



Outdoor Based Ecosystem Learning during the Covid Pandemic 19 Merauke Elementary School Students

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ABSTRAK

Pademic covid-19 mengharuskan semua elemen pendidikan untuk melaksanakan pembelajaran daring, namun tidak semua sekolah yang ada khususnya di kabupaten Merauke melaksanakan hal itu karena melihat kesiapan siswa yang tidak mempunyai alat untuk digunakan sebagai pembelajaran. Penelitian ini bertujuan untuk meningkatkan keaktifan dan hasil belajar siswa pada pembelajaran ekosistem siswa kelas V. Penelitian ini adalah penelitian Tindakan kelas dengan jenis penelitian kolaboratif dan dilaksanakan sebanyak dua siklus yang terdiri dari perencanaan, pelaksanaan, observasi, dan refleksi. subjek dalam penelitian ini adalah siswa kelas V SD yang berjumlah 18 orang. Teknik pengumpulan data yang digunakan yaitu observasi, wawancara, dokumentasi dan tes evaluasi belajar siswa. Berdasarkan hasil penelitian ini dapat disimpulkan bahwa hasil belajar siswa dimasa pandemi covid-19 berbasis outdoor pada pelajaran ekosistem

meningkat pada siklus 1 sebesar 60,1 dan pada siklus II meningkat lagi sebesar 81,1, penelitian ini juga meningkatkan keaktifan siswa dalam pembelajaran pada setiap pertemuannya. Berdasarkan penelitian ini dapat disimpulkan bahwa pembelajaran ekosistem berbasis outdoor dapat meningkatkan hasil belajar siswa kelas V yang terdampak pada pembelajaran daring.

ABSTRACT

The Pademic Covid-19 suddenly required all elements of education to carry out learning, but not all existing schools, especially in Merauke district, did this because they saw the readiness of students who did not have tools to use as learning. This study aims to increase student activity and learning outcomes in class V ecosystem learning. This research is a classroom action research with collaborative research type and is carried out in two cycles consisting of planning, implementing, observing, and reflecting. The subjects in this study were students of grade V SD YPPK Santo Tarsisius Biankuk who got 18 people. The data test technique used was observation, interviews, documentation and student learning evaluation tests. Based on the results of this study, it can be seen that student learning outcomes during the Covid-19 pandemi outdoor based on ecosystem lessons increased in cycle 1 by 60.1 and in cycle II increased by 81.1, this study also increased student activity in learning at each meeting. Based on this research, it can be ignored that environment-based learning can improve the learning outcomes of class V students which are affected by bold learning.

1. Introduction

Covid-19 suddenly requires all elements of education to carry out online learning, seeing the current conditions that are very urgent in the world of education, the step taken by the government is to carry out online learning (Anugrahana, 2020; Chang et al., 2020; Dong et al., 2020; Laelasari & Puspita, 2020; Mishra et al., 2020; Patricia, 2020; Wong et al., 2020). Online learning is often referred to as learning in the DARING network which is currently implemented, not seeing the age limit anymore, children are required to operate a communication tool, namely an Android cellphone and a computer that can be used as learning media in today's times (Anugrahana, 2020; Herliandry et al., 2020; Malyana, n.d.;

Nagge et al., 2017; Setiawan et al., 2019; Wang, 2020) said that as if all levels of education are forced to transform to adapt suddenly drastically to do learning from home through online media online, this is certainly not an easy thing because it is not fully prepared. Online learning can take advantage of platforms in the form of applications, websites, blended learning social networks and learning management systems (Herliandry et al., 2020), these various platforms can be used to support the transfer of knowledge provided by teachers / lecturers to students / students and supported by various techniques assignments and discussions to convey information.

