Analysis of Distance Learning During the Covid-19 Pandemic on Biology Learning at Senior High School of Bogor Regency

Lina Widiastuti[*], Surti Kurniasih, Prasetyorini
Science Education Study Program, Postgraduate - Universitas Pakuan, Bogor
***Corresponding Author. Email: lina.072619007@unpak.ac.id

Abstract: This study aims to analyze the implementation of Distance Learning (PJJ) in biology learning in high school including implementation, obstacles, and results. The method used in this research is descriptive method. The population includes all high school students in the Bogor Regency area for the 2020/2021 academic year and biology teachers in the Bogor Regency area with a sample of 337 students from 10 schools and 60 biology subject teachers. This research data collection technique uses a questionnaire or a questionnaire via google form which is analyzed by describing various research results in the form of percentages. Based on the results of the study, it can be concluded that the implementation of PJJ has been going well. The indicators are the completeness of supporting facilities and infrastructure for PJJ, teacher readiness in implementing PJJ, student participation, student attendance rate, application and learning methods used, achievement of learning objectives, and completeness of student learning outcomes cognitively. Based on these indicators, 70% of students and 55% of teachers think that the implementation of PJJ has been running effectively. Obstacles faced in the implementation of PJJ include the lack of active students in learning, discipline in collecting assignments, poor internet network, lack of internet quota availability, difficulty understanding some materials and too many tasks that must be done by students.

Introduction

Since the Corona virus outbreak entered Indonesia, in early March 2020, public concerns about the spread of this virus have increased. The government in various ways takes steps to prevent the transmission of this virus so that it affects various areas of people's lives, including in the field of education. According to an ABC News report on March 7, 2020, dozens of countries have suspended face-to-face learning in schools due to Covid-19. According to a report from UNESCO, there are 290.5 million students worldwide whose learning activities are disrupted (Purwanto et al., 2020). The impact is that learning is "forced" to be carried out by distance learning (PJJ) or also called online learning which later developed the terms online and BDR (Learning From Home).

On March 24, 2020, the Minister of Education and Culture of the Republic of Indonesia issued Circular Letter No. 4 of 2020 regarding the implementation of education policies during the emergency period for the spread of Covid-19. In the circular it was explained that the learning process was carried out online/remotely at home. Seeing the development of the condition of the spread of the Covid-19 outbreak that continues to increase, PJJ activities will continue in the 2020/2021 school year.

According to Moore et al., (2011), online learning is learning that utilizes the internet network with ease of access, connectivity, more flexibility, and can provide various learning

interactions. Distance learning referred to here is online or online learning, namely learning that uses internet access with various applications used. Internet and ICT-based learning like this allows the learning process between teachers and students who are separated by distance and in different places (Milman, 2015). Online learning requires ICT literacy both teachers and students so that the learning process can be carried out properly and optimally.

The current pandemic conditions have brought major changes to the world of education where online learning or Distance Learning (PJJ) must be implemented. This forces all elements in education, especially students and teachers, to learn to use existing technology so that learning objectives can still be achieved. ICT literacy and skills using ICT are needed for the development of online learning. There are still many obstacles and challenges to be found in this online learning because it is still in the adaptation stage to the current new normal conditions. One of the obstacles faced is the lack of ability of teachers and students to use ICT to support learning. This is in line with the results of research by Dwi et al., (2020) showing that online learning is less effective due to inadequate facilities and infrastructure and lack of mastery of technology. In addition, students think that online learning tends to be monotonous where teachers only provide material that must be studied independently. . According to Abidin et al., (2020), there are still quite a lot of students, teachers and even lecturers who are not yet proficient in online learning, especially those in remote areas.

