester have a Liliefors value (L0 = 0.1694 > Lt = 0.173). The results of the test scores in this even semester have a Liliefors value (L0 = 0.14563 > Lt = 0.173). While the results of the homogeneity test using the Ftest were obtained (Fcount < Ftable = 1.474 < 1.674). While the results of hypothesis testing using the t-test were obtained (tcount = 2.76 > ttable = 2.012). So it can be concluded that there is a significant difference between student learning outcomes before and after Covid-19 as seen from the List of T.P. Odd and Even Semester Exam Values. 2019/2020 In the Country 095256 Pematang Bandar.

Keywords: Difference, Results, Before, After, Covid-19

INTRODUCTION

According to Piaget (in Purwanto 2000:94) Learning is a process of interaction of students with the environment which is always changing and is carried out continuously. Learning is a process of someone trying to acquire a form of behavior. One component of activities related to goals and interactions in education is the learning process. According to Gagne (in Suprijono, 2013: 2), learning is a change in disposition or ability that a person achieves through activity. The change in disposition is not obtained directly from a person's natural growth process. According to Slameto (2013: 54) Learning is a business process carried out by a person to obtain a new change in behavior as a whole, as a result of his own experience in interaction with his environment.

Based on the tragedy at the end of 2019 which was called the corona virus or covid-19 and became a pandemic that continued until the Corona virus spread throughout the world, and arrived in Indonesia on March 11 2020 until now. According to Adiwijaya (2020: 11) said the Covid-19 pandemic resulted in sudden changes in the daily lives of individuals and community activities, bringing extraordinary changes to all fields. One of

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them is education, so learning from home is a necessity. With the state of education during this Covid-19 era, the key to success in dealing with it is the presence and role of parents as a companion or mentor of change for their children at home. This pandemic period is an opportunity to make every parent aware that the burden of children's education cannot be left solely on the teacher. Learning is actually a process of changing one's attitude and behavior through teaching and training efforts. Parents must be able to study again with their children at home. At the same time, instill positive thinking patterns so that facing this pandemic is a new lifestyle that must be used to live. Adiwijaya emphasized that all processes of becoming a good educator and learner are, of course, a shared responsibility. The hope is the extent of everyone's role in carrying out the mandate as educators and

According to Dimyati (2006:12) Learning outcomes are the result of an interaction between learning and teaching. So the learning outcomes are essentially changes in the behavior of students including cognitive, affective, and psychomotor. So that every educator will certainly expect that the learning outcomes of their students will increase after carrying out the learning process. Learning Outcomes before Covid-19, namely face-to-face learning before the pandemic was mandatory, all levels were mandatory for schools, class capacity was fully utilized, and the pre-pandemic school entry schedule was 5-6 working days and some schools only Monday to Friday, there were also until Saturday. While learning outcomes after Covid-19, namely online learning, face-to-face learning is not required, students can study online at home using conference communication platforms such as zoom and other learning media. During a pandemic, the levels allowed to return to school start from the junior high school level, schools that are allowed to open are also only allowed to accommodate 30-50 percent of class capacity depending on the size of the room, and schools that are allowed face-to-face meetings during this pandemic, students are only allowed to enter two quarters. once a day (KEMENDIKBUD, 2020:11).

Student learning outcomes during the Covid-19 period are used by teachers as a determinant or measure in achieving an education that is happening at the present time, whether student learning outcomes are better or even worse than previous learning outcomes. But in reality, not all students can achieve good results, especially during the current pandemic. To find out and see more details, the researcher made an observation in the form of taking data in the form of documentation about student learning outcomes, by choosing one of the schools, namely SD Negeri 095256 Pematang Bandar. In the precovid-19 period, researchers saw that from learning outcomes there was an average decrease in the 2019/2020 odd school year. The results of observational findings in the field of face-to-face learning continued but student learning outcomes decreased. Compared to the Covid-19 period, student learning outcomes increased and homework during the pre-Covid-19 period was still given every day by the teacher.

LITERATURE REVIEW

Study

learners.



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

According to Whittaker, (in Djamarah, 2011: 12) formulates that "learning as a process where behavior is generated or changed through training or experience". Meanwhile, according to Djamarah (2011: 13) learning is "a series of physical and mental activities to obtain a change in behavior as a result of individual experience in interaction with the environment which involves cognitive, affective and psychomotor". And whereas according to Khodijah (2014: 50) learning is a process that allows a person to acquire and form new competencies, skills, and attitudes involving internal mental processes that result in changes in behavior and are relatively permanent in nature.

From some of the definitions above, the writer can draw the conclusion that the notion of learning is a change that occurs in humans based on experiences experienced in the environment where they are concerned with their mentality, attitudes, and skills. The content of the literature review is a description/foundation of scientific theories related to the subject matter of the study/research, written in Times New Roman 12 font. All theoretical sources cited in this chapter must be listed in the bibliography.

Learning outcomes

Learning outcomes can be explained by understanding the two words that make it up, namely "results" and "learning". The definition of result (product) refers to an acquisition as a result of carrying out an activity or process that results in a change in input functionally (Purwanto, 2011:77). While learning is done to seek a change in behavior in individuals who learn. The change in behavior is an acquisition that becomes a learning outcome, in addition to cognitive learning outcomes obtained by students. In essence, learning outcomes are abilities that children acquire after going through learning activities. Learning itself is a process of a person trying to acquire a relatively sedentary form of behavior (Mulyono, 2003:55). According to Dimyati and Mudjiono (2006:75) learning outcomes are the results achieved in the form of numbers or scores after being given a learning achievement test at the end of each lesson. The value obtained by students becomes a reference to see student mastery in receiving subject matter.

