



Analysis of the Use of Online Learning Media on Students' Achieved Learning Outcomes During the COVID-19 pandemic at SMP PGRI 363 Pondok Petir

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Abstract:

This research analyses the use of online learning media on the students' achieved learning outcomes during the COVID-19 pandemic for 8th-grade students at PGRI 363 Pondok Petir. This research applies the descriptive method, which describes and interprets objects as what they are. The data in this research were collected by using observation, interview, and document. The findings of this research show that Google Classroom was used for online media learning for 8th-grade students at SMP PGRI 363. Using Google Classroom resulted in decreased and increased student learning outcomes. The outcome decreased in learning materials; not all students could absorb them. However, there was increasing skill. There is an increase in the skill aspect related to students' skills in using technology in the field of learning, namely Google Classroom and according to information from teachers, it is stated that students have become more responsible for their learning, where students try to complete the tasks given even without direct supervision from the teacher in class. The results of teacher discussions with student parents during the learning review process using Google Classroom also show that students are becoming increasingly trained to be more independent in managing their learning at home.

Keywords: Learning Outcomes; Online Learning Media; Pandemic

Introduction

COVID-19 hit the entire world, including Indonesia. According to the most updated data from the World Health Organization on April 24th 2020, 213 countries have been infected by COVID-19. 2631839 of them were confirmed positive, and 182100 dead. COVID-19 is an infectious disease. This means it can spread from someone to another both directly and indirectly. This disease attacks the respiratory system, such as the nose, throat, and lungs. Complicated treatment, non-existing vaccines and medicine, and limited personal protective equipment (PPE) for healthcare

workers encouraged the government to issue strict policies to terminate the spread of COVID-19. This is known as physical distancing. However, policy on physical distancing can slow down many aspects of life, such as the economy, society, and education for certain. The government decided to issue school holidays and moved the learning-teaching process from school to home by Work From Home. These decisions were worrisome for many parties.

Online learning will be effective if it meets the learning essential components, which are discursive, adaptive, interactive, and reflective. These elements work best if integrated with the learning environment or if it meets the digital learning ecosystem. It accommodates students' learning styles, flexibility, and experience, which later brings positive feelings (Oktavian dan Riantina, 2020).

The Internet provides many excellences. It creates a world without borders. Without physical movement, someone can travel the world, read various books, and gain updated news. 'Easy' is one significant benefit of the Internet. The word 'easy' can represent all the Internet has for the world. Everything people do with the Internet is practical, easy to use and apply. As long as there is an internet connection, any information can be accessed within seconds.

According to Sanjaya (in Haryono, 2015: 47), learning media refers to tools and materials used to facilitate and achieve the materials in the learning-teaching process. Meanwhile, Hujair AH Sanaky (2013:4) states that learning media is the means for education, which can be employed as the learning process to enhance the effectiveness and efficiency of achieving teaching purposes.

The existence of this pandemic has had an impact felt by most teachers and students when teachers and students have not been able to fully implement how learning will be carried out in total using online technology (on the network). Older teachers also feel this because they must learn how to teach material online. In online learning, people are required to use learning media that students can access to support learning. So, this research is important to determine teachers' use of learning media in online learning.

Based on the initial observation at SMP PGRI 363 Pondok Petir, it was found that Online Learning at the school was not maximally conducted. Students' participation in online learning, especially, was still low. This brought out the low learning outcomes for the students. Still, this school seemed to need learning media, which is appropriate in a pandemic situation. This appropriate media is going to support the learning process.

As technology becomes more advanced, it is essential to use it for SMP PGRI 363 Pondok Petir students during the pandemic. This is to avoid the spread of Covid-19, which cannot be well handled yet.

In this study, the researchers observe that technology, especially online learning media and other digital sources, should be employed to achieve students' maximum learning outcomes.

According to Briggs (in Indriana, 2011: 14), learning media are physical means which are used to send messages to the students in the forms of books, movies, video records, and so on. Learning materials are messages that require media so they can be delivered. Therefore, the tools to send the messages are called learning media. Gagne (in Indriana, 2011: 14) states that learning media embody various components in the student ecosystem that can stimulate students to learn. Based on Gagne's opinion, students need to be stimulated in learning so they can learn. In this case, stimulus and motivation come in from various learning media.