Previous research on distance learning has been carried out by Abidin et al., (2020) who examined the effectiveness of the implementation of distance learning during the Covid-19 pandemic where the results of this pandemic had a considerable influence on the world of education, due to major changes in learning activities. which is usually face-to-face at school becomes distance learning from home. The facts found in the field, so far the implementation of learning is quite effective, although there are still various obstacles such as problems of teacher-student social interaction and economic problems. This is in accordance with the results of research from Emilia et al., (2021) which states that online learning has been quite effective in terms of increasing understanding of knowledge, improving skills and changing attitudes. In addition, student learning outcomes are also quite good. They are quite satisfied with the facilities provided and the motivation of the teacher. This is likely the longer the implementation of online learning is getting in a better direction. Other research was carried out by Firman & Rahayu (2020), Sadikin & Hamidah (2020) who conducted online learning studies at universities where the results of online learning got a very good response. from students in terms of flexibility of implementation, can foster independent learning and motivate students to be more active in learning. Weaknesses found are the limited interaction between students and lecturers as well as difficulties in understanding the subject matter. The implementation of online learning is quite effective in raising social distancing behavior and reducing crowds so as to prevent the spread of Covid-19. Research results from Indiani regarding online learning in Vocational High Schools show that online learning supports Physical Distancing according to the government's program to stop the spread of Covid-19 (Indiani, 2020). In practice, there are various problems because online learning is not yet used to being used in the learning process and forced conditions without good preparation. However, online learning is the right solution in the current emergency to provide optimal learning and various innovations can be made to make it fun. In accordance with the times in the industrial era 4.0 and training 21st century skills, online learning can be a learning model in the future.

The implementation of PJJ in Bogor Regency varies in conditions, considering that the Bogor Regency area is included in the Regency which has an area in the Province of West

Java. There are urban, transitional, and rural areas where the quality of internet connection in these areas varies. Many senior high schools in Bogor Regency are in remote and rural areas, and there are even schools that are difficult to access by public transportation. The completeness of the supporting facilities and infrastructure of PJJ in each school is also different. There are schools that have complete facilities and infrastructure and there are also schools that are still trying to gradually complete the facilities and infrastructure to support PJJ. The ability of teachers in Bogor Regency SMA is also very varied. In addition, not all schools provide special training to prepare for the implementation of PJJ. In general, all high schools in Bogor Regency are trying their best to organize PJJs that are tailored to students' conditions and school abilities. All the above conditions will affect the implementation and results of the PJJ that takes place in Bogor Regency. The purpose of this study is to analyse the implementation of PJJ in biology learning at the high school level to get an overview of the implementation, problems or obstacles and the results of the implementation of PJJ.

Research Method

This study uses a qualitative descriptive method, namely a study that explores information regarding the implementation of PJJ in several schools. This research is descriptive research that provides an overview of a variable or condition because it does not require control of a treatment and there is no hypothesis testing. Qualitative research does not use statistics, but through data collection, the analysis is then interpreted (Anggito & Setiawan, 2018)

The subjects of this study were students and teachers of biology subjects in Bogor Regency. The data collection technique in this study was by distributing questionnaires via Google Form to students from 10 high school schools in Bogor Regency totalling 337 students and 60 teachers from public and private schools in Bogor Regency who were members of the Bogor Regency Biology MGMP. The data analysis technique was carried out descriptively from the results of the questionnaire or questionnaire responses.

Results and Discussion
Implementation of PJJ

The implementation of PJJ can be seen from the aspect of teacher preparation before teaching, the learning process and assessment or evaluation. In distance learning, teachers are required more to prepare everything before the learning process. Regarding the preparation before PJJ, the results of the distributed questionnaires are presented in Table 1.

Table 1. Things that the Teacher Prepares Before the Implementation of PJJ

No	Prepared Activities	Percentage of Teachers who Implement
1.	Prepare teaching materials	97 %
2.	Create an attendance list	85 %
3.	Prepare pictures/videos related to the material	82 %
4.	Preparing practice questions/quiz	80 %
5.	Prepare room meet/meeting ID/link vicon	67 %