However, in reality, not all educational units in all corners of the country implement online learning, see the demands and readiness of students to implement learning and most importantly see a safe zone from the Covid-19 pandemic. Likewise, education in Merauke Regency from May to August, seeing from the Covid-19 Health zone, Merauke is included in the green zone category or it can be said to be able to carry out the learning process face-to-face by following all the protocols set by the district government and the education office Merauke. This step was taken by the government and the Merauke district teaching education office because they saw that many parents and students could not carry out online learning through an application because of economic limitations, which had to buy a data package to be able to access an application and could not have an Android cellphone. Schools have initiated learning through the LURING network but the results are less effective, because the LURING learning that is carried out is learning where the class teacher makes a question without any explanation from the teacher then parents are asked to take assignments to do at home, the role of parents is very important in educating his son in doing the task. This is in accordance with the research conducted by which states that learning outside the network or giving assignments to students can only impose additional tasks for parents because most parents are busy looking for their family's living expenses. The existence of this pandemic parents reduces their activities and focus on their children (Briliannur Dwi C et al., n.d.; Fredy et al., 2019; Malyana, n.d.), students are also lazy in doing the assignments given by the teacher because students do not understand the concept of the assignment and the atmosphere of the place to do is different when students are inside class together with his friends.

Likewise, what happened at SD YPPK Santo Tarsisius Biankuk Merauke, this school is located on the coast or on the outskirts of Merauke city, the majority of students who go to school are native Papuan sons and daughters living on the coast of Merauke. Based on an interview from the principal in early June, he said that learning carried out during this pandemic was offline learning, less effective because the teacher only made assignments that were submitted by parents and given by their children to be completed within a time limit determined by the teacher without there was an explanation from the teacher how to do it, the principal also said that there were some teachers in grades VI, V, and IV who had carried out the learning process face-to-face because it was no longer possible for parents to take on assignments and most parents were busy earning a living and taking care of households (Daulay et al., 2018; Fredy et al., 2019), as well as the principal said this was done to prepare students to take the midterm exam (UTS) in October. The student report card scores obtained were taken from the UTS scores before the pandemic. The face-to-face learning process carried out by SD YPPK Santo Tarsisius Biankuk Merauke follows all the recommended health protocols submitted by the Merauke district education office, namely students who are in a maximum class of 20 students per class, students sit not side by side with other students but sit alone and every time. following the learning process students are required to use masks in the classroom. The time to carry out the face-to-face learning process is 2 x 25 minutes or 50 minutes for one meeting and students are only in school from 08.00 to 10.30 and continue with other classes. The teacher also said that one of the materials that were difficult to understand by previous students was ecosystem material, this reason was chosen by the teacher because it saw students very difficult to master the concepts in the material and saw student learning outcomes in 2019 and only 33.3% of students achieved The KKM score or only 6 students and 66.7% of the students did not reach the KKM score or 12 students in the remedial category from the total of 18 students.

Based on the problems experienced by SD YPPK Santo Tarsisius Biankuk Merauke, the researchers were motivated to carry out research in the Ganjii semester to improve learning outcomes for fifth grade students of SD YPPK santo Tarsisius Merauke on ecosystem materials using outdoor-based learning to increase student activity in understanding the ecosystem and to improve results. student learning. This outdoor-based learning is used to anticipate students not to spend too long in the classroom to prevent the spread of Covid-19 in the classroom and more learning outside the classroom so that students can more easily understand the ecosystem in the school environment. This research, as conducted by (Nasution, 2020) on biology learning, concluded that outdoor learning can increase student motivation and learning outcomes in ecosystem material in each cycle at SMP Negeri 1 Labuhan Deli, Deli Serdang district. This study only focuses on one theme, namely the ecosystem, and is limited to increasing student

activity and learning outcomes using outdoor based learning for fifth grade students of SD YPPK Santo Tarsisius Biankuk Merauke

2. Methodology

The research method used in this research is limited classroom action research (Arikunto & Suharsimi, 2014), meaning that the actions taken must follow all the protocols that have been determined by the government and the Merauke district education office. The type of classroom action research used is collaboration between teachers, observers, and researchers together to achieve one goal of increasing student learning outcomes and student activity in ecosystem learning materials during the affected Covid-19 pandemic (Susilo, Chotimah, & Sari, 2012). This classroom action research was carried out in 2 cycles in which each meeting was held 4 times and at the fourth meeting an evaluation test of student learning outcomes was carried out during learning in the classroom. The research procedure according to Kemmis & Mc Taggart can be seen in Figure 1.