Learning media for online learning can be applied using an internet network. This aligns with Ahmad's statement (2010: 1-2) that the Internet is recognized as an infinite network of information, communication, investigation, and sources. These all can be employed to help students to make a thesis, project, etc. The Internet is a tool to gain information on a global scale. Nowadays, students can access more information than in the books. They look for information by accessing the websites all over the world. The Internet for education is really useful for learning and teaching at school. The Internet can help students to complete their knowledge and teachers to find the appropriate and innovative learning materials. Students can find anything online, from the courses to general knowledge. Meanwhile, teachers can find information from other than books that can be used to teach the students (Supriyanto, 2007:2). Today, teachers are required to possess supporting skills in technology, especially in the Internet. This is because they are more capable of using the Internet. This enables them to find more useful non-book information for online learning.

From the online learning media, students' learning outcomes and learning standards are expected to be achieved maximally. Nawawi (in Susanto 2015: 5) states that learning outcome is defined as the degree of success of a student in learning the school materials, and this degree is asserted in scores gained from the tests on certain courses. Still, Dimiyati and Mudjino (2013: 3) mention that learning outcome results from learning-teaching interaction. From the teacher's side, the act of teaching ends with an evaluation on the learning outcome. Meanwhile, from the student side, the learning outcome is the final and peak of the learning process.

In line with the above ideas, Susanto (2015: 5) states that the educator's assessment of learning outcome serves the function of monitoring learning progress, learning outcome, and detecting what are needed to improve learning outcome continuously. The achieved learning outcome in online learning reflects how successful a learning process in pandemic time in every educational unit is.

One of the steps that teachers must pay attention to in obtaining high student learning outcomes is choosing the appropriate learning media to use. So that, learning media is one of the factors that influences student learning outcomes, as the results of research conducted by Pransisca & Rahmatin (2020) also show that the learning model assisted by e-learning media in terms of learning interest indirectly has a positive influence on learning outcomes. Other research was also mentioned by (Rahmatia et al., 2017) stating that e-learning media influences learning outcomes.

With increasingly advanced technological developments, it is necessary to use technology that can be used wisely, especially for students at SMP PGRI 363 Pondok Petir to avoid transmission of the coronavirus 19, which has not been handled properly. In this research, researchers see that the level of use of technology, especially the use of online learning media and other digital learning resources, can be used properly to improve maximum student learning outcomes. For this reason, researchers are interested in researching "Analysis of the use of online learning media on student learning outcomes during the Covid 19 pandemic at SMP PGRI 363 Pondok Petir".

Literature Review

Online Learning Media

Media refers to all forms of intermediaries used by people to deliver or spread ideas, concepts, or opinions, so these delivered ideas or concepts reach their intended recipients. Media are various components in the student ecosystem which can stimulate students to learn.

According to Briggs (in Indriana, 2011: 14), learning media are physical means used to deliver learning materials in the forms of books, films, video recordings, etc. Learning materials are messages that require media to deliver them. Therefore, the means used to deliver these messages are called learning media. Next, Gagne (in Indriana, 2011: 14) states that learning media embody various components in the student ecosystem that can stimulate learning. From this Gagne's idea, it can be said that students need stimulus and motivation to learn. In this case, the stimulus and motivation are in the form of various learning media.

Arnesti, N., & Hamid, A. (2015) stated that online learning media can be interpreted as media that is equipped with a controller that can be operated by the user, so that the user can control and access what the user needs. The choice of online learning media is very diverse, ranging from just sending messages (chatting) to media that can display videos or conduct video conferences. All online class platforms offer various interesting features and are able to facilitate online learning (Hidayat & Noeraida, 2020). Online learning media that can be used currently are through the WhatsApp application, e-learning,

WhatsApp group, google classroom, virtual class, email, telegram, Google Form, zoom, Meet, Webex Meet and others (Indiani, 2020).

The results of research conducted by Denissa Alfiany Luhulima et al in 2016 found that learning media using video is very helpful in the learning process both in formal education and non-formal education. Generation Z children, namely the generation born in an era that is sophisticated in technology, so the learning styles and media used in learning are very general and visual (Monica, J., & Fitriawati, D. 2020).