Based on Table 1 above, almost all teachers (97%) prepare teaching materials/materials before they do PJJ. The results of the questionnaire showed that 35% of teachers always made their own teaching materials, 38% answered often and 23% answered sometimes. This shows that the teachers have prepared the material well and are quite

independent in making their own teaching materials so that they are adapted to the needs and character of the students they teach. The use of technology-based learning media is very necessary, especially in PJJ during the Covid-19 pandemic and this is useful for the learning process (Adam & Syastra, 2015) (Miftah, 2013). To make this happen, digital literacy is needed for teachers to prepare interesting PJJs. Increasing digital literacy will certainly have an impact on the quality of the learning carried out (Syahroni et al., 2020). In the implementation of PJJ the teacher must be more creative in how to package teaching materials so that they are more easily understood by students. Agreeing with this, Yantoro et al., (2021) stated that online learning causes teachers to be more creative in packaging learning. The form of creativity can be in the form of preparing a summary of the material, making teaching materials in the form of power point (PPT) and providing learning videos according to the material and making interactive student worksheets. The use of learning videos makes it easier for students to understand the material because it can be studied again by playing it repeatedly (Susiyanti & Nugraheni, 2020). The use of video in PJJ has been widely used by teachers, this is proven by the results of the questionnaires distributed. 78% of teachers answered that they often displayed pictures and videos related to learning when implementing PJJ.

Regarding the activity of checking student attendance at the implementation of PJJ, 85% of teachers make their own attendance list form. Based on the questionnaires distributed, 75% of the teachers created an attendance list form using Google Forms. According to Saktiono (2019), using a google form will make it easier to monitor attendance, can be accessed by a cell phone or laptop and connected to the internet so that data is stored properly in a google sheet. The use of google forms also makes it easier for teachers to set the time to fill out the attendance list by using the form limiter so that students who are late cannot access the attendance list. This is positive to train students' discipline character in following PJJ.

Based on the results of questionnaires distributed to teachers, the learning activities carried out by teachers during the implementation of PJJ were quite varied. What learning activities are carried out by teachers when PJJ is presented in Figure 1.
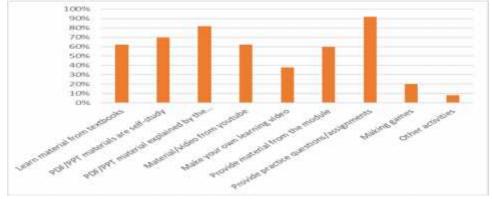

Figure 1. Learning Activities Conducted by Teachers in PJJ

Figure 1 above shows that teachers are more involved in giving practice questions/assignments to students (92%) and providing subject matter in PDF or PPT form which is directly explained by the teacher in a video conference/virtual face-to-face (82%). This is in accordance with the results obtained that most of the teachers (70%) answered that they often did video conferences using the Zoom meeting and Google Meet applications, while the rest answered that they sometimes did video conferences. In practice, the teacher combines several activities, for example making material in PDF or PPT form which is sent

first to Google Classroom and then explained during virtual face-to-face after that giving practice questions or assignments related to the material. This is done to measure students' understanding of the material that has been taught and to condition students to study again or repeat the material. According to the research results of Nurhaerah (2019), giving practice questions or recitations can affect student learning outcomes and help students understand the subject matter. Indirectly students learn through the given task. These results are in line with research from Nurhalizah (2019) where the application of the recitation method can improve student learning outcomes.

The methods most used by teachers in PJJ are the assignment method (95%) and question and answer (83%). The results of research from Setyowati (2015) regarding the effect of the assignment method on student learning outcomes, it was found that there was a significant influence between the assignment method on student learning outcomes. This method is used because the material or learning materials are too much while time is limited. For the learning objectives and targets to be achieved and all materials delivered, this assignment method is very good to be applied in learning. In the implementation of PJJ, learning time is less than normal conditions. Some schools implement an emergency curriculum meaning that there are basic competencies that are not conveyed, but many also apply the 2013 curriculum as usual with the consideration that students receive all the material for the school exams and college entrance selection tests.