Covid-19

Corona virus disease 2019 (English: coronavirus disease 2019, abbreviated as COVID-19) is an infectious disease caused by SARS-CoV-2, a type of coronavirus. This disease resulted in the 2019-2020 coronavirus pandemic. Covid-19 sufferers can experience fever, dry cough, and difficulty breathing. Sore throats, runny nose, or sneezing are less common. In susceptible patients, this disease can lead to pneumonia and multi-organ failure (Yuliana, 2020:90)

METHOD

The population in this study were students of SD Negeri 095256 Pematang Bandar. the sample in this study were all students of SD Negeri 095256 Pematang Bandar. The sampling technique that the researchers used was non-probability sampling, namely a sampling technique that did not provide equal opportunities for each element or member of



the population to be selected as a sample. In this quantitative research the selection technique uses saturated sampling techniques. To test the data collection used, namely data collection techniques with documentation. After the data is obtained, it is then processed by conducting a data requirements test using a normality test and a homogeneous test.

RESULTS AND DISCUSSION

Contents Results and Discussion

The following will provide a description of the data regarding. 1) Student learning outcomes before Covid-19 as seen from the List of Odd Semester Middle Examination Scores for Elementary School TP 2019/2020 at SD Negeri 095256 Pematang Bandar. 2) Student learning outcomes during the Covid-19 period as seen from the List of Odd Semester Middle Examination Scores for Elementary School TP 2020/2021 at SD Negeri 095256 Pematang Bandar. 3) Differences in student learning outcomes before and after covid-19 as seen from the List of Scores for the 2019/2020 Odd Semester Middle Exams and the 2020/2021 Odd Semester Mid Exams at SD Negeri 095256 Pematang Bandar.

Table 1. Student learning outcomes before Covid-19 as seen from the List of Odd Semester Middle Examination Grades for 2019/2020 Elementary Schoolsat SD Negeri 095256 Pematang Bandar

			1 0111	attaing D	anuai					
			2019/2020 T	P Odd Seme	ster UTS Sc	cores				
Student's name	PKN	ВІ	MM	IPA	IPS	BASS	Agm	PENJAS	SBDP	Average Per Student
Denis S. Sinaga	67	67	67	67	67	67	78	67	69	68
Gapbriel Marpaung	68	69	68	68	68	68	67	70	68	68
Arga O. Panjaitan	68	69	67	68	68	68	67	72	70	69
Abhidah Adrelia	78	75	72	78	76	69	82	75	78	78
Andrew Harianja	78	79	85	83	85	79	80	82	75	81
Angelita L. Tobing	70	72	72	73	69	69	73	75	75	72
Ancient inspired flowers	80	80	83	80	81	79	84	82	78	81
Chatrine SR Sinaga	70	72	72	72	74	69	71	70	75	72
Chelsea O. Siregar	68	70	69	69	69	67	67	67	75	69
Christian Siregar	78	78	72	75	76	71	80	79	72	76
Daniel Hutagaol	68	69	67	68	68	67	67	70	69	68
Dimas Febriansyah	67	67	67	67	67	67	78	67	69	68
Farrell Tri S. Damanik	70	70	69	69	68	67	82	70	75	71
Firmansyah Sidauruk	68	69	67	68	68	67	80	70	75	70
Josua F. Hutabarat	68	72	70	70	69	69	67	70	75	70
Melani J. Sinaga	72	73	72	72	70	69	69	68	75	71
Melisa Napitupulu	68	70	68	69	68	68	67	67	75	69
Pirmawati Sinaga	75	75	78	78	74	76	80	77	75	76
Rafael E. Simanjuntak	68	70	68	68	68	67	69	73	75	70
Sitorus' breakfast	68	70	70	68	68	67	73	76	75	71
	Denis S. Sinaga Gapbriel Marpaung Arga O. Panjaitan Abhidah Adrelia Andrew Harianja Angelita L. Tobing Ancient inspired flowers Chatrine SR Sinaga Chelsea O. Siregar Christian Siregar Daniel Hutagaol Dimas Febriansyah Farrell Tri S. Damanik Firmansyah Sidauruk Josua F. Hutabarat Melani J. Sinaga Melisa Napitupulu Pirmawati Sinaga Rafael E. Simanjuntak	Denis S. Sinaga Gapbriel Marpaung 68 Arga O. Panjaitan 68 Abhidah Adrelia 78 Andrew Harianja 78 Angelita L. Tobing 70 Ancient inspired flowers Chatrine SR Sinaga 70 Chelsea O. Siregar 68 Christian Siregar 78 Daniel Hutagaol 68 Dimas Febriansyah 67 Farrell Tri S. Damanik 70 Firmansyah Sidauruk 68 Melani J. Sinaga 72 Melisa Napitupulu 68 Pirmawati Sinaga 75 Rafael E. Simanjuntak 68 Sitorus' breakfast	Student's name PKN BI Denis S. Sinaga 67 67 Gapbriel Marpaung 68 69 Arga O. Panjaitan 68 69 Abhidah Adrelia 78 75 Andrew Harianja 78 79 Angelita L. Tobing 70 72 Ancient inspired flowers 80 80 Chatrine SR Sinaga 70 72 Chelsea O. Siregar 68 70 Christian Siregar 78 78 Daniel Hutagaol 68 69 Dimas Febriansyah 67 67 Farrell Tri S. Damanik 70 70 Firmansyah Sidauruk 68 69 Josua F. Hutabarat 68 72 Melani J. Sinaga 72 73 Melisa Napitupulu 68 70 Pirmawati Sinaga 75 75 Rafael E. Simanjuntak 68 70 Sitorus' breakfast 70	Student's name						



