



Evaluation of the Science Learning Process at SMPN 5 Bengkulu Based Online During the Pandemic

Engga Marlinsa^{1*}, Freti Saputri¹, Mardiyati¹, Ahmad Walid¹

¹ Bengkulu State Islamic Institute of Religion, Bengkulu – Indonesia

*Email: Enggamarlinsa00@gmail.com

(Received: Dec 15, 2020; Accepted: Jan 23, 2021; Published: Apr 12, 2021)

ABSTRACT

The purpose of this study was to evaluate the student learning process in science subjects at SMPN 5 Bengkulu online based during the pandemic. The method used is a data analysis method with a descriptive qualitative approach to the sources obtained through interviews and filling in the Google Form which is distributed to students of class VII and IX of SMPN 5 Bengkulu. The instrument used in this study was a questionnaire. The results showed that online learning was quite fun for students with a percentage of 67.6% and boring for other 32.4% students. And the Whatsapp application is more effectively used in online learning with a percentage of 91.2%, besides that handphone can also be useful for students in the learning process because they are easy to use.

Keywords : evaluation, online learning, covid pandemic 19

INTRODUCTION

In essence, education is a significant need and guidance to ensure the development and continuity of life of the nation and state for achievement of human resources with high quality and intellectuality (Bhakti, 2017). In a teaching and learning process there are evaluation activities (Utami, 2019). Evaluation is a clarification process to see the suitability of a program implementation with the planning based on certain standard criteria (Kusumawati, 2020).

Evaluation is defined as the identification, clarification, and application of criteria to explain the appropriateness or suitability of the object being evaluated with these criteria (Worthen, et al. 2011). The scope of learning evaluation includes planning the learning process of implementing learning and learning outcomes (Arifin, Z. 2014).

Problem of Research

The Covid-19 outbreak spread throughout the world, including Indonesia and the outbreak also had an impact on education, so that the system in the learning process was also changed to an online learning system which officially the government of the Republic of Indonesia through the Minister of Education and Culture of the Republic of Indonesia issued Circular No. 4 of 2020 regarding the implementation of educational policies in the emergency

period of the spread of Corona Virus Disease (Covid-19) which stipulates that since the mark of 24 March 2020, the learning process is officially carried out at all levels of education, carrying out the learning process from home through an online learning system to support government programs in breaking the chain of distribution Covid-19 virus. (Kementrian Pendidikan dan Kebudayaan, 2020)

So online learning allows learning to be carried out without meeting physically and at a distance, by using good internet access (Henderson, 2010). The implementation of online learning at the education level is still felt by some teachers even though the average teacher today already has a mobile device that can be used to operate online learning media (Sun'iyah S. L, 2020). In line with government instructions to carry out online learning, many workshops or online training have sprung up through various social media groups, which provide information about online learning and media that can be used, starting from the animation video genre to learning evaluation (Zaiman, 2020).

The use of online learning systems is one effort that can be made to overcome these problems and make it easier for students and teachers to access learning materials (Darmansyah, 2010). The use of online learning systems is one of the efforts that can be made to overcome problems and make it easier for students to access learning materials, the use of WA groups and conference meeting applications (Zoom/Google meet) can create a virtual learning environment. This use in learning activities encourages the implementation of education or learning to be more effective (Riyanda, et al, 2020).

By using web media, it allows a lot of information on learning data to be obtained so that it provides a more interesting and complete explanation to students (Darmansyah 2010). Ideally, educators and students should always quickly access various data information (Rusman, et al, 2011). "Changes in the demands of integrating technology in learning activities make the world of education require innovation and creativity in the learning process, one of which is the use of web-based learning media in teaching and learning activities" (Ekawati, 2018).

Research Focus

The purpose of this study was to evaluate the student learning process in science subjects at SMPN 5 Bengkulu online based during the pandemic.

METHODOLOGY OF RESEARCH

This research uses a descriptive qualitative approach based on the consideration that the symptoms of this research are a process carried out through a study of the behavior or activities of the actors involved in it. In addition, the descriptive qualitative approach is considered more flexible to describe an object of research. By using a descriptive qualitative approach, an understanding or meaning of a symptom can be found inductively.

Evaluation research is used to determine the effectiveness of achieving the goals, results, or impacts of a program and policy implementation process that has been planned and implemented over a certain period of time. The results of the detailed analysis must be able to

show the strengths and weaknesses of the program, so that it can be delivered operationally (Nugrahani, 2014).