Internet

As Ahmad (2010: 1-2) states, the Internet is recognized as an infinite network of information, communication, investigation, and sources which can be utilized to help students to make a thesis, project, etc. The Internet plays a role as a tool to deliver information in a global scale. Today, students can gain much more information than what they can gain from books. This is done by searching and accessing all websites in the world.

In Indonesia, the internet network begins to develop in 1983 at Universitas Indonesia. It was named UINet and developed by Doctor Joseph Luhukay, who had just graduated his Ph.D. from America. This network was developed for four years. In the same year, Luhukay also developed University Network (Uninet) at Ministry of Education and Culture, who had the biggest computer networks that covered Universitas Indonesia, Institut Teknologi Bandung, Institut Pertanian Bogor, Universitas Gadjah Mada, Institut Teknologi Surabaya, Universitas Hasanudin and Directorate General of Higher Education (Oetomo, 2002:52).

Dharma (2015: 2) states that Internet stands for interconnected networking, which is a set of interconnected computers. Internet is defined as a wide and global computer network, which connects computer users in one country to users in other countries worldwide. In this computer network, there are many information sources, from static ones to dynamic and interactive ones. Still (Radityaningrum & Restianti, 2017) mentions that the Internet is a set of wide computer networks, either small or big, which are interconnected using telecommunication networks that are available in all over the world.

Distance learning

Distance learning is an instructional delivery that does not oblige the students to present in the same place with the teacher physically. According to Ibrahim (2005: 5), people have known distance learning since 1870s. Distance learning means teaching the students in a separate place with the teacher, and the learning sources are the Internet, and it goes online within the assistance of information and

communication technology and sophisticated media. This aligns with the Law of 2003 No. 20 Article 1 Paragraph 15. It states, "Online learning is the education whose students and teachers are in separate places, and its learning utilizes various learning sources within the technology of information, communication, and other media".

Warsita (2007: 9) delineates the distinctive features of distance learning, encompassing several key aspects. Firstly, the educational process involves a sustained separation between teachers and students throughout the entirety of the program. Secondly, students are physically situated in disparate locations from each other during the educational program. Thirdly, the entire process is facilitated by an educational institution responsible for managing the program. Moreover, distance learning relies on highly mechanized communication methods for disseminating learning materials. Lastly, it emphasizes two-way communication, allowing students to initiate dialogue, inquire, and engage in the processing of information.

Rusman (2011:351) highlights the various advantages and disadvantages associated with distance learning. On the positive side, distance learning offers several benefits. Firstly, it incorporates e-moderating, a facilitative tool that enables seamless communication between teachers and students through the Internet, overcoming limitations of distance, place, and time. Secondly, students enjoy the flexibility of accessing learning materials at their convenience, allowing for learning or reviewing whenever and wherever necessary. Additionally, if students require supplementary information related to their coursework, they can readily access it online. Furthermore, the Internet serves as a platform for discussions between teachers and students, accommodating numerous participants and thereby fostering an environment where knowledge and insights are enriched. Lastly, distance learning places a significant emphasis on students, making them the focal point of the learning-teaching process as they actively engage.

However, despite its advantages, distance learning is not without its drawbacks, as outlined by Rusman (2011:352). Firstly, one significant disadvantage is the lack of interaction between teachers and students, as well as among students themselves. This absence of interaction can impede the establishment of values in the learning process. Secondly, distance learning has a tendency to overlook both academic and social aspects, placing more emphasis on commercial or business development. Thirdly, there is a frequent occurrence of mismanagement in delivering modules to students in remote areas, disrupting the scheduled learning activities. This logistical issue becomes a hindrance to effective learning. Fourthly, students enrolled in distance learning programs may face a motivational deficit, leading to a higher likelihood of academic failure. Lastly, due to the potential large number of students involved, distance

learning requires robust administrative support to ensure smooth operations and effective service delivery. Independent learning for self-improvement.

Student Learning Outcomes

Learning outcomes refer to a student's ability or achievement achieved through the learning process. Sudjana (2011: 22) states that learning outcomes are the student's ability after the student receives or experiences the learning. Learning outcomes become evidence that someone has learned. This can be observed from the student's behavior, from not to know to have known, from not to understanding to have understood (Hamalik 2014: 30).