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

21	Ancient Sarbel Bonar	80	80	86	82	76	79	84	80	75	80
22	Sariani Br. Sitorus	80	80	80	81	78	76	83	80	75	79
23	Suci Aulia A. Lestari	78	80	78	75	74	76	84	78	75	78
24	Vicky L. Hutabarat	68	69	68	68	69	67	70	70	69	68
25	Andika W. Syahputra	67	68	67	67	68	67	80	70	69	69
26	Rido	68	70	67	69	69	68	80	72	75	71
27	Jessica Hutri Siahaan	78	80	76	76	76	76	79	80	75	77
	Average Per Subject	73.2963	74.6296	71.62963	72.8519	73.7778	71.3333	76,037	73.2222	74.3333	72.51

Student learning outcomes before covid-19 as seen from the List of Odd Semester Test Scores for 2019/2020 Elementary Schools at SD Negeri 095256 Pematang Bandar have overall scores in the range of 68 - 81. The lowest score is 68 and the highest score is 81. The results of the test scores on This odd semester has an average value (mean) of 72.51.

Table 2. Student learning outcomes during the Covid-19 period as seen from the List of Odd Semester Middle Examination Grades for 2020/2021 Elementary School at SD Negeri 095256 Pematang Bandar

	2020/2021 TP Odd Semester UTS Scores										
No	Student's name	PKN	B. IND	MM	IPA	IPS	BASS	Agm	PENJAS	SBDP	Average Per Student
1	Denis S. Sinaga	75	75	75	75	75	75	80	75	75	76
2	Gapbriel Marpaung	77	77	76	76	75	75	80	75	76	76
3	Arga Oktisan Panjaitan	75	77	76	75	75	76	80	76	77	76
4	Abhidah Adrelia	85	86	78	78	79	76	86	80	84	81
5	Andrew Harianja	87	87	85	85	84	80	90	84	78	84
6	Angelita Lumban Tobing	80	82	78	78	78	76	86	76	77	79
7	Ancient inspired flowers	87	88	84	85	85	78	90	85	84	85
8	Chatrine Setia R. Sinaga	83	82	78	80	78	78	85	78	80	80
9	Chelsea O. Siregar	77	78	76	78	75	76	80	75	78	77
10	Christian Siregar	85	86	80	82	84	78	90	80	80	83
11	Daniel Hutagaol	77	78	78	75	75	75	80	75	76	77
12	Dimas Febriansyah	75	75	75	75	75	75	80	75	76	76
13	Farrell Tri S. Damanik	80	78	76	78	78	75	82	78	78	78
14	Firmansyah Sidauruk	78	78	76	78	77	75	80	78	77	77
15	Josua F. Hutabarat	77	77	76	78	77	76	80	78	75	77
16	Melani J. Sinaga	78	82	78	78	78	76	80	78	76	78
17	Melisa Napitupulu	75	78	76	75	76	75	80	76	76	76
18	Pirmawati Sinaga	85	84	80	80	78	78	88	82	82	82
19	Rafael E. Simanjuntak	77	78	77	78	78	75	80	80	75	78
20	Sitorus' breakfast	78	78	77	78	78	76	80	78	80	78
21	Ancient Sarbel Bonar	85	87	84	84	80	80	90	80	80	83
22	Sariani Br. Sitorus	85	88	82	84	82	78	90	82	82	84
23	Suci Aulia A. Lestari	85	87	80	82	78	78	84	80	82	82
24	Vicky L. Hutabarat	78	78	78	75	75	75	80	78	76	77
25	Andika W. Syahputra	75	75	75	75	75	75	78	75	75	75
26	Rido	77	78	76	75	78	77	88	78	78	78
27	Jessica Hutri Siahaan	85	86	82	84	82	78	88	84	80	83



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

Average Per Subject										ı 	
	80,963	80,037	78.2222	77.8889	77.1852	76.4815	83.4815	78.4815	78.2593	79,17	l

Student learning outcomes during the Covid-19 period as seen from the List of Even Semester Examination Grades for 2019/2020 Elementary Schools at SD Negeri 095256 Pematang Bandar have overall grades in the range of 75.33 – 85.11. With the lowest score of 75.33 and the highest score of 85.11. The results of the test scores in this odd semester have an average value (mean) of 79.17.

To calculate the average student learning outcomes used the following formula:

1. Student Learning Outcomes Before Covid-19

$$\overline{X} = \frac{\Sigma x}{\Sigma n}$$

$$\overline{X} = \frac{1958}{27}$$

$$\overline{X} = 72,51$$

2. Student Learning Outcomes After Covid-19

$$\overline{X} = \frac{\sum x}{\sum n}$$

$$\overline{X} = \frac{2137}{27} \overline{X} = 79,17$$

Improving Student Learning Outcomes

Is known: Odd semester(1)
$$\overline{x}$$
 =72,52
Even Semester (2) \overline{x} =79,15

To find the percent (%) increase in student learning outcomes in the experimental class can be calculated using the formula:

% Increase
$$=\frac{\bar{x}_2 - \bar{x}_1}{\bar{x}_1} x 100\%$$

% Increase $=\frac{79,15 - 72,52}{72,52} x 100\%$
% Increase $=\frac{6,63}{72,52} x 100\%$
% Increase $=0,091 x 100\%$
% Increase $=0,091\%$