This research was conducted at SMP Negeri 5 Kota Bengkulu. The research subjects were science teachers and grade VII and IX students. The method used in this study is the data analysis method of Miles and Huberman's model. Miles and Huberman say that analyzing data in qualitative research is a continuous process carried out by non-participatory observation. So that the data analysis method used in this study was carried out throughout the research, starting from initial observations, data collection, the stage of writing reports to drawing conclusions, then the results were narrated.

In this case, the validator's research on the instrument is based on the indicators contained in the validation sheet of each instrument. The assessment on the validation sheet is in the form of scoring from 1-4, with each score having different achievement indicators.

The methods used in data collection are :

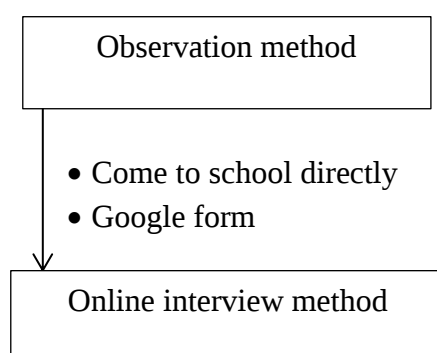


Figure 1. The Procedure of research

The type of data used is subject data. Subject data is a type of research data with opinions, attitudes, experiences, or characteristics of a person or group of people who are research subjects (Fauzi, M., 2010).

The data collection instrument used was a questionnaire or online-based questionnaire using Google Form. The questionnaire in this study was used to collect information from science teachers and junior high school students in grades VIII and IX. The educational questionnaire was used to collect data about the implementation and assessment of science learning which was carried out online at the SMP. While student questionnaires are used to collect data about the implementation of online learning from the perspective of students.

RESULTS AND DISCUSSION

This observational research was conducted on November 18, 2020. Furthermore, interviews were conducted with teachers and online-based questionnaires were distributed to students using google form media until November 19, 2020. Based on the data obtained online, the evaluation results of the science learning process at SMP Negeri 5 Bengkulu are in the unfavorable category. In the aspect of the learning process it is in a poor category, while in the

aspect of learning media the evaluation results show it is in the good category. And in the process of delivering learning material as a whole the evaluation results show that it is included in the quite good category.

In the evaluation of the science learning process, it is in the poor category. In detail, the evaluation results in the assessment and the accuracy of the material are categorized as quite good. In the aspect of allocation of time and learning resources, it is in a fairly good category. The results of the evaluation process on the implementation of science learning at SMP Negeri 5 Bengkulu were in the poor category, preliminary activities and core activities as well as closing activities showed a poor category.

In general, the results of the evaluation of science learning outcomes at the school were in the unfavorable category. This shows that most of the aspects contained in the criteria used are not in accordance with the science learning program implemented at SMP Negeri 5.

In receiving and digesting lessons online, based on the results of the questionnaire students need text and animation media so that learning can be understood and take place pleasantly. The ease and speed of accessing information online through the internet and books are very important for students today in carrying out online learning during a pandemic.

In general, the results of the evaluation of science learning at SMP Negeri 5 were categorized as unfavorable because based on the results of the research survey conducted by the research team it was known that science teachers and students at SMPN 5 Bengkulu experienced problems in carrying out online learning activities, which were less effective than learning, face to face, because they are not used to it and the teacher does not know whether the student is really taking part in the lesson or not. In the science learning process, SMPN 5 Bengkulu conducted online discussions using the WhatsApp, Zoom, Google Classroom, and Google Meet applications. But video call-based applications are considered less effective in delivering discussions due to network constraints and the lack of student response in using the application. The assignment and material collection mechanism is usually given in the form of modules each student has, in the form of Google forms and also videos.

Table 1. IPA online learning materials at SMPN 5 Bengkulu.

Aspect	Indicator	Presentase
Learning process	Pretty fun	67,6%
	Very boring	32,4%
Teaching Tools	Difficult to understand	32,4%
Learning Media	Effective Through the Whatsapp	79,4%
Source of Material	Internet	47,1%
	Book	38,2 %
Learning Instruments	Understanding	50%
	Mobile	91,2 %

