

PROFILE OF STUDENTS DIFFICULTY IN BIOLOGY LEARNING DURING PANDEMIC COVID-19 IN SMA NEGERI 1 SILANGKITANG

Novita Sari Nasution¹, Ika Chastanti^{1*}, Dahrul Aman Harahap¹

¹FKIP Universitas Labuhanbatu

*Corresponding author: chastanti.ika@gmail.com

ARTICLE INFO:

ABSTRACT

Article History

Received December 30, 2020
Revised February 5, 2021
Accepted February 6, 2021

Keywords:

Learning Difficulty, Online Learning, Pandemic Covid-19

The pandemic coronavirus diseases (Covid-19), which has plagued the world, have hampered education implementation, so that the government has issued a policy to implement online learning. This study aimed to determine the difficulties of learning online students in learning biology during the Covid-19 pandemic. This study uses a descriptive method using a qualitative approach. The samples in this study were students and teachers of SMA Negeri 1 Silangkitang, Labuhanbatu Regency. The data analysis technique was carried out in a descriptive qualitative manner using the Miles damn Huberman model. The results showed that learning biology during the covid-19 pandemic at SMA Negeri 1 Silangkitang was based on (1) Prepare Learning Tools (46.60%); (2) Independent (80%); (3) Asking questions (43.30%); (4) Looking for Other Sources (36.60%); (5) Anxious (36.60%); (6) Confidence (40%); (7) Concise the Material (40%) (8) Write Important Concepts (40%); (9) Active (23.30%) and (10) Lazy (40%). Online learning carried out during the Covid-19 pandemic has the advantage of being more flexible in using time because it can be accessed anytime and anywhere. Delivery of information is faster and can reach many students using online media. However, there are also weaknesses in online learning; namely, students are not actively involved because there are students whose areas are not covered by the internet network, and there are also students who cannot afford smartphones.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

How to Cite:

Nasution, N. S., Chastanti, I., & Harahap, D. A. (2021). Profile of Students Difficulty in Biology Learning During Pandemic Covid-19 In SMA Negeri 1 Silangkitang. *Jurnal Pelita Pendidikan*, 9(4), 020-025.

INTRODUCTION

The coronavirus pandemic (Covid-19), which has become an epidemic in the world, has hampered the implementation of education, so that the Government issued a policy for implementing online learning ([Nurcholis, 2020](#)). This condition causes teachers to implement learning innovations to overcome student learning difficulties during biology learning (Jamaluddin et al., 2020).

To prevent the spread of the coronavirus, state policymakers have decided for schools to implement online learning. The lack of technical knowledge of teachers, students, and parents is one of the problems in applying this online method. Teachers must master technology and must adapt to online learning. Parents with a higher education background will easily apply it. However, parents with low educational backgrounds will surrender to this online learning and ignore their children having learning difficulties or not ([Rafendi et al., 2020](#)).

This study aimed to determine students' online learning difficulties in learning biology during the Covid-19 pandemic. Learning difficulties are defined as learning disabilities ([Ismail, 2016](#)). Learning difficulties can coexist with other disorders, such as sensory disturbances, social and emotional barriers, and are also influenced by the environment. Online communication is a way of communicating where information is delivered and received using the internet ([Abdurrahman, 2003](#)).

The results of observations made at SMA Negeri 1 Silangkitang found that students experienced learning difficulties such as feeling lazy to follow the online learning process because students could not be directly involved, which affected decreasing student learning outcomes. In learning activities, students are usually found lazy to learn. To determine the root of students' laziness, educators must know in detail about students' fundamental problems who do not want to learn. Students who are lazy to learn are not only complained of by educators but also by parents of students ([Maulidia, 2009](#)).

The Covid-19 pandemic that has hit the world has caused learning difficulties for students because of online learning to reduce the coronavirus's transmission process. Online learning is a learning method carried out using the internet network ([Mustafa et al., 2019](#)).

Weak internet networks are one of the obstacles that teachers and students often experience. The results of Rafandi et al. (2020) show that the internet network is one of the

causes of student learning difficulties, especially in rural areas, so that students and teachers find it challenging to access the internet. This is a challenge for teachers to apply this online learning. Teachers have to go the extra mile so that students want to take part in online learning.