Still, according to Susanto (2015: 5) learning outcome is the ability a student receives after learning activities. This is because learning means a process in which someone tries to receive a permanent behaviour change. In learning or instructional activities, the teacher is usually set the learning purposes. Successful students belong to those who successfully achieve the learning or instructional purposes.

Nawawi (in Susanto, 2015: 5) states that learning outcome is defined as the degree of success of a student in learning the materials at school, and this degree is asserted in score gained from the tests on certain courses. Still, according to Dimiyati and Mudjino (2013: 3), learning outcome is the result of learning-teaching interaction. From the teacher side, the act of teaching is ended with an evaluation on learning outcome. Meanwhile, from the student side, learning outcome is the final and peak of the learning process.

According to Susanto (2015: 5) the Assessment of Learning Outcomes by the educator serves the function of monitoring learning progress, monitoring learning outcomes, and detecting what are needed to improve learning outcomes continuously. The achieved learning outcome in online learning reflects how successful a learning process in pandemic time in every educational unit is. The Assessment of Learning Outcome by Educator serves distinct functions, encompassing both formative and summative assessments. Formative assessment aims at addressing deficiencies in students' attitudes, knowledge, and skills in alignment with the principles of the Curriculum 2013. This approach is designed to ensure that students not only acquire knowledge but also develop capabilities and a genuine desire to learn. The insights gained from reviewing students' weaknesses through formative assessment are utilized for remedial learning, refining the Learning Implementation Plan (LIP), and enhancing the learning process. These improvements contribute to the teachers' development strategies for subsequent meetings. On the other hand, summative assessment is employed to gauge a student's overall learning success at the conclusion of a semester, year, or a specific educational unit period. The outcomes of this evaluation play a pivotal role in

providing assessments for student reports, determining grade promotion, and evaluating the overall success of the educational unit.

Research Methodology

Research Design

This research applies descriptive qualitative. Sugiyono (2014: 43) states that in qualitative research, the data are gained from various sources using data collection techniques such as observation, interviews, and documents. These data are continuously collected until the collection reaches its saturation point. This research was conducted at SMP PGRI 363 Pondok, Kecamatan Bojongsari, City of Depok, West Java.

Research Subject and Instruments

Informants are the people who can provide major information required for research (Andi Prastowo, 2012). These people are determined purposively, which means they are considered based for certain purposes. In this research, the informants are the principal, the Social Science teacher, the PIC for curriculum, and the student representation. These informants were determined based on purposive sampling, which is taking data under certain considerations. The instrument is the researcher in qualitative research (Sugiyono, 2015). A qualitative researcher is a human instrument whose functions are to set the research focus, choose the instrument as data source, collect data, assess data quality, analyse data, interpret data, and draw conclusions based on all of these data.

Data Collection and Analysis Techniques

The researchers interviewed the informants. Previously, they were divided into two; key informant and informant. Key informant was the school principal who also taught Social Science at SMP PGRI 363 Pondok Petir. Interview with key informant was followed by interviews with PIC of Curriculum and student representation on how the online learning went at their school. The guidelines to conduct this research were based on the questions compiled by the researchers previously or before the interview was conducted. Therefore, the interviews could go well and the data required finally could solve the research questions. The techniques to collect data in this research were observation, interview, and document.

The data in this research were analyzed using descriptive qualitative method. Sugiyono (2014: 43) states that in qualitative research, the data are attained from various sources using data collection techniques such as observation, interview, and document. They are continuously conducted until the data collected reach their saturation point. These data were analyzed descriptively, so how the use of Internet

affected the learning outcomes of Social Science course for 8th grade students at SMP PGRI 363 Pondok Petir could be found out.

There were some steps to analyze data in this research. First, data collection means collecting data from research location by observation, interview, and document. Before these data were collected, the appropriate strategy to determine and to investigate the data had been determined. Second, the results of interviews with the economic teacher were analyzed descriptively. Finally research conclusions, which were how internet media was used and how the 8th grade students' achievements at SMP PGRI 363 Pondok Petir were, were drawn.

Results and Discussions

This research focuses on the use of online learning media in COVID-19 pandemic time and on the students' achieved learning outcomes. Researchers conducted observation, interviews, and documentation to gain information and data from the research sources.