Standard Deviation for learning outcomes before covid-19

$$\sum fx = 1958$$

$$sdx = \sqrt{\frac{\sum fx}{n}} = -\sqrt{\frac{1958}{27}} \sqrt{72,51}$$

$$sdx = 8.51$$

Standard Deviation for learning outcomes after covid-19

$$\sum f = 2137y^{2}$$

$$SDy = 0 = 0.89 \sqrt{\frac{\sum fy^{2}}{n}} \sqrt{\frac{1318}{27}} \sqrt{79,14}$$

Standard Error for learning outcomes before Covid-19

$$SEMx = \frac{SDx}{\sqrt{n-1}}$$

$$= \frac{8,51}{\sqrt{27-1}} \frac{8,51}{\sqrt{26}} \frac{8,51}{5,09}$$

$$= 1.672$$



$$= 2.78$$

Standard Error for learning outcomes after Covid-19

$$SEMy = \frac{SDy}{\sqrt{n-1}}$$
=1,742 \frac{8,89}{\sqrt{27-1}} \frac{8,89}{\sqrt{26}} = \frac{8,89}{5,09}
= 3.02

Standard Error Difference between X1 and X2 Variables

$$SE_{M_x-M_y} = \sqrt{SE_{M_{X1}}^2 + SE_{M_{X2}}^2}$$

$$SE_{M_x-M_y} = \sqrt{(1,67)^2 + (1,74)^2}$$

$$SE_{M_x-M_y} = \sqrt{2,78 + 3,02}$$

$$SE_{M_X-M_y} = \sqrt{5,8}$$

$$SE_{M_X-M_y} = 2.40$$

From the above calculation, the standard error difference between X1 and X2 is 2.40.

Table 3. Research Data Normality Test

No.	Data	Class	Lo	Ltable (α=0.05)	Conclusion
1.	Study	Control	0.1694	0.173	Normal
	Study	Experiment	0.1456	0.173	Normal

Testing the normality of data on A1 (odd semester exam scores) produces a maximum Lo of 0.1694. From the list of critical values L for the Liliefors test with n=27 and significance level = 0.05, Ltable = 0.173, so it can be concluded that student learning outcomes before Covid-19 (column A1) came from populations with normal distribution. Testing the normality of data on A1 (odd semester exam scores) produces a maximum Lo of 0.1456. From the list of critical values L for the Liliefors test with n=27 and significance level = 0.05, Ltable = 0.173, so it can be concluded that student learning outcomes during the Covid-19 period (column A2) came from populations with normal distribution.

Table 4. Research Data Homogeneity Test

					•	
No.	Data	Class	Variance	Fcount	Ftable (α=0.05)	Conclusion
1.	Study	Control	4,42	1 474	1.674	11
	Study	Experiment	3.00	1,474	1,674	Homogeneous

Based on the results of the two-way analysis test results, it can be concluded that the analytical requirements needed for the two-way analysis of variance have been met, so it is feasible to carry out further analytical testing to determine differences in student learning outcomes before and after Covid-19 at SD Negeri 095256 Pematang Bandar on grades odd semester and even semester exams.

Hypothesis testing is done by using a different test (t-test). The t-test was carried out by comparing the mean values of the two research groups.

Is known:

$$Mx = 73.5$$

 $my = 79$



$$SE_{Mx-My} = 2.40$$

tcount $= \frac{Mx-My}{SE_{Mx-My}}$
tcount $= \frac{79,14-72,51}{2,40}$
tcount $= \frac{6,629}{2,40}$
tcount $= 2,76$

Based on the calculations that have been done, it is known that the average value of the research before Covid-19 was 73.5 while the average value of the research after Covid-19 was 79. By using the combined average value and variance of the two research groups, it is known large tount = 2.76. The tount value obtained is then compared with the ttable value, which is 2.012 which can be seen in.

Based on the two-way analysis of variance that has been carried out, the standard deviation of the X variable is 4.423 and Y is 3.00. and Fcount for these two variables is 1.474 while the F-table with the db 1 and the denominator db at the 0.05 level is known to be 1.674.

Based on the criteria for testing the hypothesis written in the work attachment which reads: "The hypothesis is accepted (Ho: $\mu A1 = \mu A2$) if Fh > Ft at a significant level of 0.05 with a numerator dk of 1 and a denominator of 1.474". From the description above, it can be concluded that there is a significant difference between student learning outcomes before and after Covid-19 as seen from the List of Odd and Even Semester Examination Grades 2019/2020 in Negeri 095256 Pematang Bandar.

By looking at these results it can be concluded that in this study Ha was accepted while simultaneously rejecting Ho which means it is more effectiveStudent learning outcomes during the Covid-19 period as seen from the List of Even Semester Examination Grades for 2019/2020 Elementary Schools at SD Negeri 095256 Pematang Bandarcompared withStudent learning outcomes before Covid-19 as seen from the List of Odd Semester Examination Grades for the 2019/2020 Elementary School at SD Negeri 095256 Pematang Bandar.