During the Covid-19 pandemic, there were differences in the habits of the learning system. The learning system carried out by the teacher is usually face-to-face, turning into online learning. During the Covid-19 pandemic, SMA Negeri 1 Silangkitang conducted online biology lessons. Teachers use Google Meet and Youtube to show biology learning videos and social media in the form of Whatsapp groups to share learning materials. Students experience difficulty learning biology during online learning because of the difficulty of understanding the material presented by the teacher online.

METHOD

This research uses quantitative methods with descriptive data presentation. This research was conducted at SMA Negeri 1 Silangkitang, South Labuhanbatu Regency. The sampling technique used was purposive sampling. The samples of this research were students of class XII and biology teachers of SMA Negeri 1 Silangkitang. The data collection technique was carried out utilizing in-depth interviews and questionnaires. The data analysis technique uses the Miles and Huberman model, which includes three stages: (1) data reduction, namely (a) summarizing data on direct contact with people, events, and situations at the research location, (b) coding, (c) making objective notes, (d)) taking reflective notes, (e) making marginal notes, (f) storing data, (g) creating memos, (h) analyzing between locations, and (i) creating summaries between locations; (2) Display Data by composing narrative text; (3) Verification, namely the stage of concluding. ([Chastanti et al, 2019](#)).

RESULTS AND DISCUSSION

Biology learning during the Covid-19 pandemic at SMA Negeri 1 Silangkitang was based on ten indicators. The description of students' online learning difficulties in the learning process is presented in Figure 1.

Indicators of Preparing Learning Tools, 46.60% of students have prepared learning tools used during the learning process before starting learning. Independent indicators (80%), in the online learning process, students learn independently in doing learning assignments given by the teacher.

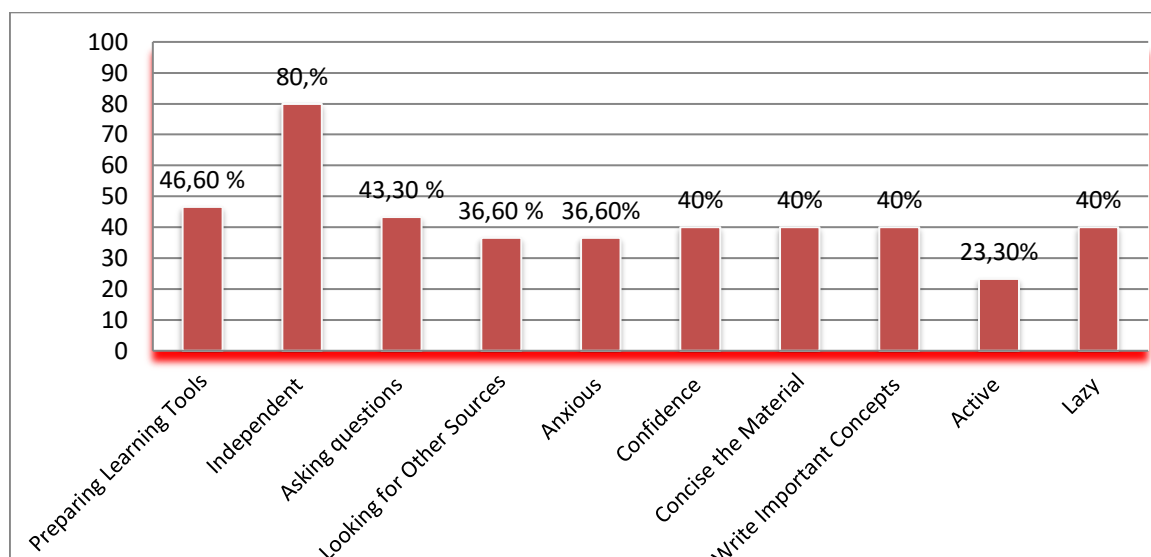


Figure 1. The description of students' online learning difficulties in the learning process

In the indicator of asking, only some students (43.30%) actively asked questions when they did not understand the material. There are as many as 36.60% of students usually looking for learning references from the internet. As many as 36.60%, students feel anxious when they cannot complete the teacher's assignment. Students who feel confident are only 40% because most students do not believe in what they have learned;

As many as 40% students usually do the teacher's assignment by summarizing the material that the teacher has delivered. Writing Important Concepts (40%), in biology learning, students must write important concepts because there are many terms they do not understand in biology learning. Active (23.30%), during the Covid-19 pandemic, many students were inactive because they did not understand online learning. Lazy (40%), students prefer to play online games rather than study or do assignments given by the teacher.