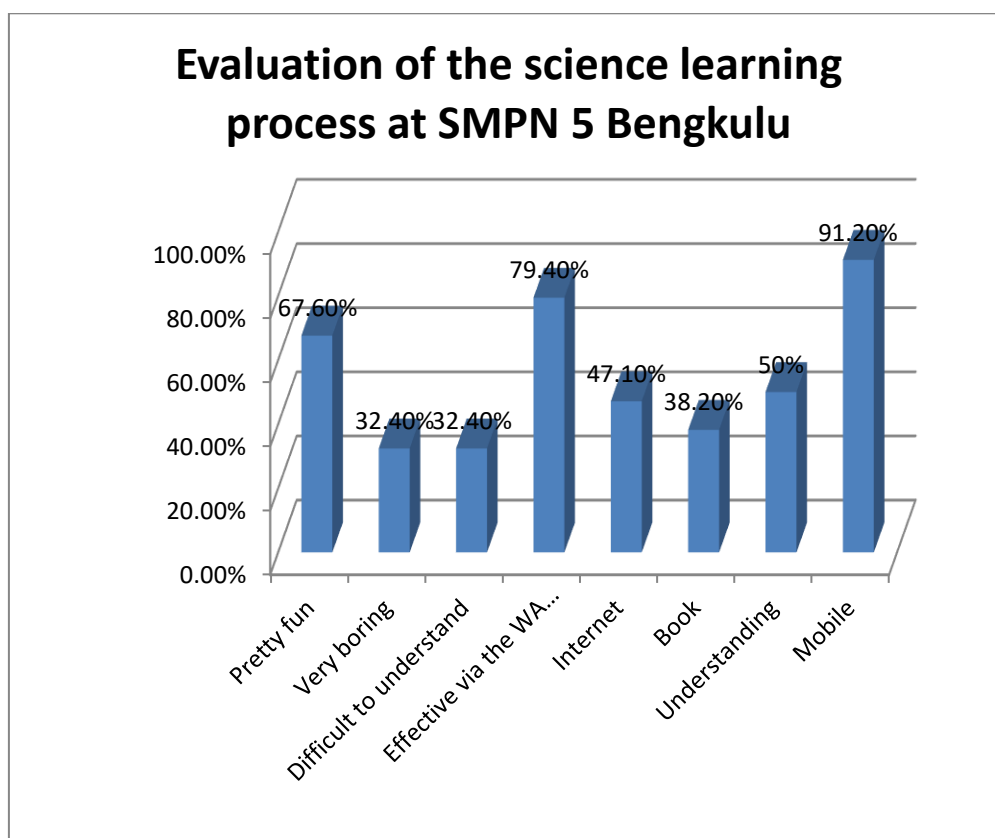


Figure 2. Graphic of Science Online Learning Materials at SMPN 5 Bengkulu

In the learning process there are several obstacles when teaching, such as in understanding assignments, only a few students are considered to understand and collect assignments from the material given. So, from this there are also other obstacles, namely in the problem of assessment. As for the perspective of students based on the results of the questionnaire it was found that students had difficulty accepting and understanding the material presented by the teacher, while the exercises given did not help students understand the material. The percentage of research results from 34 students showed that only 67.6% stated that online learning was quite fun and 32.4% stated that it was very boring. In terms of the teaching tools used in the delivery of material 32.4% of students stated that the teaching tools were difficult to understand, but 79.4% of students stated that the WhatsApp application was more effectively used in the learning process, and 47.1% of students preferred how to understand science subjects via the internet rather than through books. Even from understanding, students have difficulty reaching 50%. In the online learning process 91.2% of students used cellphones as a tool used for learning, and 91.2% of students stated that this teaching tool was useful because from the survey results it was known that 85.3% of students stated that this communication tool was easily accessible anywhere.

The presentation of the input aspects in this research includes: (1) Students: The results of the evaluation of the students who took the research questionnaire were 34 people; (2) Curriculum: From the results of the evaluation, it was found that the curriculum used at SMPN 5 Bengkulu used the 2013 curriculum; (3) Teaching materials: From the results of the

evaluation, it is known that the main teaching material at SMPN 5 Bengkulu is printed teaching materials in the form of modules. Apart from the modules, supporting teaching materials were also developed, such as power point presentations, audio programs, video and other media; (4) Teacher: There are 3 teachers in the field of science studies at the school. All subject teachers have permanent teacher status and have obtained teacher certification.

According to Masrokhah, Muria Suci University, in his research at SDN Bintoro 5, Demak Regency, the obstacles faced by teachers include several aspects, including: lesson planning, implementation of the learning process, assessment of both the process and learning outcomes, and other obstacles. Internal obstacles include mastery of technology and teacher competence. Meanwhile, external barriers include internet networks and quotas. Teachers rarely access the internet, use learning platforms, and are less skilled at interacting using learning platforms are also factors that hinder the online learning process (Herliana, F., et al., 2020). The use of smartphones and laptops in online learning can improve student learning outcomes (Anggrawan, A., 2019). Pangondian, R. A., Santosa, P. I., & Nugroho, E. (2019) stated the many advantages of using information and communication technology in the implementation of online learning. The use of online learning using zoom cloud meetings has the advantage of being able to interact directly between students and lecturers as well as teaching materials but it has the disadvantage of being wasteful and less effective if there are more than 20 students (Naserly, M. K., 2020).