Regarding the applications used in PJJ at the high school level, it is very varied and diverse. Many schools use more than one application, they combine applications because learning is generally carried out synchronously and asynchronously. In the use of applications in general, students and teachers already understand the application used. Only 15% stated that they did not understand the PJJ application, moreover 72% of the teachers stated that their school held training on the use of the PJJ application. In addition, during this pandemic, many trainings or workshops are held online regarding the use of various PJJ applications, thus opening opportunities for teachers to learn various PJJ applications. Applications used in schools can be seen in Figure 2.
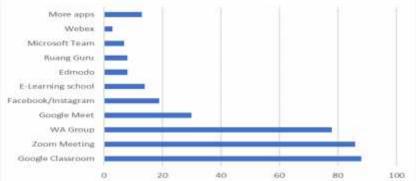

Figure 2. PJJ Applications Used in Senior High Schools in Bogor Regency

Based on Figure 2 above, the application that is widely used is Google Classroom. According to Iftakhar (2016), the advantages of Google Classroom are that it is easy to use, timesaving, cloud-based, flexible, and free. The use of Google classroom in PJJ is very good because it is efficient, effective, and interactive (Nurfalah, 2019). The results of the research from Putri & Dewi (2019) showed that the use of google classroom in learning could improve student learning outcomes, although the increase was not significant. This is what causes the Google Classroom application to be widely used in schools. In addition, the results of research from Manurung et al., (2021) state that google classroom and its impact on student learning outcomes can be observed from material understanding, grades, active questioning, and

discipline so that many schools use it in PJJ. Activities that can be done in Google Classroom include sending assignments and materials to assess assignments. This application is also connected to Gmail, Drive, Youtube and Calendar as well as other facilities provided by Google Classroom that can be used in learning activities (Hammi, 2017). Currently, the Google Classroom application is connected to the Learning ID account from the Ministry of Education and Culture which offers various advantages and conveniences. Generally, Google Classroom is used for asynchronous learning activities.

In Figure 2 above, the second application that is widely used is zoom meeting as an application for synchronous learning activities. According to Haqien & Rahman (2020), the use of zoom meetings is better because there is verbal communication compared to other applications that only communicate in writing. Zoom meetings are media that facilitate video conferences (virtual face-to-face) between teachers and students so that communication is more effective. This is in line with the results of research from Rahayu et al., (2021) that zoom meetings can improve learning outcomes and student activity in Indonesian subjects. The next application that is widely used is the Whatsapp group (WAG) which is well known to the public. Effective use of WAG to inform everything related to learning.

Regarding assessment or evaluation, teachers use Google forms more to carry out assessments. Since the pandemic conditions and the new normal, the use of google forms has increased. This happens because Google Forms is easy to use and is connected to Google Classroom via Google Drive and is free of charge. Students are also familiar with using it. According to Yuwono et al., (2020) the google form application is a practical, simple, fast, and easy application for assessment of learning in the digital era. This application can be set as a quiz if it is used for assessment. Students can view their scores immediately after completing the test and the results can easily be downloaded by the teacher from the response spreadsheet. For schools that have their own e-learning, they usually use the application for assessment, for example using Moodle. For the Bogor Regency area, not many schools have their own e-learning. Another application, Quizizz, has been widely used by teachers in conducting assessments. The use of this application is very interesting because it is set as if they were playing a game with an attractive appearance and the music that accompanies it. In practice, the teacher combines several applications in conducting the assessment so that it is more varied.

Barriers in PJJ

The obstacles faced by teachers in implementing PJJ are quite varied, ranging from the difficulty of students accessing the internet to the obstacles of student delays in collecting assignments. More details about the obstacles or obstacles faced by teachers in PJJ can be seen in Table 2.

Table 2. Obstacles Encountered in the Implementation of PJJ

Obstacles/Constraints faced in PJJ	Percentage
Difficulty accessing the internet for students	48 %
There is no adequate internet quota	35 %
Material that is difficult to understand	27 %
Lack of understanding of the PJJ application	15 %
Lack of understanding of ICT	10 %
Lack of student activity	68 %
Lack of student attendance	38 %
The difficulty of some students in collecting assignments	70 %
Difficulty in preparing PJJ materials	15 %
Hassle in checking student assignments	33 %

Based on Table 2 above, the teacher found more problems in collecting student assignments. Sometimes some students find it difficult to submit assignments on time, even if the teacher does not immediately remind them. Such students do not yet have the awareness to be disciplined in collecting assignments. In addition, there are other problems regarding student activity that is lacking during PJJ, for example when in virtual classroom forums (google classroom). There are types of students who must be given a stimulus first in the form of questions or others to comment on the class forum or even must be rewarded with grades for those who ask. Therefore, a strategy is needed for teachers to create an active classroom atmosphere. Another problem is the internet network that is not good in some student residences, because the Bogor district has a large area and there are many village areas in several sub-districts.