Findings on Observation

In the COVID-19 pandemic era, schools implemented online learning at home to avoid the coronavirus spread. The learning conducted was completely different from pre-pandemic era in which students can learn at schools and teacher can directly deliver the learning materials for them. Therefore, schools changed offline or in-class learning into online or at-home learning.

The homeroom teacher of 8th grade students of SMP PGRI 363 Pondok Petir stated:

"The learning implemented during pandemic was Google Classroom. The communication went using this media. Teacher provided materials or gave assignment by Google Classroom in form of text, video, or link. When needed, teacher visited students' houses to hand them the questions or learning materials if they did not have laptop or smartphone." (Direct observation on April 8th, 2021 at 10.30 am)

Findings on Interviews

Interviews were conducted gradually. There were 3 informants involved: Agus Santoso (A.S) as the key informants, Elsy Rahmawati (E.R) as the informant 1, and Inah as informant 2.

Related to online learning media used during COVID-19 by the students at SMP 363 PGR Pondok Petir, Agus Santoso explained:

"We signed up for a new media for learning, which is Google Classroom. This was used to send assignments for the students. In online learning, teachers send the learning materials, which were photos, videos, or student worksheet to the students. Online learning was conducted from Monday to Friday."

Meanwhile, the assignments given should be submitted offline at school.” (Interview with A.S., April 23th, 2021).

“Online learning was conducted through Google Classroom application. Meanwhile, daily test was conducted by Google Form. These media were used when it was possible to have learning online. When some students could not participate online, teachers visited their houses and gave them assignments once a week. Only 80% students were joining online learning because there were some barriers. Some students could only join the offline learning because they could not access the application.” (Interview with A.S., April 23rd, 2021)

There were supporting and barrier factors in online learning. Below is the explanation:

“Available budget for teachers such as internet quota to deliver the assignment for the students and Google Form links provided by school was a supporting factor. Meanwhile, the service or signal was the barrier factor. This was because many students live in villages. Not everyone of them could reach the internet service to access Google Classroom and Google Form. Some students also only gave little responses and felt bored. These were also the barriers.” (Interview with A.S., April 23rd, 2021)

The use of media for online learning is explained as follows:

“The teachers used media with Internet. They utilized video to explain the materials, to create questions and quiz. They also rewarded the students who consistently did the assignments and who were always on time in sending their assignments.” (Interview with A.S., April 23rd, 2021).

The average achievement of 8th grade students in online learning is explained as follows:

“We didn’t have to reach all the targets in online learning. This was because only 80% of the students use it. This means not all of them use online. Some of them had to do the assignment offline. Teachers had to visit their houses respectively. This was because they did not have a smartphone or Google Classroom application, nor were it hard to reach the internet service.” (Interview with Inah, April 23rd, 2021)

Online learning outcomes of 8th grade students at SMP PGRI 363 Pondok Petir during COVID-19 pandemic is explained as follows:

“The learning outcomes of 8th grade students decreased in learning materials. This was because not all the materials were understood by the students. In term of skills, learning outcomes such as students’ attitude at home, increased. They also explored knowledge at home even though they do not belong to the materials discussed. However, students can learn more to deepen their knowledge and talent.” (Interview with E.R., April 23rd, 2021).

DISCUSSION

The Use of Online Learning Media for 8th Grade Students at SMP PGRI 363 Pondok Petir During Pandemic

Based on the observation and interviews on online learning during COVID-19 pandemic, it can be explained that the teachers for 8th grade students have implemented online learning or at-home learning. This was done to prevent the spread of coronavirus. This can be proven as follows:

“Online learning was conducted using Google Classroom application. Daily tests were provided using Google Form. These media were used for online learning. If students could not reach the online learning, teacher would visit their houses and hand the assignment once a week. Only 80% students were using online learning. This was because there were also barriers in online learning. Therefore, some students used online and some others used offline. The students who could not access the application would use offline learning.” (Interview with A.S., April 23rd, 2021).