The results showed that biology learning during the pandemic period was not carried out well because students experienced learning difficulties, and most students preferred playing online games or playing with friends rather than having to take part in the online learning process. The results of research conducted by Rafendi et al. (2020). Stating that the obstacles that cause students to experience learning difficulties online are (1) unsupported facilities such as mobile phones; (2) limited internet access; (3) limited cellular data quota; (4) the teacher's explanation is less than optimal; and (5) the role of parents who are less supportive of the learning process.

Students' impact in online learning is that students are not familiar with distance learning because so far, the learning system is carried out

face-to-face. Students are accustomed to interacting with friends and teachers when studying face-to-face at school. With the online learning method, students need time to adapt to new changes that will indirectly affect student learning styles (Dewi, 2020).

Biology subjects are often considered difficult because biology learning is learning in class and learning in the environment, and making observations both in the natural environment and in the laboratory (Subrata, 2018).

The results of interviews with students indicated that students had difficulty learning on genetic material with Monohybrid crosses' theme. Students find it challenging to ask the teacher because the online learning system is implemented to feel lazy to learn biology.

Online learning is learning that utilizes internet networks in the learning process. By setting social distancing, all face-to-face learning activities will be temporarily stopped (Syarifudin, 2020). Online learning is an educational innovation and a challenge to the availability of varied and innovative learning resources (Nakayama and Yamamoto, 2007).

Research on online learning analysis during the Work From Home (WFH) Covid-19 pandemic is a challenge for education in the digital era (Darmalaksana et al, 2020). This phenomenon provides a solution by creating a responsive service concept by Bella et al (2020) at SMPN 5 Kudus to find out learning difficulties online. The results showed that the concept of responsive service could help students overcome learning difficulties by providing individual guidance and collaboration between subject teachers and students.

The interview results showed that the online learning difficulties experienced by students of SMA Negeri 1 Silangkitang made students look for other alternatives, namely by looking for information from other learning sources, namely by using google, the teacher room, and youtube. Students stated that online learning was difficult to understand so that in the end, only the parents learned. Online learning makes students feel bored because they are often interrupted by the internet network.

Students also stated that there were difficulties in receiving and understanding the teacher's material via online media. However, some students were happy with online learning because there were no friends who cheated on answers.

Online learning is learning that is done virtually by using virtual applications. Online learning still has to pay attention to the competencies taught in schools. Online learning is transferring material through the internet media and not only by moving questions through social media applications. Online learning must still be planned, implemented, and evaluated in the same way as learning carried out face-to-face ([Syarifuddin, 2020](#)).

Online learning can make students more independent and less dependent on others. Students will focus on laptop or cellphone screens in completing assignments and online discussions ([Majid, 2011](#)). Online learning has the advantage of building student knowledge and understanding.

The results of student answers related to questions about the effectiveness of online learning obtained different answers. Some students answered that online learning was less effective because it was not guided directly by the class teacher. However, some students answered that online learning was effective because the teacher would send learning materials online.

The use of virtual learning in the distance learning process is believed to provide convenience in learning and make it a means of being able to communicate virtually and avoiding physical contact to prevent transmission of Covid-19 ([Mashuri, 2020](#)). Interviews with students found that the teacher delivered material using video, links from google and gave practice questions every week in meetings.

Student learning activities during the Covid-19 pandemic are still being carried out. The use of technology in the digital era is beneficial in the current situation ([Kosassy, 2020](#)). Teachers and students can access many online platforms and media. Online learning has benefits, namely: (1) increasing learning interactions between students

and teachers; (2) communication can be established anytime and anywhere; (3) students can be reached on a broader scope; (4) facilitate the storage of learning materials ([Suhartono, 2020](#)).