Figure 1. Classroom action research procedures (Kemmis & Mc Taggart Model)

The activities carried out in this study are 1) Planning, the researcher analyzes the curriculum and the subject matter to determine the basic competencies and indicators and learning objectives to be achieved in an outdoor-based learning implementation plan (RPP) on ecosystem material, the researcher also prepares a group worksheet, LKK and evaluation of learning outcomes to students to determine the extent of the material provided in each cycle, as well as preparing student activeness observation sheets during outdoor-based learning; 2) Implementation, planning that has been prepared in the form of RPP, LKK, activity observation sheets and evaluation questions for each cycle are implemented at the implementation stage. evaluation questions; 3) Observation, the implementation that has been carried out in the classroom during the learning process will be observed by peers or observers to find out whether the learning is in accordance with the learning tools that have been provided at the planning stage, and to determine the activeness of students while participating in learning is seen by the observer; 4) Reflection, this activity is to restate what has been done during the learning process, this activity is carried out at the end of the siklus after students have conducted an evaluation test in the first cycle, besides that it is also intended as an effort to understand the process, problems, problems and constraints that are encountered teachers during the outdoor-based learning process.

The subjects in this study were students of grade V SD YPPK Santo Tarsisius Biankuk, amounting to 18 students consisting of 8 male students and 10 female students, the majority of students who attend school are native Papuan sons and daughters living on the coast of Merauke. The determination of this subject is based on interviews with school principals and class teachers that there is a need for action during this pandemic, seeing students very difficult to understand the material given through the tasks that students do during this pandemic and students are also slow in collecting assignments given by the teacher, lack of involvement parents in helping their children to do the tasks given and not their children are educational tools in carrying out online learning. Data collection techniques in this study consisted of four, namely observation, interviews, documentation and evaluation at the end of the cycle. Student activeness during learning can be seen from the value that has been filled in by the observer during the learning process at each meeting, the indicators observed by the observer are; (1) Visual Activities; (2) Oral Activities; (3) Listening Activities; (4) Writing Activities; (5) Mental Activities; and (6) Emotional Activities (Muah, 2015) Analysis of student activity data was analyzed descriptively and calculated by the number of scores obtained by students during learning divided by many indicators of student learning activeness, using the following formula.

In addition to knowing the activeness of students in learning, this research also knows student learning outcomes during outdoor-based learning. Student learning outcomes become an indicator in research if students experience an increase in each cycle, this research is said to have been successful and the percentage of student learning outcomes classically is $\geq 80\%$ of the total students in the class with a KKM score of 68. To determine the category of the level of success of classical student learning outcomes can be seen in table 1.

Table 1. Category of Classical Student Success Levels

Level of Success	Category
81 – 100	Very high
66 – 89	High
56 – 65	Moderate
0 – 55	Low

3. Findings and Discussion

Initial data from this study are student learning outcomes in 2019 and only 33.3% of students achieved the KKM score or only 6 students and 66.7% of students did not reach the KKM score or 12 students were in the incomplete category and based on interviews from the teacher. also said that one of the materials that was difficult for students to understand before the pandemic was ecosystem material. The implementation of this research was carried out in 2 cycles which were carried out from August to September. The implementation of the first cycle was carried out in four meetings and the fourth meeting was given an evaluation test of student learning outcomes to determine the extent of students' understanding of the learning given.

