

Analysis of Online Learning against Biology Learning Results of Students of Class XI IPA at SMAN 1 Se-Kecamatan Pangkatan

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Abstract

This study has the aim of knowing the Analysis of Online Learning on the Learning Achievement Results of Class XI Science Students at SMAN 1 Se-Kecamatan Rank. This type of research uses qualitative with the method used is descriptive. The population used is 66 public high school teachers in Pangkatan District, while the total sampling sample is 66 state high school students in Pangkatan District. Data collection techniques are carried out by conducting interviews and distributing response questionnaires to students via Google form. Instruments in the form of questionnaires and questionnaires. Data analysis techniques used descriptive analysis before carrying out descriptive analysis, Results (1) Availability of technology for students in the implementation of learning 63.73% (2) Students are more active and independent Online Learning Against Biology Learning Outcomes Class XI IPA students get 53.81% (3) Understanding of the material captured in Online Learning on Biology Learning Outcomes of Class XI Science Students 43.91% (4) Motivation and Interest of Students in Online Learning Against Biology Learning Outcomes of Class 53.81 Students (5) Use of Applications in Learning Online Learning in Online Learning on Biology Learning Outcomes of Class XI Science Students 58.79%. In this case that students have an effect on online learning on learning outcomes obtained by students.

Keywords

online learning; student learning outcomes; biology learning



I. Introduction

Online lessons are something to build a spirit of enthusiasm and honesty for students in learning. Students can learn and can do and access a material or task that has been given online. With the existence of an online lesson, students are also trained to be able to behave honestly in doing at home without having to imitate a friend's assignment, and enthusiasm in doing it even though they are not with the teacher. In this case, the teacher can periodically monitor each task from the students (Sari, 2021).

The lessons that have been implemented in the policy in home learning are online lessons, both face-to-face via computer screens and smartphones or simply giving an assignment through typed messages and then delivered online. Online lessons can be given so that students can still gain knowledge and continue to be able to continue a level of education that should be obtained without lowering a standard in education that has been set. (Handayani & Subakti, 2021). Education at this time also requires more of a student to be able to learn by using a useful media on technological resources (Naning Eko Noviana, 2021).

Policies in an online lesson during a pandemic also make it the first solution so that an implementation in the learning process can still be done directly. However, in an implementation there are obstacles and shortcomings in an online learning policy during a pandemic which has made a solution the first is so that a learning process can still be direct. However, in its implementation there are obstacles and shortcomings (Ruci Pawicara, 2020).

Face-to-face lessons can make students able to interact directly with teachers and friends so that the expertise of students in responding to environmental problems in friendship or with teachers is much better than online lessons. With the existence of a system in online lessons today, of course, it is very different from the face-to-face learning system in general, both in terms of attitudes, methods, behavior, in the lessons used as well as in the media or communication used, for example when the lesson takes place on via zoom, and learning assignments are also delivered via social media (Jannah Nadiatul, et al, 2021).

In an activity in the implementation of online learning as a medium in learning with the aim of being able to give a task to students so that they can pursue and can access it online. Where teachers can also monitor an activity in students while at home. While at school, teachers can directly interact face to face to be able to discuss a material and work assignments to students through e-learning (Sari, 2021).

Using an online learning system can make the process of implementing lessons better and more effective and efficient when compared to using a simple and conventional system. Because the use of a system can provide convenience for both teachers and students and other parties in the implementation of a process in the lesson (Mulyati, Anggoro Aryo P, 2017).

The quality of the system and the quality of information are two interconnected dimensions in an application of the use of an information technology. Both types of quality are very decisive on the results or outputs created in the learning system as a form of utilizing information technology in education. Therefore, the development and innovation of the electronic learning system is absolutely carried out by an educational institution. At present schools are also competing to increase the use of information technology in IT-based teaching and learning mechanisms (Mulyati, Anggoro Aryo P, 2017). Online lessons can emphasize students to be able to process information that can be presented by the teacher online (Prasetya & Harjanto, 2020).

Before the researcher conducted the research, the researcher conducted an observation visit to the school at SMAN 1 in the Rank District and did a few short interviews with the teacher and students of Class XI Science and the researcher also received information about the students and teachers that many students still had students who have difficulty in online learning and complain about online learning where they have difficulties in using an online learning application, and some of the students also experience an obstacle and lack of interest in student learning in online learning with online learning which will make students feel lazy and bored or too late and others, because students cannot meet their colleagues, and also have to carry out a lot of work as well as the collection of tasks that must be deadlines.

