

Implementation of Biology Learning At SMPN 1 Ulakan Tapakis in the Covid-19 Outbreak of 2020/2021

Yulfitra Febriani M¹ and Azwir Anhar²

¹Student of Master Degree Program of Biology Education.

²Lecture of Biology Department, Faculty of Mathematics and Sciences,
Faculty of Mathematics and Sciences, State University of Padang
Jl. Prof. Dr. Hamka Air Tawar Barat Padang – 25131, Indonesia



Abstract – This study aims to reveal the implementation of biology learning at SMPN 1 Ulakan Tapakis during the Covid-19 outbreak in the 2020/2021 academic year. This research is a descriptive research. The research data were obtained through observation, interviews and documentation study. Data analysis was performed using the Miles and Huberman model. The results showed that the Covid-19 outbreak had an impact on all aspects of life including education. Learning that is usually carried out in schools through face-to-face must be done online to break the chain of spreading Covid-19. The lesson plan prepared by the teacher has sufficient criteria. The implementation of the learning carried out is not in accordance with the lesson plans made by the teacher. The assessment of learning outcomes by the teacher has sufficient criteria.

Keywords – Covid-19 Pandemic, Online Learning, Implementation of Biology Learning.

I. INTRODUCTION

Natural Science according to Toronto (2010: 136) is "A collection of systematic theories, its application is generally confined to natural phenomena, birth and development through scientific methods such as observation and experimentation and demands scientific outlook such as inquisitiveness, transparency, integrity, and etc.". The objects of science study, especially biology, are subsistence things that include students and subsistence things around students, making it simpler for students to understand biological material. Lufri (2007: 7) states that teachers and students who love subsistence things and enjoy interacting with them can establish more effective biology learning.

Science learning, especially biology, should be interesting, fun, and easy to understand by students because students learn about themselves and their surroundings. In fact, since the Covid-19 outbreak hit the world, including Indonesia, learning in schools has experienced problems. Learning which is usually done face-to-face and the interaction between students and teachers for a while must be done by learning from home. Learning from home is done

online or called online. During the pandemic, now online learning has been carried out almost all over the world (Goldschmidt, 2020: 89).

The central and local governments issued policies to change learning activities that are usually carried out in schools to divert learning from home during Covid-19 (Sari et al., 2020: 157). Based on the Circular of the Secretary General of the Ministry of Education and Culture Number 15 of 2020 concerning guidelines for organizing learning from home in the emergency period of the spread of Corona Virus Disease (Covid-19), it states that learning from home is through online and / or offline distance learning. A joint decree from the Minister of Education and Culture, the Minister of Religion, the Minister of Health and the Minister of Home Affairs regarding the guidelines for implementing learning in the academic year and academic year during the Covid-19 pandemic states that educational units in the yellow, orange and red zones are prohibited from carrying out the process face-to-face learning in educational units and continue learning activities from home.

Based on the results of observations made in August 2020 with one of the biology teachers at SMPN 1 Ulakan tapakis, it was found that entering the 2020/2021 school year on July 13, 2020, SMPN 1 Ulakan Tapakis which was in the red zone carried out learning by learning from home online. In fact, not all students can learn online. The reason is because students and parents do not have devices that can support online learning. Following the Circular of the Education and Culture Office of the Padang Pariaman Regency Government, biology lessons are conducted by combining online distance learning and offline distance learning. Students who cannot take part in online learning can do offline learning by picking up and delivering worksheets to school according to the specified schedule. The interest and motivation of students towards learning is still low, it can be seen from the lack of participation when collecting assignments given by the teacher both online and offline.

The results of observations also show that online learning in Biology lessons at SMPN 1 Ulakan Tapakis is done through WhatssaApp (WhatsApp Group). The limitations of the students' networks, signals and internet packages do not allow Biology learning to be done through learning videos such as zoom applications. Online learning is carried out by the teacher by giving assignments in the form of assignment sheets and videos related to the material studied through WhatssaApp (WhatsApp Group). Students who take offline learning are given assignments in the form of assignment sheets.

The results of the author's interviews with several students showed that there were obstacles in learning biology remotely during the Covid-19 outbreak. Students and parents do not have devices that support online learning. Online learning is also constrained by network and signal limitations during online learning. Students also have difficulty buying internet quota because they come from middle to lower middle families, most of whom parents work as fishermen, farmers,

and some also migrate. Students prefer to learn directly through face-to-face rather than online or offline, because it is easier to understand biology learning by learning directly than online and offline learning.