The implementation of learning activities carried out in cycle I follows all the protocols determined by the government and the Merauke district teaching education office by using a mask and washing hands before entering the classroom. The learning process for the first meeting was carried out on August 14 with agreed time, namely 2 x 25 minutes or 50 minutes. The teacher explains the first material by asking students what is meant by ecosystem, but students are silent and cannot answer questions from the teacher, the teacher then orders students to read the material in the student book, the teacher explains that ecosystem is a reciprocal relationship between living things and the environment then one of the students asked whether the ecosystem was included as living things, the teacher answered yes. The learning process on that day was still dominated by the teacher because seeing the new students doing the learning process for 2 weeks face to face, the habit of students so far was only playing and not doing the assignments given by the teacher. Student activeness in the classroom is still very low, seeing from the results of observations made by the observer teacher, students are still in the poor category because students are not very active in interacting with the questions given by the teacher, the activeness of students in expressing opinions through LKK is not in accordance with the questions given seeing students still very difficult to understand ecosystem learning. the activities of the learning process that day can be seen in Figure 2.



Figure 2. Student Learning Process in Class

Based on the picture above, it can be seen that students are still very difficult to understand the components of the ecosystem and there needs to be guidance from the teacher to be able to complete the LKK that has been distributed by the teacher, therefore this research is continued at the second meeting.

The second meeting was held on August 15, the learning process carried out on that day was different from the first meeting where the implementation used a learning video using a contextual approach. The teacher explains the material about the balance of the ecosystem the students observe the explanation, after explaining the teacher instructs the students to pay attention to the learning video about the balance of the ecosystem the students are very happy to take part in the lesson that day because there is an opportunity for students to see the ecosystem material they are learning. Students' attention is very much on the learning video and almost all students pay attention to learning at that time. Based on the results of observations made at this second meeting it can be said that the learning process went well and the activeness of students in participating in learning had increased, but they had not reached the indicators that had been set in the very good category, input from the observer that there were still some students who did not pay attention to the explanation the teacher when the teacher explains the material, students also often play with the masks with their mouths so that they interfere with the learning process, and there are still many students who have not been able to work on the LKK provided by the teacher and have to ask for help from teachers and students.

The implementation activities carried out at the third meeting are based on the Friday schedule because Friday is a holiday, so the learning is postponed to Saturday 22 August. The activity of the third meeting learning process uses outdoor-based learning where students are instructed to better understand ecosystem learning, so students are invited to observe the ecosystem in their school environment, see the environment is very supportive to make observations about ecosystem material. Before students make observations outside the classroom, the teacher first explains the material about the interaction between living things and their environment in an ecosystem, the goal is to get initial data before making observations outside the classroom. After the teacher explains the student material then divided into 8 study groups consisting of two students from each group, the learning process outside the classroom can be seen in Figure 3.



Figure 3. Student learning process outside the school environment

Students observe the ecosystem in the environment together with their group partners. Students were very happy to take part in the lesson on that day seeing that this was the first-time students were learning outside the classroom and immediately answered the questions on the student group worksheets. The teacher also does not allow students to be alone in conducting discussions with their group friends but the teacher guides students in finding the concepts they learn on that day. The ecosystems observed by students are garden ecosystems, forests and ponds near the school environment, students observe the interaction of living things with their environment, for example, the garden ecosystem there are reeds (grass), grasshoppers, butterflies, forest flowers, and the plants in the garden, the ecosystem interact with each other, the answer from one group. The activeness of students working on LKK and discussing with their group friends was very visible when one group said that the butterfly perched on the flower to suck the essence of the flower, another student said that the butterfly ate the newly bloomed leaves on the flower, the group pair argued with each other to find the truth. From what they observed, the teacher then explained to the pair of the group, and based on the teacher's observations, the teacher said that learning that was carried out outside the classroom was more effective than learning that was carried out in the classroom. This outdoor-based learning really helps students in knowing the material being taught on that day and student activity has increased from previous learning. Based on the analysis of cycle I student learning activeness can be seen in table 2.