Regarding the ease of internet access at each student's home, 65% of students answered that the quality of the internet network was good, 30% answered less well and 5% answered bad. For teachers, 92% answered that the internet network was good and 8% answered that it was not good. This shows that the problem of poor internet network is experienced by more students than teachers. Difficulties in accessing the internet are experienced by many students who live in remote areas of Bogor regency or rural areas, while for teachers' internet access is very easy because it is facilitated by schools where teachers carry out teaching activities in schools.

The activeness of students in the implementation of PJJ, especially in terms of asking questions about subject matter, still needs to be improved. This is based on student answers where 65% expressed shame to ask questions in the Google Classroom forum or other applications. As many as 80% of students prefer to discuss with their friends about the subject matter than asking the teacher in the forum. This condition should be used by teachers to empower peer tutors or group discussions even though it is done online. For example, by utilizing the breakout room facility in the Zoom meeting application for online group discussions or video calls and Whatsapp groups.

Based on the data from the questionnaire, the most obstacles faced by students in terms of difficulty in accessing the internet due to poor networks, unavailability of internet quota, difficulties in understanding the material, and too many assignments given by the teacher. The problem of difficulty in accessing the internet is naturally experienced by schools in Bogor Regency where many sub-districts are still villages and have difficulty signalling. The problem of quotas is currently quite resolved with the help of the learning quota from the Ministry of Education and Culture, it's just that there are still some students who have not received this assistance. Difficulty understanding the material is a natural problem experienced by students, this can be circumvented by simplifying the material in a form that is easily accepted by students and conveying essential material to students. Video conference or virtual face-to-face can also be a solution to ask questions and discuss directly about the subject matter. Regarding the problem of assignments that are too widely accepted by students, this is in accordance with the method that is widely used by teachers in PJJ, namely the assignment method and activities that are mostly done by teachers in PJJ, namely practice questions or assignments.

PJJ Results

Regarding student learning achievement in PJJ, 45% of teachers stated that it was increasing, 38% said it was constant and 17% said it was decreasing. This is different from the results of the questionnaire from students who stated that 30% of their achievements had increased, 50% said they were constant and 21% said they had decreased. Many factors influence this, especially the internal factors of students. They must be independent in

learning and good at managing time. There are students who succeed in instilling learning independence during PJJ but there are also students who become lazy because they feel they are not directly supervised by the teacher. As much as 73.3% of teachers stated that students' learning independence was built on the implementation of PJJ. They are indirectly forced to be independent in learning because of this pandemic condition. Based on the results of research from Rijal & Bachtiar (2015) stated that there is a positive relationship between learning independence and student achievement. The learning outcomes obtained are in the high category because of high learning independence. In addition, there is a link between learning independence and problem-solving abilities, where between the two is directly proportional (Sundayana, 2018).

The success of students in participating in PJJ can be seen from the ability to understand the subject matter and the achievement of learning objectives listed in the lesson plans. An illustration of the percentage of student success in understanding the material and the achievement of learning objectives can be seen in Figure 3.
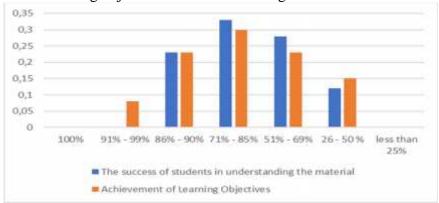

Figure 3. The percentage of student success in understanding the material and the achievement of learning objectives

Based on Figure 3 above, the success of students in understanding the material and the achievement of learning objectives are generally achieved at a percentage of 71%-85%. Based on the percentage level of achievement, students' understanding of the material and the achievement of learning objectives is quite good. This is supported by the data from the questionnaires distributed to students that 83% of them stated that they received completeness scores from the results of daily assessments or other assessments.