Online and offline learning has never been done before in biology learning at SMPN 1 Ulakan Tapakis. Online and offline learning is a new learning model for students at SMPN 1 Ulakan Tapakis. Based on this, researchers wanted to know how to plan, implement and evaluate biology learning at SMPN 1 Ulakan Tapakis during the Covid-19 outbreak.

II. METHOD

This type of research is descriptive. Descriptive research (descriptive research) is research that aims to describe a situation or phenomenon as it is without manipulating the object of research (Sukmadinata, 2015: 18). The sources in this study were all science teachers and students at SMPN 1 Ulakan Tapakis. Methods of data collection using observation, interviews, and study documentation. This study uses data triangulation to compare (double-check) informants obtained from different sources. Data analysis was performed using the Miles and Huberman model.

III. RESULT AND DISCUSSION

1. Result

Based on research conducted at SMPN 1 Ulakan Tapakis regarding the implementation of biology learning during the Covid-19 outbreak, it can be revealed starting from learning planning, implementing learning, assessing learning outcomes that have been carried out by teachers and obstacles encountered during the learning process.

The results of observations and documentation studies on the implementation of online learning can be seen in table 1.

Table 1. Observation Results of Science Learning Implementation

Assessment Indicators	Observation Result				Average Value	Score
	AA	BB	CC	DD		
1. Table of LearningPlan	AA	BB	CC	DD		
A.	66,66	66,66	66,66	66,66	66,66	Sufficient
B.	66,66	33,33	33,33	33,33	41,66	Intermediate
C.	33,33	33,33	33,33	33,33	33,33	Intermediate
D.	66,66	66,66	66,66	66,66	66,66	Sufficient
E.	100	100	66,66	33,33	75	Good
Total					283,31	
Average value					56,66	Sufficient
2. Table of LearningImplementation	AA	BB	CC	DD		

F.	33,33	66,66	66,66	66,66	58,32	Sufficient
G.	33,33	33,33	33,33	33,33	33,33	Intermediate
H.	66,66	66,66	66,66	66,66	66,66	Sufficient
I.	66,66	66,66	66,66	100	75	Good
J.	66,66	100	66,66	100	83,33	Good
K.	50	50	50	50	50	Sufficient
Total					366,64	
Average value					61,10	Sufficient
3. Table of Learning Assessment	AA	BB	CC	DD		
L.	33,33	33,33	33,33	66,66	41,66	Intermediate
M.	75	75	75	75	75	Good
Total					116,66	
Average value					58,33	Sufficient

Note :

- AA :Science Teacher grade VII
- BB :Science Teacher grade VIII
- CC : Science Teacher grade VIII
- DD :Science Teacher grade IX

2. Discussion

The spread of the corona virus that causes Coronavirus Disease (Covid-19) affects all aspects of life, one of which is in the field of education (Prasetyaningtyas, 2020: 86). One of the Indonesian government's policies to break the Covid-19 distribution chain is to impose social distancing at all levels of society, including for learning activities at the middle level. Schools are closed but learning activities must be continued. Teachers and students are encouraged to switch to online learning (Lestari and Gunawan, 2020: 58). Teaching and learning activities are not only limited to indoors but can be carried out anywhere. The definition of learning according to Baharuddin (2008: 13) is an activity to achieve intelligence or knowledge, so that people know, understand, understand, can implement, and have about something. Referring to this understanding, online learning is learning that is carried out at home to gain knowledge, so that students know, understand, and can carry out this knowledge

Distance learning aims to meet educational standards by utilizing information technology using computers or gadgets that are connected to each other between students and teachers so that through the use of these technologies the teaching and learning process can be carried out properly (Pakpahan and Fitriani, 2020: 31). Online and offline learning emphasizes students to be active, initiative and innovative in order to understand the lesson well in order to achieve optimal academic achievement. Academic achievement from a social cognitive perspective is seen as a complex relationship between individual abilities, self-perception, assessment of tasks, expectations of success, cognitive strategies and self-regulation, gender, parenting style, socioeconomic status, performance, and individual attitudes toward school (Clemons , 2008: 1).

Teachers in carrying out learning during the Covid-19 outbreak are still making lesson plan, syllabus, teaching materials or student worksheet to help the learning process. Teachers must design learning so that the online learning process can run well, starting from planning learning, implementing learning and learning assessment.

Researchers conducted observations and documented studies of planning, implementation and assessment of learning science teachers so that they could assess each indicator. The lesson plan has five points that are observed and each point has an indicator assessment item. Based on the data in table 1. point A has an average of 66.66. This means that the teacher formulates the learning objectives in the lesson plan according to the syllabus and pays attention to the characteristics of students who have sufficient criteria.