In the interview results regarding the obstacles experienced during online learning, students answered that the problem was an unstable network and students did not understand the lesson, so usually, parents who actively participated in learning to explain it to students. Students' other obstacles are eye pain, boredom, and the internet quota that runs out faster. The thing that makes students bored is that they cannot meet their friends, and if there are questions that are not understood, they cannot be asked to the teacher. Students do not focus on learning and often miss learning materials, and cannot answer questions from the teacher so that when the teacher provides material and assignments, students will not do it.

Internet-based online learning methods and Learning Management systems (LMS) used are Zoom and Google Meet. One of the online lessons that can be done is online classes using computer networks and the internet throughout all learning activities ([Sudirman, 2019](#)). Online learning requires an atmosphere that supports learning at home and must also have an adequate internet connection. To stay in touch, in online learning, students should discuss and ask questions by using the Video Call facility ([Sunendar and Dadan, 2020](#)).

Analysis of Teacher Difficulties in Learning Biology Online

The teacher is asked several questions that are expected to describe the teacher's difficulties when learning online. The teacher said that motivation in learning biology online was classified as low because there were students whose homes were not reached by the internet network. The strategy implemented by the teacher to increase student motivation is to carry out offline learning specifically for students who do not have internet access and smartphones.

Teachers must have ideas that are realized for students' benefit in developing science ([Wicaksono, 2017](#)). During the COVID-19 pandemic, teachers as educators are required to continue to ensure the implementation of education in schools. One of the solutions offered to increase student motivation constrained by the internet network is the offline learning system. The offline learning system is a learning system that requires face-to-face learning. The type of offline activity is watching TVRI as a learning

medium. After watching students collect reports or documents ([Sunendar and Dadan, 2020](#)).

Online learning that is carried out in schools is a new obstacle for teachers. Interviews with biology teachers show that teachers only teach without seeing the students' critical thinking skills improve or not. The teacher only focuses on students with high competence and does not help students with low competency. The teacher stated that the students' ability to use online media was also limited.

Online learning media is support for education, not as a substitute for education. Online media creates a new paradigm, namely the role of teachers who are more facilitators and students as active participants. Teachers are required to create good learning strategies by presenting interesting learning materials ([Argaheni, 2020](#)).

Teachers must be creative during the online learning period if students start to experience boredom during the online learning process ([Anugrahana, 2020](#)). Teachers are also required to be more innovative in using online learning. Teachers must facilitate learning resources to improve critical thinking skills for students who have low competence ([Tjandra, 2020](#)). During online learning, the biology teacher at SMA Negeri 1 Silangkitang also created learning media by making instructional videos using a learning video maker application in the form of Camtasia.

Online learning carried out during the Covid-19 pandemic has the advantage of being more flexible in using time. Learning can be accessed anytime and anywhere. Delivery of information is faster and can reach many students using online media. However, there are also weaknesses in online learning. Namely, students are not actively involved because there are students who live in environments not covered by the internet network. Besides, some students cannot afford smartphones (Hidayat, 2017).

CONCLUSION

The difficulties faced by students in the online learning process are fundamental difficulties that must be faced, including difficulties in the form of internet networks, limited features of online learning applications, difficulties in learning services, and the need for the role of parents during online learning to help guide students in understanding the material provided teacher. The online learning process is considered ineffective because students cannot get knowledge directly from the class teacher and cannot communicate directly with friends at

school. This difficulty should be a concern in preparing and implementing online learning. Most students already understand the reasons for implementing online learning, namely as a precautionary measure to help decide the corona virus's spread. However, most students are not ready and familiar with the implementation of online learning.