But there are still some students who don't mind the use of a learning system that was implemented during the COVID-19 pandemic. Sihombing (2020) state that Covid-19 pandemic caused everyone to behave beyond normal limits as usual. The outbreak of this virus has an impact especially on the economy of a nation and Globally (Ningrum, 2020). The problems posed by the Covid-19 pandemic which have become a global problem have the potential to trigger a new social order or reconstruction (Bara, 2021). Constraints in the

implementation of learning are a situation in which students cannot do lessons properly due to a disturbance in learning and threats, as well as obstacles in learning. Since the implementation of a lesson from home or lessons online, students have experienced obstacles. Learning carried out in formal schools cannot be separated from the curriculum, because the curriculum becomes a reference for teachers in carrying out learning (Samsiadi, 2022). Interest in learning, and mastering the atmosphere of the student learning environment become one of the barriers to student learning some students believe that they are less motivated in the learning environment and less interested in learning (Pratiwi & Harahap, 2022).

With the pandemic during the covid-19 period, it has become an unfavorable impact on the implementation of a process in lessons at SMAN 1 in the Rank District, as well as other schools with a policy implemented to overcome a cause of the spread of Covid-19 as well as a solution. This can be overcome by the obstacles in conducting face-to-face lessons which also become something that is very inhibiting for the whole community. This study has never been carried out before. Then based on the background in a problem above, it will encourage the reviewer to carry out an assessment of Online Learning Analysis on Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Rank District. The purpose of this research is to find out the Analysis of Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Ranking District.

II. Research Method

This research was conducted in June at the State Senior High School in Pangakatan District. The type of this research used qualitative with the method used was descriptive. The population used was 66 State Senior High School students in Pangakatan District, while the total sampling sample was 66 State Senior High School students in Pangakatan District sampling using total sampling is sampling where the number of samples is the same as the population, due to taking total sampling because the population is less than 100. (Sugiono 2014).

Data collection techniques were carried out by giving direct interviews and response questionnaires to students regarding online lessons on student biology learning outcomes using Google Form. The technique of distributing the questionnaire is done by sharing the Google Form link via WhatsApp media to students using 4 choices. The indicators in this study are (1.) Availability of Technology, (2.) Students are more active and independent, (3.) Understanding of the captured material, (4.) Motivation and Interests, (5.) Use of Applications and this research is also supported by the results of interviews with information that has the capacity according to research needs.

The initial preparation stage is carried out by observing and conducting observations and interviews with students online learning on student biology learning outcomes, the next stage is to make interview statement guidelines, as well as grids on students' online learning on student biology learning outcomes, then continued by making a question and continued with instrument validation to expert validators, the data collection instrument used was an interview questionnaire distributed through Google form as for the instrument Online learning on the results of students' biology learning achievement, is a modification of (Ruci Pawicara, 2020), (Wasito, 2021), (Rofiah, 2021). For instruments online learning on student biology learning outcomes. It can be seen in table 1.

Table 1. Online Learning Questionnaire Grid on Student Biology Learning Outcomes

No	Indicator	No Question	Number of Statement Items
1	Technology Availability	1,2,3,4,5	5
2.	Students are more active and independent	6,7,8,9,10	5
3	Understanding the captured material	11,12,13,14,15	5
4.	Motivation and Interest	16,17,18,19,20	5
5	Application Usage	21,22,23,24,25	5
Amount			25

This study uses instruments in the form of questionnaires and questionnaires to obtain questionnaire data or questionnaires in this study are used as the main instrument to obtain data about online learning on the biology learning outcomes of class XII science students at State Senior High Schools throughout Pangkatan District. In this study, the data obtained from the documentation is data for class XII IPA at SMA Negeri Se- Pangkatan District in the form of value online learning on student biology learning outcomes, then the data analysis technique used descriptive analysis.

III. Discussion

Based on the research that has been carried out, the researcher has obtained the results of the analysis of Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Rank District. The data given to the respondents are in the form of a questionnaire/questionnaire and observations that will be analyzed using descriptive analysis, from the results of the table above, the results of the indicators for Online Learning Analysis against Biology Learning Outcomes of Class XI Science Students at SMAN 1 Se-Kecamatan Rank. The data is as follows that students of XI IPA at SMAN 1.

Carrying out online learning in supporting the learning implementation process as indicated in the indicator (1.) Availability of Technology for students in the implementation of learning by 63.73% (2.) Students are more active and independent getting a score of 53.81% (3.) Understanding the captured material obtained a result of 43.91% (4.) Students' motivation and interest in online learning obtained a score of 53.81 (5.) The use of applications in online learning was 58.79%.

Table 2. Online Learning against Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the District of Rank

No	Indicator	Influential Students Online Learning	Influential Students Online Learning	Total
1	Technology Availability	31.27%	63.73%	100%
2	Students are more active and	46.19%	53.81%	100%

	independent			
3	Understanding of Captured Material Motivation and	56.09%	43.91%	100%
4	Interest	46.19%	53.81%	100%
5	Application Usage	41.21%	58.79%	100%

In this case, many students and teachers take advantage of online learning as a process of implementing learning, but there are also some students who have no influence in the process of implementing online learning because many students complain about the implementation of online learning, some of the students also experience problems and complain about their lack of interest in learning while starting online learning because they feel bored, lazy and students are less active and independent as well as decreased motivation and use of applications and lack of availability of technology.