Point B an average of 41.66 means that the teacher's score in arranging teaching materials sequentially has moderate criteria. Point C an average of 33.33 means that teachers in planning effective and conducive learning activities have moderate criteria values. Point D an average of 66.66, which means that the teacher in choosing learning sources / learning media that is in accordance with the material and learning strategies has sufficient criteria. Point E an average of 75 means that the teacher arranges student worksheet in a structured and attractive manner having a good criterion score.

The implementation of online learning begins with preliminary activities which include an average F point of 58.32, meaning that the activities for the teacher to start learning have sufficient criteria. The core activity at point G an average of 33.33 means that the teacher in mastering the subject matter has a moderate criterion value. Point H with an

average of 66.66 shows that teachers in implementing an effective learning approach or strategy have sufficient criteria. Point I an average of 75 means that teachers in utilizing media in online learning have good criteria. At point J an average of 83.33 means that the teacher in triggering or maintaining the involvement of students in learning has a good criterion value. The closing activity at point K with an average of 50 means that the teacher in ending the lesson effectively has sufficient score criteria.

Assessment of online learning at point L an average of 41.66 means that teachers in designing evaluation tools to measure progress and learning of students have a moderate criterion value. Points M an average of 75 means that teachers in using various strategies and assessment methods to monitor the progress and learning outcomes of students in achieving certain competencies as written in the lesson plan have good criteria.

Online learning planning with an average of 56.66 has sufficient criteria value. The implementation of online learning on average 61.10 has sufficient score criteria. The learning implementation that is carried out is not in accordance with the lesson plans made by the teacher. An average online learning assessment of 58.33 has a sufficient criterion value.

IV. CONCLUSION

Based on research that has been done, online learning cannot be implemented optimally due to several obstacles. Limited learning facilities for students in the form of gadgets. There are students who do not have a device to carry out online learning. Unstable internet connection or network. The learning implementation is not in accordance with the learning plan made by the teacher. The response of students who are still lacking in responding to online learning.

REFERENCES

- [1] Baharuddin. 2008. *Teori Belajar dan Pembelajaran*. Yogyakarta: Ar-Ruzz Media.
- [2] Clemons, T. L. 2008. *Underachieving Gifted Students: A Social Cognitive Model*. Virginia: University of Virginia.
- [3] Goldschmidt, K. 2020. The COVID-19 Pandemic: Technology Use to Support the Wellbeing of Children. *Journal of Pediatric Nursing*, 53: 88-90
- [4] Lestari, A.S dan Gunawan. 2020. The Impact of Covid-19 Pandemic on Learning Implementasi of Primary and Secondary School Levels. *Indonesian Journal of Elementary and Childhood Education*, 1(2): 58-63.
- [5] Lufri. 2007. *Strategi Pembelajaran Biologi: Teori, Praktik, dan Penelitian*. Padang: UNP Press.
- [6] Prasetyaningtyas, S. 2020. Pelaksanaan Belajar Dari Rumah (BDR) secara Online selama Darurat Covid-19 di SMPN 1 Semin. *Jurnal Karya Ilmiah Guru*, 5(1): 86-94.
- [7] Sari, I., Sinaga, P., Hernani, dan Solfarina. 2020. Chemistry Learning via Distance Learning during the Covid-19 Pandemic. *Journal of Education and Teacher Training*, 5(1): 155-165.
- [8] Sukmadinata, N.S. 2015. *Metode Penelitian Pendidikan*. Bandung: PT Remaja Rosdakarya.
- [9] Surat Edaran Sekretaris Jenderal No. 15 Tahun 2020 tentang Pedoman Pelaksanaan Belajar dari Rumah selama Darurat Bencana Covid-19.
- [10] Surat Keputusan bersama Menteri Pendidikan dan Kebudayaan, Menteri Agama, Menteri Kesehatan dan Menteri dalam Negeri tentang Republik Indonesia Nomor 01/KB/2020, Nomor 516 tahun 2020, Nomor HK.03.01/Menkes/363/2020, dan Nomor 440-882 tahun 2020 tentang Panduan Penyelenggaraan Pembelajaran pada tahun Ajaran 2020/2021 dan tahun Akademik 2020/2021 di masa Pandemi Virus Covid-19.
- [11] Trianto. 2010. *Model Pembelajaran Terpadu*. Jakarta: PT Bumi Aksara.