Table 2. Observation Results of Student Learning Activeness in Cycle I

Indicator	Average		
	Meeting I	Meeting II	Meeting III
Visual Activities	6.50	7.33	7.50
Oral Activities	6.33	8.17	8.83
Listening Activities	6.50	7.00	7.33
Writing Activities	6.17	7.83	8.17
Mental Activities	6.17	7.67	7.00
Emotioanl Activities	6.33	7.67	7.83

Based on the results of the analysis in table 2 it can be seen that the activeness of students at the first, second, and third meetings at the average value obtained by students during the learning process has increased. This increase is based on input from observers at each meeting so that students better understand the ecosystem changing the learning process at each meeting. The implementation of the student learning outcomes test was carried out on August 28th. The questions given were a six-number essay consisting of each question. The aim was to find out the extent of students' knowledge during outdoor learning which was carried out face-to-face in class and outside the classroom. Based on the results of the analysis of the learning outcomes test, it can be seen that there is a need for improvement in the next cycle of action because it has not reached the predetermined indicators together with the class teachers and observers. The learning outcomes of cycle I can be seen in table 3.

Table 3. Learning Outcomes of Cycle, I Student Ecosystems

Value Range	The Number of Students	Criteria	Percentage
> 68	13	Completed	72.2
≤ 68	5	Not Complete	27.8
Total	18	-	100
Average	-	-	77.5
Classical Completeness of Learning			60.1

Student learning outcomes in cycle I based on table 3 can be seen that students who completed were 72.2% or 13 students who completed while 27.8% or 5 students who had not. This incomplete student is based on the delivery of the class teacher and observer during the action, that of the five students there are three students who cannot read fast and can only spell the given LKK questions so that students are slow in working on the questions. The average value obtained by students is also still very low, namely 77.5, while the classical student learning completeness indicator is still below the specified limit, namely ≤80% of the total number of students who take part in learning, the classical student learning completeness value in cycle I is equal to 60.1% in moderate category and said to be incomplete. Therefore, there needs to be actions that must be taken by teachers, researchers and observers to improve the learning process in the next cycle.

Reflection cycle I was carried out by involving class teachers, observers and students who helped in this study. Based on the results of reflection, one of the obstacles faced by students during the learning process were: (1) students were not used to working on LKK assignments that were given individually; (2) students only depend on students who understand more knowledge and do not want to find out what they are learning; (3) students' habits during the pandemic period were very influential in the learning process because many students did not pay attention to the teacher's explanation and only played in the classroom; (4) LKK is made more interesting so that students understand more easily each question given; and (5) students are not yet responsible for presenting their observations in front of the class. From the results of the reflections carried out in cycle I, it can be seen that there are five problems faced by students during the learning process, therefore it is continued in cycle II.

The implementation of the second cycle of the first meeting was held on September 4, the material taught on that day was the types of components of the abiotic and biotic ecosystem. The teacher explained the material on that day about the components of the ecosystem included in abiotic and biotic. The students paid attention to the explanation given by the teacher. The teacher then orders the students to read the material in the student's book about the material, then orders the students to make observations in the school environment. Students observe the abiotic and biotic components then write them down on a group worksheet that has been distributed by the teacher before the students leave the classroom. The

teacher guides students who have not yet understood the components of the ecosystem and provides an example so that students understand what they are doing outside the classroom, the activeness of students during outdoor-based learning is very visible, occasionally students ask the teacher what they do not understand then the teacher guides the students, Learning process activities on that day can be seen in Figure 4.



Figure 4. Teacher Guides Students in Working on Group Worksheets

The learning implementation carried out in the first cycle of the first meeting was in accordance with the learning implementation plan, students had the courage to ask the teacher about how to do questions that had not been understood by students then did it according to observations seen while outside the classroom. The learning outcomes at the meeting were very enjoyable because of the involvement of students in understanding material about the components of the abiotic and biotic ecosystem.