Contents of Discussion Results

Table 5. List of 2019/2020 2019/2020 Odd Semester Middle Examination Scores

No	Name	Average
1	Denis S. Sinaga	85
2	Gapbriel Marpaung	80
3	Arga Oktisan Panjaitan	77
4	Abhidah Adrelia	83
5	Andrew Harianja	77
6	Angelita Lumban Tobing	76
7	Ancient inspired flowers	78
8	Chatrine Setia R. Sinaga	77
9	Chelsea O. Siregar	77



10	Christian Siregar	78
11	Daniel Hutagaol	76
12	Dimas Febriansyah	82
13	Farrell Tri S. Damanik	78
14	Firmansyah Sidauruk	78
15	Josua F. Hutabarat	83
16	Melani J. Sinaga	84
17	Melisa Napitupulu	82
18	Pirmawati Sinaga	77
19	Rafael E. Simanjuntak	75
20	Sitorus' breakfast	78
21	Ancient Sarbel Bonar	83
22	Sariani Br. Sitorus	85
23	Suci Aulia A. Lestari	80
24	Vicky L. Hutabarat	77
25	Andika W. Syahputra	83
26	Rido	77
27	Jessica Hutri Siahaan	76
	Amount	2137
_	Average	79.15

From the table above it can be seen that student learning outcomes before Covid-19 were seen from the List of Odd Semester Examination Scores for 2019/2020 Elementary Schools at SD Negeri 095256 Pematang Bandar has an overall score in the range of 67 – 84. The lowest score is 67 and the highest score is 84 The results of the test scores in the middle of this odd semester have an average value (mean) of 73.5.

Judging from the average score of students' midterm exam results, it can be concluded that their learning outcomes were lower during pre-Covid-19 learning because the learning outcomes when face-to-face students filled out the exam sheets with answers they knew when memorizing the grid that the teacher gave before the exam, without looking at the book, and they answer the exam questions themselves without anyone's help.

However, basically face-to-face learning is more effective than when online/offline learning is currently underway, because when the direct or face-to-face learning process is carried out students or students are more understanding and more active in understanding what is explained and taught by the teacher, and the teacher also plays an active role in supervising students in learning and can assess children's development in understanding what has been taught to them.

From the explanation above, the researchers concluded that the learning process or teaching and learning process before Covid-19 which was carried out directly or face to face was more optimal, so that children or students were more active and understood what the teacher had taught during the lesson.

This section contains the main sub-discussions written in Times New Roman 12 font. The sub-discussions are written systematically. It is hoped that the numbering in the sub-discussion should not be written too much.

Table 6. List of 2020/2021 Odd Semester Middle Exam Scores



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

No	Name	Average
1	Denis S. Sinaga	85
2	Gapbriel Marpaung	80
3	Arga Oktisan Panjaitan	77
4	Abhidah Adrelia	83
5	Andrew Harianja	77
6	Angelita Lumban Tobing	76
7	Ancient inspired flowers	78
8	Chatrine Setia R. Sinaga	77
9	Chelsea O. Siregar	77
10	Christian Siregar	78
11	Daniel Hutagaol	76
12	Dimas Febriansyah	82
13	Farrell Tri S. Damanik	78
14	Firmansyah Sidauruk	78
15	Josua F. Hutabarat	83
16	Melani J. Sinaga	84
17	Melisa Napitupulu	82
18	Pirmawati Sinaga	77
19	Rafael E. Simanjuntak	75
20	Sitorus' breakfast	78
21	Ancient Sarbel Bonar	83
22	Sariani Br. Sitorus	85
23	Suci Aulia A. Lestari	80
24	Vicky L. Hutabarat	77
25	Andika W. Syahputra	83
26	Rido	77
27	Jessica Hutri Siahaan	76
	Amount	2137
	Average	79.15

From the table above it can be seen that the learning outcomes of students during the Covid-19 period were seen from the List of Even Semester Examination Scores for the 2019/2020 Elementary Schools at SD Negeri 095256 Pematang Bandar had overall scores in the range of 75-90. The lowest score was 75 and the highest score was 90 The results of the test scores in this odd semester have an average (mean) value of 79.

Based on the table above by looking at the number of average results that are higher or more increased compared to the previous average results, it can be concluded that their learning outcomes have improved more during learning after Covid-19, because during this pandemic students couldconduct online learning at home using conference communication platforms such as zoom and other learning media. And during exams students work on exam questions at home online/offline using existing facilities, in contrast to face-to-face exams, online/offline exams are a little more free to choose any assistance in working on exam questions.



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

Learning outcomes when online/offline students also get maximum attention from parents, the role of parents is more active in their children's education, and pays much more attention to their children's daily learning, and also pays attention to their children during exams during the pandemic, providing facilities and infrastructure such as providing smartphone facilities and assisting in working on exam questions, moreover children can freely open books and read them when looking for answers in exam questions.

When viewed from the average value of the research results, it appears that the increase in student learning outcomes after Covid-19 is better than the increase in student learning outcomes before Covid-19.

With a large comparison of the increase in the average value of student learning outcomes in the two research variables, it can be concluded that it is more effectiveStudent learning outcomes during the Covid-19 period as seen from the List of Odd Semester Middle Examination Grades for 2019/2020 Elementary School at SD Negeri 095256 Pematang Bandarcompared withStudent learning outcomes before Covid-19 as seen from the List of Odd Semester Middle Examination Grades for 2020/2021 Elementary School at SD Negeri 095256 Pematang Bandar.

By looking at the learning completeness of the two research variables, it can be concluded that the learning outcomes after Covid-19 were much higher in terms of the percentage of learning completeness than the learning outcomes before Covid-19.