Conclusion
Based on the results of the study, it can be concluded that the implementation of distance learning during the Covid-19 pandemic at the Bogor Regency High School level has been going well. The indicators are the completeness of the facilities and infrastructure to support the PJJ, the readiness of teachers to implement the PJJ, the participation of students, the level of student attendance, the application and learning methods used, the achievement of learning objectives, and the completeness of student learning outcomes cognitively. Several obstacles are still found, namely the difficulty of internet access, the availability of quotas, student participation which still needs to be improved. The results of the PJJ are quite good in terms of students' understanding of the material and the achievement of learning objectives.

Recommendation
Based on the results of the research that has been described, recommendation can be given to the school to increase teacher training or debriefing regarding IT or ICT-based learning so

that the implementation of PJJ is more varied and interesting. In addition, for teachers, continue to study and learn to improve their competence so that they can organize teaching and learning activities that are more meaningful, interesting, and varied. For other researchers to be able to follow up on the results of this study about the effect of PJJ on the competencies of students. For example, measuring thinking skills, ICT skills, problem solving abilities and others. In addition, the next research direction can be carried out regarding the application of blended learning after the implementation of face-to-face learning is carried out. Suggestions that can be given

References

Adam, S., & Syastra, M. T. (2015). Pemanfaatan Media Pembelajaran Berbasis Teknologi Informasi Bagi Siswa Kelas X SMA Ananda Batam. *CBIS Journal*, *3*(2), 78–90.

Anggito, A., & Setiawan, J. (2018). *Metodologi Penelitian Kualitatif*. CV.Jejak.

Dwi, C. B., Amelia, A., Hasanah, U., & Putra, A. M. (2020). Analisis Keefektifan Pembelajaran Online di Masa Pandemi Covid-19. *Mahaguru, Jurnal Pendidikan Guru Sekolah Dasar*, 28–37.

Emilia, J., Ismanto, B., & Luhsasi, D. (2021). Evaluasi Implementasi Pembelajaran Daring pada Pembelajaran Akuntansi Perusahaan Dagang di Masa Pandemi Covid-19. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 7*(3), 663-671. doi:https://doi.org/10.33394/jk.v7i3.3849

Firman, F., & Rahayu, S. (2020). Pembelajaran Online di Tengah Pandemi Covid-19. *Indonesian Journal of Educational Science (IJES)*, *2*(2), 81–89. https://doi.org/10.31605/ijes.v2i2.659

Hammi, Z. (2017). "Implementasi Google Classroom Pada Kelas Xi Ipa Man 2 Kudus." *Skripsi*, 1–58. https://lib.unnes.ac.id/31039/

Haqien, D., & Rahman, A. A. (2020). Pemanfaatan Zoom Meeting untuk Proses Pembelajaran pada Masa Pandemi Covid-19. *SAP (Susunan Artikel Pendidikan)*, *5*(1). https://doi.org/10.30998/sap.v5i1.6511

Iftakhar, S. (2016). Google Classroom : What Works and How? *Journal of Education and Social Science*, *2*(3), 12–18.

Indiani, B. (2020). Mengoptimalkan proses pembelajaran dengan media daring pada masa pandemi covid-19. *Sipatokkong BPSDM Sulawesi Selatan*, *1*(3), 227–232.

Manurung, R., Sadjiarto, A., & Sitorus, D. (2021). Aplikasi Google Classroom sebagai Media Pembelajaran Online dan Dampaknya Terhadap Keaktifan Belajar Siswa pada Masa Pandemi Covid-19. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 7*(3), 729-739. doi:https://doi.org/10.33394/jk.v7i3.3853

Miftah, M. (2013). Fungsi dan Peran Media PembelajaranSebagai Upaya Peningkatan Kemampuan Belajar Siswa. *Kwangsan*, *1*(2), 95–105.

Milman, N. . (2015). Distance Education. *International Encyclopedia of The Social & Behavioral Sciences : Second Education*.

Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-Learning, online learning, and distance learning environments: Are they the same? *Internet and Higher Education*, *14*(2), 129–135. https://doi.org/10.1016/j.iheduc.2010.10.001

Nurfalah, E. (2019). Optimalisasi E-Learning Berbasis Virtual Class dengan Google Classroom Sebagai Media Pembelajaran Biologi. *Physics Education Research Journal*, *1*(1), 46–55.