The second learning meeting was carried out on Saturday, September 05, the learning process was in accordance with the learning tools that had been prepared by the teacher researchers and observers, before entering the class, as usually students wash their hands then instruct students to enter the classroom one by one, this is done to prevent the spread covid-19 in schools. The material taught on that day, namely the factors that affect the teacher's ecosystem, provides an example of the factors that affect the ecosystem, namely burning the forest carelessly is one example of the factors that affect the ecosystem because it can damage and kill the ecosystem in the forest according to the teacher's explanation. Then the teacher asked the students who had burned the forest, there were some students who raised their hands and then the teacher advised the students not to burn the forest carelessly because it could damage and kill the ecosystem in it and have an impact on the inhaled air. Based on the interview with the classroom teacher said that often the people around the school during the dry season in August - November often burn the forest around the school environment, and it really disturbs the air that is inhaled, so that the related agencies go down directly to reprimand who burns the forest. The teacher then instructs students to leave the classroom to observe the factors that affect the ecosystem, two groups go to the back of the school to collect information about the factors that affect the ecosystem, behind the school there is a garbage collection that is not properly taken care of by garbage officers at the school so that garbage is scattered everywhere, students then record the information into the LKK.

Student activeness at this second meeting the better the students were able to find information in accordance with the instructions in the LKK which were given the higher the activity of students in questions to the teacher. Learning on that day at the end by asking students to present it in front of the class the other groups respond. The observer teacher said that the learning that has been carried out so far is only a teacher center, so that students are considered unable to understand and are slow to grasp the material presented, even though seeing the learning that students have followed during this study students are able and able to capture information quickly using interesting learning students to be actively involved. The second learning meeting ends with students coming to the front of the class presenting the other groups responding.

The third meeting in cycle II was held on September 11, the material taught on that day is the food chain and food webs in an ecosystem. The teacher then explains the material before students go down to directly observe the food chain around the school environment. Students' attention leads to the explanation given by the teacher so that students get initial information before making observations, after explaining the material the teacher prompts students to make observations outside the classroom about the food chain in an ecosystem. Learning activities can be seen in Figure 5.



Figure 5. Outdoor Learning in the School Enviroment

This research also involves students, the goal is that these students can find out how to collect classroom action research data so that students when they go down to the field no longer have difficulty in collecting data, the students used are final semester students. The involvement of students in this research really helps teachers and researchers in collecting data in the field, students are very familiar with students by explaining information and sharing knowledge with students about the existing food chain around the school environment. The learning implementation carried out at this third meeting is in accordance with the learning tools that have been prepared. The teacher then orders the students to enter the class and present it in front of the class where other students respond. During the group discussion, one group asked about the food chain observed by the other group that did not match the observations made by the group, then the teacher explained the difference and the students understood. The activeness of students in responding to answers is in accordance with the indicators that have been made where students must be able to provide suggestions or input to other groups if they are not in accordance with the results of observations made while outside the classroom. Based on the analysis of outdoor-based student learning activeness, it can be seen in table 4.

Table 4. Observation Results of Student Learning Activeness in Cycle II

Indicator	Average		
	Meeting I	Meeting II	Meeting III
Visual Activities	9.50	10.7	11.0
Oral Activities	9.50	10.3	11.3
Listening Activities	9.50	10.3	11.0
Writing Activities	8.57	10.2	11.5
Mental Activities	9.33	10.3	11.7
Emotioanl Activities	10.0	10.5	11.2

The results of the observation analysis carried out in cycle II showed that student learning activeness had increased in each meeting, maintaining student learning activity with outdoor-based learning that was used by teachers during the learning process in cycle II. Class teachers and observers said that even in difficult times like this, students should not be left alone to learn because students need assistance from the teacher first, parents who support and motivate students to achieve the expected goals. The results of the analysis of student learning activeness in cycles I and II can be seen in Figure 6.

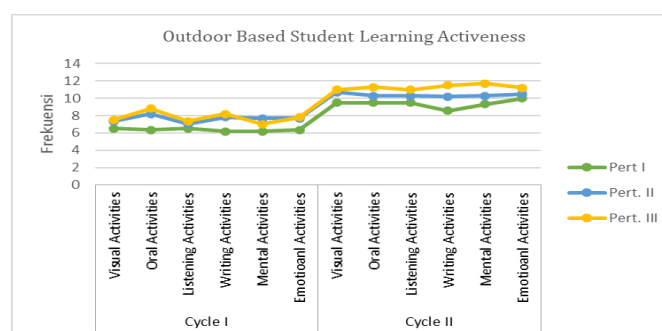


Figure 6. Outdoor Based Student Learning Activeness Diagram

Based on the results of the analysis of these observations, it can be said that outdoor-based learning can improve learning outcomes for fifth grade students of SD YPPK Santo Tarsisius Biankuk Merauke during this pandemic. Meanwhile, based on the analysis of student learning outcomes classically has increased from cycle I to cycle 2 during the learning process, the results of the analysis of classical student learning can be seen in table 5.