CLOSING

Conclusion

- 1. Student learning outcomes before Covid-19 as seen from the List of Odd Semester Middle Examination Scores 2019/2020 at SD Negeri 095256 Pematang Bandar have overall scores in the range of 68 81. The lowest score is 68 and the highest score is 81. The results of the test scores in the middle This odd semester has an average value (mean) of 72.51. Judging from the average score of students' midterm exam results, it can be concluded that their learning outcomes were lower during pre-Covid-19 learning because the learning outcomes when face-to-face students filled out the exam sheets with answers they knew when memorizing the grid that the teacher gave before the exam, without looking at the book, and they answer the exam questions themselves without anyone's help.
- 2. Student learning outcomes during the Covid-19 period as seen from the List of Grades for the 2019/2020 Odd Semester Middle Examinations at SD Negeri 095256 Pematang Bandar have overall grades in the range of 75.33 85.11. With the lowest score of 75.33 and the highest score of 85.11. The results of the test scores in this odd semester have an average value (mean) of 79.17. Judging from the average score of students' midterm exam results, it can be concluded that their learning outcomes have improved more during learning after Covid-19 because online/offline learning outcomes of students get maximum attention from parents, by paying attention to their children during exams during a pandemic, providing



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

- facilities and infrastructure such as providing smartphone facilities and assisting in working on exam questions, and being able to open books during exams.
- 3. When viewed from the average value of the research results, it appears that the increase in student learning outcomes after Covid-19 is better than the increase in student learning outcomes before Covid-19. With a large comparison of the increase in the average value of student learning outcomes in the two research variables, it can be concluded that it is more effectiveStudent learning outcomes during the Covid-19 period as seen from the List of Odd Semester Middle Examination Grades for 2019/2020 Elementary School at SD Negeri 095256 Pematang Bandarcompared withStudent learning outcomes before Covid-19 as seen from the List of Odd Semester Middle Examination Grades for 2020/2021 Elementary School at SD Negeri 095256 Pematang Bandar. By looking at the learning completeness of the two research variables, it can be concluded that the learning outcomes after Covid-19 were much higher in terms of the percentage of learning completeness than the learning outcomes before Covid-19.

By looking at these results it can be concluded that in this study Ha was accepted while simultaneously rejecting Ho which means it is more effectiveStudent learning outcomes in the time of covid-19compared withStudent learning outcomes before Covid-19 at SD Negeri 095256 Pematang Bandar.

Suggestions and Acknowledgments

Based on the discussion and conclusions that have been described, the authors make several suggestions, including:

- 1. For teachers, student learning outcomes during the Covid-19 period at SD Negeri 095256 Pematang Bandar have increased compared to before the Covid-19 period, but it would be good if student learning outcomes continued to improve if this pandemic ended onwards.
- 2. For students, it would be nice if the learning process were more serious, even though this pandemic period stresses us to continue studying at home. Keep learning and digging for knowledge so that learning results can be increased, don't play too much, get used to living healthy and always listen to your parents' orders at home.
- 3. For parents of students, parents' attention during the Covid-19 pandemic is very much needed by students to improve learning outcomes, facilitate needs needed during the Covid-19 period, lend smartphones to complete assignments given by teachers at home, supervise children in doing homework assigned, always guide children to continue learning, and especially always pay attention to children's health during a pandemic current covid-19.

REFERENCES

Adiwijaya. (2020). Metamorfosis Dunia Pendidikan di Masa Pandemi Covid-19. Bandung: m.medcom.id.



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

- Arief Yuandana Sinaga. (2018). Pengaruh Strategi Pembelajaran Terhadap Kemampuan Menulis Cerpen Pada Kelas XI Siswa SMA N 5 Surakarta. Jurnal Gramatika: Jurnal Penelitian Pendidikan Bahasa Dan Sastra Indonesia. Volume (4): 37-50.
- Arif Mustafa. (2011). Belajar dan Pembelajaran (Perkembangan Wacana dan Praktik Pembelajaran dalam Pembangunan Nasional). Ar-Ruzz Media: Yogyakarta.
- Arikunto. (2014). Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta: Rineka Cipta.
- Bustani, B., Khaddafi, M. ., & Nur Ilham, R. (2022). REGIONAL FINANCIAL MANAGEMENT SYSTEM OF REGENCY/CITY REGIONAL ORIGINAL INCOME IN ACEH PROVINCE PERIOD YEAR 2016-2020. International Journal of Educational Review, Law And Social Sciences (IJERLAS), 2(3), 459–468. https://doi.org/10.54443/ijerlas.v2i3.277.
- Dimyanti dan Mudjiono. (2006). Belajar dan Pembelajaran. Jakarta: Rineka Cipta Evelin Siregar, dkk. (2010). Teori Belajar dan Pembelajaran. Bogor: Ghalia Indonesia.
- Falahuddin, F., Fuadi, . F., Munandar, M., Juanda, R. ., & Nur Ilham, R. . (2022). INCREASING BUSINESS SUPPORTING CAPACITY IN MSMES BUSINESS GROUP TEMPE BUNGONG NANGGROE KERUPUK IN SYAMTALIRA ARON DISTRICT, UTARA ACEH REGENCY. IRPITAGE JOURNAL, 2(2), 65–68. https://doi.org/10.54443/irpitage.v2i2.313.
- Gegne dalam Purwanto. (2000). Evaluasi hasil Belajar. Yogyakarta: Pustaka Pelajar.
- Geovani, I. ., Nurkhotijah, S. ., Kurniawan, H. ., Milanie, F., & Nur Ilham, R. . (2021). JURIDICAL ANALYSIS OF VICTIMS OF THE ECONOMIC EXPLOITATION OF CHILDREN UNDER THE AGE TO REALIZE LEGAL PROTECTION FROM HUMAN RIGHTS ASPECTS: RESEARCH STUDY AT THE OFFICE OF SOCIAL AND COMMUNITY EMPOWERMENT IN BATAM CITY. International Journal of Educational Review, Law And Social Sciences (IJERLAS), 1(1), 45–52. https://doi.org/10.54443/ijerlas.v1i1.10.
- Hardini,dkk. (2012). Belajar dan Pembelajaran Pengembangan Wacana dan Praktik Pembelajaran Pembangunan Nasional. Jogjakarta: Ar-Ruzz Media.
- Ilham, Rico Nur. et all (2019). Comparative of the Supply Chain and Block Chains to Increase the Country Revenues via Virtual Tax Transactions and Replacing Future of Money. International Journal of Suplly Management. Volume 8 No.5 August 2019.
- Ilham, Rico Nur. et all (2019). Investigation of the Bitcoin Effects on the Country Revenues via Virtual Tax Transactions for Purchasing Management. International Journal of Suplly Management. Volume 8 No.6 December 2019.
- Kemendikbud RI. (2020). Edaran Tentang Pencegahan Wabah covid-19 di Lingkungan Pendidikan Seluruh Indonesia
- Khodijah, Nyanyu. (2014). Psikologi Pendidikan. Jakarta: Rajawali Pers
- Lampung Yuliana. 2020. Corona virus disease (COVID-19);sebuah tinjauan literatur. Fakultas Kedokteran Universitas
- Lasta Irawan, A. ., Briggs, D. ., Muhammad Azami, T. ., & Nurfaliza, N. (2021). THE EFFECT OF POSITION PROMOTION ON EMPLOYEE SATISFACTION WITH COMPENSATION AS INTERVENING VARIABLES: (Case Study on Harvesting Employees of PT. Karya Hevea Indonesia). International Journal of Social Science, Educational, Economics, Agriculture Research, and Technology (IJSET), 1(1), 11–20. https://doi.org/10.54443/ijset.v1i1.2.
- Likdanawati, likdanawati, Yanita, Y., Hamdiah, H., Nur Ilham, R., & Sinta, I. (2022). EFFECT OF ORGANIZATIONAL COMMITMENT, WORK MOTIVATION AND LEADERSHIP STYLE ON EMPLOYEE PERFORMANCE OF PT. ACEH