REFERENCES

- Abdurrahman. (2003). *Pendidikan Bagi Anak Berkesulitan Belajar*. Jakarta: Rineka Cipta.
- Anugrahana, A. (2020). Hambatan, Solusi, dan Harapan: Pembelajaran Daring Selama Masa Pandemi Covid-19 oleh Guru Sekolah Dasar. *Scholaria: Jurnal Pendidikan dan Kebudayaan*, 10(3), 282-289.
- Argaheni. N. B. (2020). Sistematis Review: Dampak Perkuliahan Daring Saat Pandemi COVID-19 terhadap Mahasiswa Indonesia. *Placentum Jurnal Ilmiah Kesehatan dan Aplikasinya*, 8(2).
- Bella, M. H., Sri, M., Nia I., & Puspo, N. (2020). Konsep Layanan Responsif bagi Siswa yang Mengalami Kesulitan Belajar secara Daring Dimasa Pandemi Covid-19. *Konseling Edukasi: Journal of Guidance and Counseling*, 4(2), 306-322.
- Chastanti, I., Gultom, M. & Sari, N.F. (2019). Analisis Penggunaan Internet Terhadap Karakter Bersahabat/ Komunikatif Pada Pembelajaran Biologi. *Jurnal Pelita Pendidikan*, 7(4), 178-184.
- Darmalaksana, W., Hambali R., Masrur A., & Muchlas. (2020). Analisis Pembelajaran Online Masa WFH Pandemi Covid-19 Sebagai Tantangan Pemimpin Digital Abad 21. *Karya Tulid Ilmiah (KTI) Masa Work From Home (WFH) Covid-19*. Bandung: UIN Sunan Gunung Jati.
- Dewi, W. (2020). Dampak Covid-19 Terhadap Implementasi Pembelajaran Daring di Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 2(1), 55-61.
- Ismail. (2016). Diagnosis Kesulitan Belajar Siswa dalam Pembelajaran Aktif di Sekolah. *Jurnal Edukasi*, 2(1).
- Kosassy, S. O. (2020). Model Pembelajaran Kobeko Berbasis Web Blog (Balada Pendidikan Tinggi di Tengah Kepungan Wabah Covid-19) *JVEIT*, 1(1).
- Majid, A. (2011). *Perencanaan Pembelajaran*. Bandung: Remaja Rosdakarya.

- Mashuri, H. (2020). *Pembelajaran di Masa Covid-19 Work From Home*. Malang: Wineka Media.
- Maulidia, R. (2009). Problem Malas Belajar pada Remaja (Sebuah Analisis Psikologis). *At-Ta'dib*, 4(2).
- Nakayama, M. & Yamamoto, H. (2007). The Impact of Learner Characteristic on Learning Performance in Hybrid Courses among Japanese Students. *Electronic Journal E-Learning*, 5(1).
- Nurcholis. (2020). Dampak Pandemi Novel Corona Virus Disease (Covid-19) Terhadap Psikologi dan Pendidikan serta Kebijakan Pemerintah. *Jurnal Pgsd*, 6(1).
- Subrata, M., Wulan, N. M. A., & Wijayanti, S. (2018). Pemanfaatan Lapangan Rumput sebagai Sumber Belajar pada Materi *Plantae* Peserta Didik Kelas X MIA SMA Negeri 1 Abiansemal Tahun Pelajaran 2015/2016. *Emasains*, 8(1).
- Suhartono. (2020). Analisis Pengaruh Pembelajaran Daring Terhadap Kemampuan Literasi Bahasa Mahasiswa. *Innovative*, 8(1).
- Sunendar., & Dadan. (2020). Kamus Besar Bahasa Indonesia. Jakarta.
- Syarifuddin, A. S. (2020). Implementasi Pembelajaran Daring untuk Meningkatkan Mutu Pendidikan Sebagai Dampak Diterapkannya Social Distancing. *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 5(1).
- Tjandra, D. S. (2020). Implementasi Pembelajaran Pendidikan Agama Kristen di Abad 21. *SIKIP: Jurnal Pendidikan Agama Kristen*, 1(1): 1-10.
- Wicaksono, A. (2019). Mencari Karakter Pendidikan yang Ideal Bagi Indonesia (Dalam Cerita dan Realita dari Masa ke Masa). *Lentera: Jurnal Ilmiah Kependidikan*, 1, 109 – 118.