CONCLUSION

Based on the results of data analysis carried out by the research team, it can be concluded that the implementation of the science learning process online at SMP Negeri 5 Bengkulu is said to be less effective. The implementation of learning activities through the Zoom application is stated to be less effective, while learning activities through WhatsApp groups are stated to be quite effective but with several shortcomings, namely the delivery of material is difficult to understand by students and during the learning process it is considered very boring because the delivery of the material presented does not attract the attention of students. In addition, the implementation aspect of the process assessment has not been seen to be running smoothly and on target.

References

- Anggrawan, A. (2019). Analisis deskriptif hasil belajar pembelajaran tatap muka dan pembelajaran online menurut gaya belajar mahasiswa. *MATRIK: Jurnal Manajemen, Teknik Informatika Dan Rekayasa Komputer*, 339-346.
- Arifin, Z. (2014). Evaluation of learning principles, techniques, procedures. *Bandung: PT. Remaja Rosdakarya Offset*.
- Arikunto, S. (2013). Prosedur penelitian suatu pendekatan praktik.
- Arikunto, S. (2021). *Dasar-Dasar Evaluasi Pendidikan Edisi 3*. Bumi Aksara.

- Bhakti, Y. B. (2017). Evaluasi program model CIPP pada proses pembelajaran IPA. *JIPFRI (Jurnal Inovasi Pendidikan Fisika Dan Riset Ilmiah)*, 1(2), 75-82.
- Darmadi, H. (2011). *Metodologi Penelitian Pendidikan*. Bandung: Alfabeta.
- Darmansyah, D. (2010). Teori dan Konsep Dasar Pembelajaran Berbasis WEB. *Pedagogi: Jurnal Ilmiah Ilmu Pendidikan*, 9(1), 1-15.
- Ekawati, N. E. (2018). Application of Blended Learning with Edmodo Application Based on PDEODE Learning Strategy to Increase Student Learning Achievement. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 8(1).
- Fauzi, M. (2010). *Metodologi Penelitian Kuantitatif*. Semarang: Walisongo Pers.
- Herliana, F., Halim, A., Farhan, A., & Kasli, E. (2020). Identification of Lecturer Difficulties in Implementing of Blended Learning in the Covid-19 era. *Asian Journal of Science Education*, 2(2), 106-113.
- Ibrahim, R. dan Ali, Muhammad. (2007). *Teori Evaluasi Pendidikan*. Bandung: PT Imtina.
- Kusumawati Putri, R.D. (2020). *Evaluasi Pembelajaran IPA Model Discovery Learning Menggunakan Model Countenance Stake*. Jawa Tengah : Literasi.
- Masrokhah. (2020). *Evaluasi Implementasi Kurikulum 2013 Pembelajaran Online di Masa Pandemi Covid-19 di SDN Bintaro 5 Kabupaten Demak*.
- Mulyasa, E. (2011). *Menjadi Guru Profesional*, cet.-11. Bandung: PT Remaja Rosdakarya.
- Naserly, M. K. (2020). Implementasi Zoom, Google Classroom, Dan Whatsapp Group Dalam Mendukung Pembelajaran Daring (Online) Pada Mata Kuliah Bahasa Inggris Lanjut (Studi Kasus Pada 2 Kelas Semester 2, Jurusan Administrasi Bisnis, Fakultas Ekonomi Dan Bisnis, Universitas Bina Sa. *Aksara Public*, 4(2), 155-165.
- Nugrahani, F., & Hum, M. (2014). *Metode penelitian kualitatif*. Solo: Cakra Books.
- Riyanda, A. R., Herlina, K., & Wicaksono, B. A. (2020). Evaluasi Implementasi Sistem Pembelajaran Daring Fakultas Keguruan dan Ilmu Pendidikan Universitas Lampung. *IKRA-ITH HUMANIORA: Jurnal Sosial Dan Humaniora*, 4(1), 66-71.
- Rusman, D. (2011). *Teknologi Pembelajaran*. Bandung: PT Remaja Persada. *Pembelajaran Interaktif-Inovatif*.
- Sun'iyah Siti L. (2020). *Evaluasi Pembelajaran Berorientasi Media Pembelajaran Online pada Mata Pelajaran PAI Tingkat Pendidikan Dasar*. Jawa Timur : UNISDA.
- Surat Edaran Menteri Pendidikan dan Kebudayaan Nomor 4 Tahun 2020.
- Utami, T.N. (2019). *Development of Android-Based Electronic Student Books on Temperature and Heat Materials for Preparation for SMA / MA Exams*. Malang : Lembaga Penelitian dan Pengabdian Masyarakat.