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

- DISTRIBUS INDO RAYA. International Journal of Social Science, Educational, Economics, Agriculture Research, and Technology (IJSET), 1(8), 377–382. https://doi.org/10.54443/ijset.v1i8.41.
- Mahfud et all (2020). Developing a Problem-Based Learning Model through E-Learning for Historical Subjects to Enhance Students Learning Outcomes at SMA Negeri 1 Rogojampi. IOP Conf. Series: Earth and Environmental Science 485 (2020) 012014 doi:10.1088/1755-1315/485/1/012014.
- Mahfud et all (2021). PEMANFAATAN TRADISI RESIK LAWON SUKU USING LOKAL PADA SEBAGAI **SUMBER** BELAJAR SEJARAH **SMA** DI BANYUWANGI. Media Bina Ilmiah Vol.16 No.3 Oktober 2021. http://ejurnal.binawakya.or.id/index.php/MBI/article/view/1294/pdf.
- Mahfud, M., Yudiana, I. K., & Sariyanto, S. (2022). HISTORY OF BANYUWANGI KALIKLATAK PLANTATION AND ITS IMPACT ON SURROUNDING COMMUNITIES. International Journal of Educational Review, Law And Social Sciences (IJERLAS), 3(1), 91–104. https://doi.org/10.54443/ijerlas.v3i1.492.
- Majied Sumatrani Saragih, M. ., Hikmah Saragih, U. ., & Nur Ilham, R. . (2021). RELATIONSHIP BETWEEN MOTIVATION AND EXTRINSIC MOTIVATION TO ICREASING ENTREPRENEURSHIP IMPLEMENTATION FROM SPP ALFALAH GROUP AT BLOK 10 VILLAGE DOLOK MASIHUL. MORFAI JOURNAL, 1(1), 1–12. https://doi.org/10.54443/morfai.v1i1.11.
- Mashudi. (2007). Teori Belajar dan Pembelajaran. Bogor: Ghalia Indonesia.
- Mulyono Abdurrahman. (2003). Pendidikan bagi Anak Berkesulitan Belajar. Jakarta: PT Rineka Cipta.
- Nana Sudjana. (2005). Penilaian Hasil Proses Belajar Mengajar. Bandung: Rosdakarya.
- Nur Ilham, R. ., Arliansyah, A., Juanda, R., Multazam, M. ., & Saifanur, A. . (2021). RELATHIONSIP BETWEEN MONEY VELOCITY AND INFLATION TO INCREASING STOCK INVESTMENT RETURN: EFFECTIVE STRATEGIC BY JAKARTA AUTOMATED TRADING SYSTEM NEXT GENERATION (JATSNG) PLATFORM. International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS), 1(1), 87–92. https://doi.org/10.54443/ijebas.v1i1.27.
- Nur Ilham, R., Arliansyah, A., Juanda, R. ., Sinta, I. ., Multazam, M. ., & Syahputri, L. . (2022). APPLICATION OF GOOD CORPORATE GOVERNANCE PRINCIPLES IN IMPROVING BENEFITS OF STATE-OWNED ENTERPRISES (An Emperical Evidence from Indonesian Stock Exchange at Moment of Covid-19). International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS), 2(5), 761–772. https://doi.org/10.54443/ijebas.v2i5.410.
- Nur Ilham, R., Heikal, M. ., Khaddafi, M. ., F, F., Ichsan, I., F, F., Abbas, D. ., Fauzul Hakim Hasibuan, A. ., Munandar, M., & Chalirafi, C. (2021). Survey of Leading Commodities Of Aceh Province As Academic Effort To Join And Build The Country. IRPITAGE JOURNAL, 1(1), 13–18. https://doi.org/10.54443/irpitage.v1i1.19.
- Nur Ilham, R., Likdanawati, L., Hamdiah, H., Adnan, A., & Sinta, I. (2022). COMMUNITY SERVICE ACTIVITIES "SOCIALIZATION AVOID STUDY INVESTMENT" TO THE STUDENT BOND OF SERDANG BEDAGAI. IRPITAGE JOURNAL, 2(2), 61–64. https://doi.org/10.54443/irpitage.v2i2.312.
- Nuraini, Kokasih. (2020). Corona virus disease (COVID-19);sebuah tinjauan literatur. Fakultas Kedokteran Universitas



Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna Jusnita Samosir4, Melisa Nur Asima Sidabutar5

- Piaget dalam Suprijono. (2013). Teori Belajar dan Pembelajaran. Bogor: Ghalia Indonesia. Purwanto. (2011). Evaluasi Hasil Belajar. Yogyakarta: Pustaka Pelajar.
- Rahmaniar, R., Subhan, S., Saharuddin, S., Nur Ilham, R. ., & Anwar, K. . (2022). THE INFLUENCE OF ENTREPRENEURSHIP ASPECTS ON THE SUCCESS OF THE CHIPS INDUSTRY IN MATANG GLUMPANG DUA AND PANTON PUMP. International Journal of Social Science, Educational, Economics, Agriculture Research, and Technology (IJSET), 1(7), 337–348. https://doi.org/10.54443/ijset.v1i7.36.
- Rico Nur Ilham, Irada Sinta, & Mangasi Sinurat. (2022). THE EFFECT OF TECHNICAL ANALYSIS ON CRYPTOCURRENCY INVESTMENT RETURNS WITH THE 5 (FIVE) HIGHEST MARKET CAPITALIZATIONS IN INDONESIA. Jurnal Ekonomi, 11(02), 1022–1035. Retrieved from http://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/481.
- Sandi, H. ., Afni Yunita, N. ., Heikal, M. ., Nur Ilham, R. ., & Sinta, I. . (2021). BETWEEN **BUDGET** RELATIONSHIP PARTICIPATION, CHARACTERISTICS, **EMOTIONAL INTELLIGENCE** AND WORK MOTIVATION AS MEDIATOR VARIABLES TO STRENGTHENING USER POWER PERFORMANCE: AN EMPERICAL EVIDENCE FROM INDONESIA GOVERNMENT. **MORFAI** JOURNAL, 1(1),https://doi.org/10.54443/morfai.v1i1.14.
- Sinta, I., Nur Ilham, R. ., Authar ND, M. ., M. Subhan, & Amru Usman. (2022). UTILIZATION OF DIGITAL MEDIA IN MARKETING GAYO ARABICA COFFEE. IRPITAGE JOURNAL, 2(3), 103–108. https://doi.org/10.54443/irpitage.v2i3.467.
- Sinurat, M. ., Heikal, M. ., Simanjuntak, A. ., Siahaan, R. ., & Nur Ilham, R. . (2021). PRODUCT QUALITY ON CONSUMER PURCHASE INTEREST WITH CUSTOMER SATISFACTION AS A VARIABLE INTERVENING IN BLACK ONLINE STORE HIGH CLICK MARKET: Case Study on Customers of the Tebing Tinggi Black Market Online Store. MORFAI JOURNAL, 1(1), 13–21. https://doi.org/10.54443/morfai.v1i1.12.
- Slameto. (2013). Belajar dan Faktor-faktor yang Mempengaruhinya. Jakarta: PT. Rineka Cipta.
- Sudjana. (2005). Metode Statistika. Tarsito: Bandung
- Sugiyono. (2013). Metode Penelitian Kuantitatif Kualitatif dan R & D. Bandung : Alfabeta Suhana. (2014). Prinsip-prinsip Belajar. Bogor: Ghalia Indonesia.
- Susilana. (2007). Teori Belajar dan Pembelajaran. Bogor: Ghalia Indonesia.
- Syaiful Bahri Djamarah. (2011). Psikologi Belajar. Jakarta: Rineka Cipta
- Trianto.(2010). Belajar dan Pembelajaran Pengembangan Wacana dan Praktik Pembelajaran Pembangunan Nasional. Jogjakarta: Ar-Ruzz Media.
- Wayan Mertha, I. ., & Mahfud, M. (2022). HISTORY LEARNING BASED ON WORDWALL APPLICATIONS TO IMPROVE STUDENT LEARNING RESULTS CLASS X IPS IN MA AS'ADIYAH KETAPANG. International Journal of Educational Review, Law And Social Sciences (IJERLAS), 2(5), 507–612. https://doi.org/10.54443/ijerlas.v2i5.369.
- Yusuf Iis, E., Wahyuddin, W., Thoyib, A., Nur Ilham, R., & Sinta, I. (2022). THE EFFECT OF CAREER DEVELOPMENT AND WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE WITH WORK MOTIVATION AS INTERVENING VARIABLE AT THE OFFICE OF AGRICULTURE AND

THE DIFFERENCE IN LEARNING OUTCOMES OF CLASS V STUDENTS BEFORE AND AFTER COVID-19 AT PUBLIC ELEMENTARY SCHOOL 095256 PEMATANG BANDAR Ficha Aulia Nanda1, Martin Uribe2, Jubelando O Tambunan3, Herna

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LIVESTOCK IN ACEH. International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS), 2(2), 227–236. https://doi.org/10.54443/ijebas.v2i2.191.