From the above statements it can be concluded that online learning was conducted using Google Classroom when it came to learning materials and Google Form when it came to assignments. The interviews on April 23rd, 2021 pointed out this statement. Daily tests were done by handwriting on a book. When the students finished, their works were not submitted right away. However, all the assignments were submitted offline directly to the teachers every Saturday. On the contrary, not all students were able to access online learning. Only 80% of them could use it. This was because there were barriers in accessing materials and assignments. The students who could not go with the online learning were still able to learn by offline learning. The above statement is emphasized by the online learning media used: Google Classroom. Here it is:

“Learning media utilized in pandemic was Google Classroom. Teachers provided this application's materials in text, video, or links. Meanwhile, teachers would visit the students who did not have smartphone or Google Classroom application to hand the materials or questions needed.” (Direct observation on April 8th, 2021, at 10:30 am)

The above statement indicates that online learning was utilized by 8th grade students in learning-teaching activities during COVID-19 pandemic. This statement is confirmed by data gained from the direct observation on April 8th, 2021 at 10.30am. Online learning was implemented, so the learning activities could keep going, even though the students had to do it from home. Online learning was conducted using Google Classroom. The teachers sent the learning materials in forms of text, video or link by Google Classroom.

Learning Outcomes Achieved by 8th Grade Students at SMP PGRI 363 Pondok Petir during COVID-19 pandemic

Learning outcomes are achieved after the students join the learning. Based on the interview on 8th grade students' learning outcomes during COVID-19 pandemic, it can be explained that not all learning outcomes could be achieved. This is proven by this interview:

"Online learning should not be completely achieved. This was because only 80% students using online. This means some of them did not. They still learnt offline. Teachers visit them in their houses respectively. This is because they did not have either smartphone or Google Classroom. They neither could reach internet service." (Interview with Inah, April 23rd, 2021)

The above statements indicate that not all online learning outcomes should be achieved. This was because there were some barriers in online activities such as the unavailable facilities such as smartphone and Google Classroom application, and the signal was difficult to reach. This is confirmed by the interviews on April 23rd, 2021. Not all students used online. There were only 80% of them. Some of them learnt offline because of these barriers. For the students who studied offline, the teachers would visit their houses to deliver the materials and assignments. They visit them once a week. Still, the assignment given applied for one week as well.

The statement was supported by data and interviews conducted on April 23rd, 2021. The data and interviews explain that the teacher cannot measure students' understanding because the teachers did not directly monitor them. Their scores measured their understanding. When they had good scores, they were considered understood the materials. That students had received the materials was important for teachers.

Below is the interview on online learning outcomes of 8th grade students during COVID-19 pandemic. The outcomes indicate both decrease and increase:

"Online learning outcomes of 8th grade students during pandemic shows a decrease in the learning materials. However, there was an increase in their skills, their attitude, and their willingness to explore knowledge others than learning materials at home. Being at home, students were able to study more and deepen their talents." (Interview with E.R., April 23rd, 2021).

Based on the statement above which is supported by interview data on April 23rd, 2021, it explains that from online learning activities the learning outcomes of class 8th students have decreased as well as increased. Students experience a decline in terms of material, not all of the lesson material presented can be absorbed by students. This is proven by data on learning outcomes from one of the teachers teaching in class VIII obtained during direct observation at the school, showing that only 35% of students achieved the KKM in the subjects taught by the teacher during online learning using Google Classroom. However,

on the other hand, there is an increase in the skill aspect related to students' skills in using technology in the field of learning, namely Google Classroom and according to information from teachers, it is stated that students have become more responsible for their own learning, where students try to complete the tasks given even without direct supervision from the teacher in class. The results of teacher discussions with student parents during the learning review process carried out using Google Classroom also show that students are becoming increasingly trained to be more independent in managing their learning at home. In an article, it is sometimes unavoidable to organize the writing of research results into "subheads". The following is how to write the organizing format, which shows how to write special things that cannot be separated from an article.

Conclusion

Based on the interviews with key informants and other trusted informants, it can be concluded that online learning performed at SMP PGRI 363 Pondok Petir during the COVID-19 pandemic went well. Even though it was confusing initially, as the time went, everything was well handled. Online learning media used during COVID-19 pandemic was Google Classroom application.

Using Google Classroom as the learning media, the learning outcomes indicate a decrease. Students' understanding decreased. Students could not absorb all the learning materials. However, there was also an increase in skills. The students could sharpen their skills, be more responsible for the given assignment, and enrich their knowledge.

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