Nurhaerah. (2019). Pengaruh Pemberian Latihan (Resitasi) di Luar Jam Pembelajaran Terhadap Hasil Belajar PAI pada Peserta Didik di SMAN 2 Gowa Kabupaten Gowa. *Skripsi*.

Nurhalizah, T. (2019). Pengaruh Metode Resitasi Pada Mata Pelajaran Pendidikan Agama Islam Terhadap Hasil Belajar Peserta Didik Di Smp Negeri 43 Bulukumba. *Skripsi*, 76.

Purwanto, A., Pramono, R., Asbari, M., Santoso, P. B., Wijayanti, L. M., Choi, C. H., & Putri, R. S. (2020). Studi Eksploratif Dampak Pandemi COVID-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 1–12. https://ummaspul.e-journal.id/Edupsycouns/article/view/397

Putri, G. K., & Dewi, S. A. Y. (2019). Pengaruh Model Pembelajaran Jarak Jauh Berbasis Google Classroom Effect Of Google Classroom-Based Distance Learning Model. *Al-Fikrah*, 2(1), 60–79.

Rahayu B, S., Djumingin, S., & Munirah, M. (2021). Efek Media Zoom Cloud Meeting Terhadap Keaktifan dan Hasil Belajar Bahasa Indonesia Siswa di Masa Pandemi Covid-19. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 7*(3), 760-766. doi:https://doi.org/10.33394/jk.v7i3.3835

Rijal, S., & Bachtiar, S. (2015). Hubungan antara Sikap, Kemandirian Belajar, dan Gaya Belajar dengan Hasil Belajar Kognitif Siswa. *Jurnal Bioedukatika*, 3(2), 15. https://doi.org/10.26555/bioedukatika.v3i2.4149

Sadikin, A., & Hamidah, A. (2020). Pembelajaran Daring di Tengah Wabah Covid-19. *Biodik*, 6(2), 109–119. https://doi.org/10.22437/bio.v6i2.9759

Saktiono, A. M. (2019). Penerapan Google Form Untuk Evaluasi Kehadiran Perkuliahan Taruna-Taruni Teknika PDP UHT. *Jurnal Aplikasi Pelayaran Dan Kepelabuhanan*, 9(2), 113. https://doi.org/10.30649/jurapk.v9i2.70

Setyowati, L. (2015). Pengaruh Metode Pembelajaran Penugasan dan Peran Orang Tua Terhadap Hasil Belajar Bahasa Inggris. *Jurnal Ilmiah Bahasa Dan Seni*, 07 No 3, 227–236.

Sundayana, R. (2018). Kaitan antara Gaya Belajar, Kemandirian Belajar, dan Kemampuan Pemecahan Masalah Siswa SMP dalam Pelajaran Matematika. *Mosharafa: Jurnal Pendidikan Matematika*, 5(2), 75–84. https://doi.org/10.31980/mosharafa.v5i2.262

Susiyanti, E., & Nugraheni, N. (2020). Penerapan Model Pembelajaran Daring Dengan Bantuan Video Pembelajaran Pada Masa Pandemi Covid-19. *Prosiding Webinar Nasional IAHN-TP Palangka Raya*, 15–30.

Syahroni, M., Dianastit, F. E., & Firmandani.Fifit. (2020). Pelatihan Media PembelajaranBerbasis Teknologi Informasi untuk Meningkatkan Keterampilan Guru dalam Pembelajaran Jarak Jauh. *Internatinoal Journal Of Community Service Learning*, 4(3), 170–178.

Yantoro, Y., Hariandi, A., Mawahdah, Z., & Muspawi, M. (2021). *Inovasi guru dalam pembelajaran di era pandemi COVID-19*. 7(1), 8–15.

Yuwono, M. R., Aribowo, E. K., & Firmansah, F. (2020). Sebagai Alternatif Penilaian Pembelajaran Di Era Digital. *Jurnal Pengabdian Masyarakat*, 3(3), 49–61.