Table 5. Learning Outcomes of Cycle II Student Ecosystems

Value Range	The Number of Students	Criteria	Percentage
> 68	17	Completed	94.4
≤ 68	1	Not Complete	5.56
Total	18	-	100
Average	-	-	84.3
Classical Completeness of Learning			60.1

Based on the results of the analysis of student learning in cycle II, it can be seen that the score obtained by students who completed it was 94.4% or 17 students while students who did not complete were 5.56% or 1 student. The classical student completeness value was 81.1%. The results of this study prove that the scores obtained by students in cycle II can be said to be complete because they have reached the completeness indicator of 80% of the total students who took the lesson. Research is in accordance with the research conducted which states that outdoor learning and the surrounding environment can improve learning outcomes in the ecosystem, students feel happy with this learning because students can directly deal with the material being studied at that time and their activities also experience an increase in each cycle. The diagram of the increase from cycle I to cycle II can be seen in Figure 7.

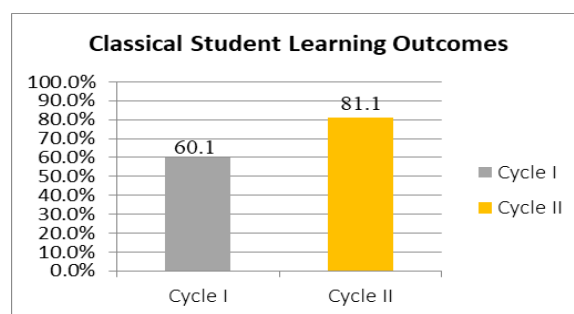


Figure 7. Diagram of Improving Student Learning Outcomes for each Cycle

The diagram above states that the research carried out during this pandemic period can produce good results for students and teachers where learning ecosystems that are considered by students to be difficult to understand can be completed properly by students and teachers through outdoor-based learning.

Discussion

Research that has been carried out at YPPK Santo Tarsisius Biankuk Elementary School can be said that students during the learning process with different faces when students carry out the learning process at home. The ability of students when they are in school requires students to be able to develop knowledge with material that is seen directly by students so that students do not feel bored following this learning most of the time spent outside the classroom. The time set during the pandemic period according to the advice of the Merauke district education and teaching office is 2 x 25 minutes a very short time to teach children who are affected by this pandemic, and it must be done seeing that there are many problems that must be faced by students if they do not carry out learning face to face. The research that was carried out during these two cycles was very beneficial for the fifth-grade students of SD YPPK Santo Tarsisius Biankuk because students could understand ecosystem learning directly by looking at the environment around the students. The effort made is to use outdoor research-based learning conducted by [Agusta et al. \(2018\)](#) which states that through outdoor learning students will acquire knowledge that is self-extracted through the formation of ideas or ideas, concepts and knowledge through direct experience.

by looking at the learning object. Based on the results of research (Nasution, 2020; Ramadhani et al., n.d.), the implementation of learning carried out by the teacher while implementing OLP learning has been carried out very well and has received an observer's assessment with a percentage of $\geq 80\%$. Student activities while participating in OLP learning have also been classified as very active. The high aspect of student activity is when listening to and paying attention to the teacher's explanation, observing plants in the environment around the school, the aspect of looking for information related to the material, and the aspects of working on the LKS in groups and discussing it, which is 100%.

The obstacles faced by students during the learning process made classroom teachers, observers and researchers reflect in cycle I so that student learning outcomes in cycle II match the expected indicators. The problems found in cycle I are (1) The learning process is still dominated by the teacher so that students cannot develop their ability to think and find the concept of the material being studied and based on interviews from the class teacher students are still in the process of introduction because during the pandemic students are off and only play so that it is still very difficult if students are required to think as expected; 2) students are not used to doing LKK assignments that are given individually; 3) students only depend on students who understand more knowledge and do not want to find out what they are learning; 4) students' habits during the pandemic period were very influential in the learning process because many students did not pay attention to the teacher's explanation and only played in the classroom; 5) LKK is made more interesting so that students understand more easily each question given; 6) students are not yet responsible for presenting their observations in front of the class; and 7) there are still some students who do not pay attention to the teacher's explanation when the teacher explains the material and only play with the mask in his mouth so that it interferes with the learning process. Based on the constraints obtained in cycle I, the researcher then compiles a learning implementation plan according to the results of the reflections carried out to fix the problems that occur in cycle II (Nomor & Palobo, 2019) saying that reflection activities are activities where the teacher examines, reflects on and discuss the learning outcomes obtained from learning and involve students through interviews to find out the extent of learning that students have obtained.

Learning cycle II is carried out by following all the inputs at the reflection stage, the goal is to achieve the expected indicators, namely that student learning outcomes can classically increase and student activity during learning has increased. Outdoor-based learning that was carried out in cycle II was very influential on student learning outcomes, it was seen that student learning outcomes based on the analysis were 81.1% of students classically from the total number of students had increased, the increase in learning outcomes from cycle I to cycle II was 21.0%. The average value of the questions done by the students during the learning process in the first cycle was 77.5 in the good category, while in the second cycle the average value of the questions carried out was 84.3 in the very good category. Based on these results the constraints that occur in cycle I can be carried out well in cycle II students are accustomed to working on LKK given individually, student habits during the pandemic period are no longer a reason and focus on what students observe during the learning process and students have dared to convey the results of their observations in front of the class. Based on the research that has been done, outdoor-based research on exocytosis material during this pandemic was successful, the research is in accordance with the research conducted by (Ramadhani, Erman, & Indah, 2016), which concludes that there is an increase in the percentage of classical completeness which is significant compared to the value Previously, those who had not implemented outdoor learning process-based learning, the response of students also during participating in outdoor learning activities, namely with a percentage of 97.8% of students agreed and were interested in outdoor learning. The results of this study are supported by research conducted by (Agusta et al., 2018; Safitri et al., 2014) which applies the Outdoor Based Ecosystem Learning with the results showing that 80-90% of student activity is in the active and very active category. Classical mastery of learning has reached the specified optimal standard, namely $\geq 75\%$.

4. Conclusion

Based on the results of research conducted during the second cycle at each meeting, it can be concluded that outdoor-based learning on ecosystems during the Covid-19 pandemic can increase the activity and learning outcomes of fifth grade students of SD YPPK Santo Tarsisius Biankuk Merauke who experienced the impact of the pandemic. The success of this research cannot be separated from the participation of students who want to learn face-to-face in order to understand the ecosystem material and outdoor-based learning carried out during the learning process makes students directly involved in the material being studied. Environmental learning that has been carried out is very supportive of natural science learning because students are directly involved in the natural surroundings so that learning is not only listening to lectures from the teacher but direct student involvement, and always maintaining health

protocols during the learning process when carrying out the learning process. face to face. Lack of facilities and infrastructure which are influenced by economic factors and students' unpreparedness in using technology which is the basis of this research so that a face-to-face learning process is held to see the needs of students who want to carry out the learning process and support from schools and related agencies to advance education in the area eastern Indonesia. The advice given in research to educators is how an educator can take advantage of an opportunity to be able to teach children in a pandemic like this by following all the protocols set by the government because we cannot depend on parents to be able to teach children at home because parents also has other activities to make a living and take care of other family members and when using online and offline learning media by promoting the characteristics of these students so that the expected learning can be achieved properly.

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