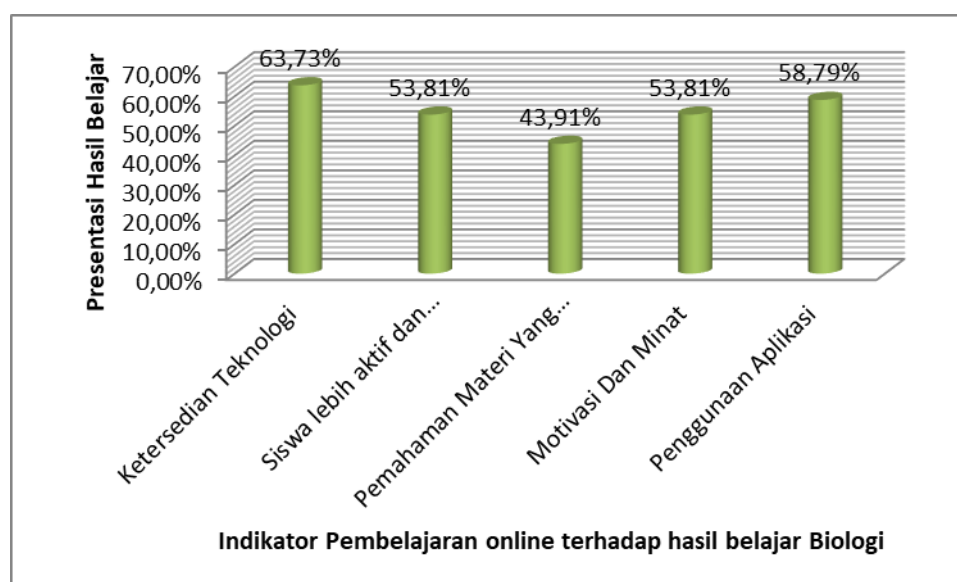


Figure 2. Online Learning against Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Sub-District Ranks

With the existence of Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Rank District, it has also led to an innovative and creative learning model in the implementation of the learning process. The learning system in this network plays an important role for every student and educator and has helped educators in facing the challenges of technological development. One of the learning models that can be applied in a technological development is the availability of technology for students in online learning on biology learning outcomes for class XI science students at SMAN 1 in the District 63.73% (2.) Students are more active and independent. Learning Online against Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Sub-District Ranks obtained 53.81% (3.) Understanding of the material captured in Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 throughout the District 43.91% (4.) Motivation and Interest of Students in Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 Se -District Rank 53.81 (5.) Use of Applications in online learning in Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 throughout the District Rank 58.79%.

In this case that students have an effect on online learning on learning outcomes obtained by students.

Online learning is a learning method implemented by all educational institutions during a pandemic with the aim of being able to break the spread of COVID-19. online lessons are well accessed, in this case it can be concluded that online lessons during the Covid-19 pandemic received a good response from students, it is recommended that teachers always provide a high motivation to students so that they can help students in the learning process (Rusdiantho & Elon, 2021). Learning using an online media requires students to be able to increase independence in their learning, especially reading habits and vocabulary mastery. (Hastuti1 & Rizky Mirani Desi, 2021).

Efforts that can be made to increase the effectiveness of a learning process are by making additional interaction extensions outside the classroom. In this case, an information technology can be used to carry out the lesson. The use of an information technology that has the same benefits as conventional lessons is available in online lessons (Sukardi, 2019). It is important to instill an independence in students from an early age so that students can explore the skills that exist in themselves. The need for a supporting infrastructure to support an online learning process that can be adequate as a process to be able to train an independence in students, in implementing a lesson online, by using an online learning media that can make it easier for a teacher to convey a material and make it easier for students to receive all the material to be delivered because they cannot carry out a learning process in the mentoring room to the teacher directly, (Sulistiyowati & Amri, 2021).

Online lessons also have a significant influence on student learning outcomes as much as 82.05%. Online lessons are also able to be a helper in the world of education during this Covid 19 Pandemic. So that the results obtained from this study show that the online learning model can improve the biology learning outcomes of students in class XI IPA at SMAN 1 Se-Kecamatan Rank, online learning models can increase an activity for students in learning by Online this method can increase teacher activities in teaching (Rangkuti et al., 2022).

Online lessons on learning motivation, this shows that the higher and increasing a variable in online lessons, the motivation in learning will increase. These results can indicate that there is a significant influence between the online learning processes on an interest in learning, in this case it shows that the higher and the increase in a learning variable online, the interest in learning will increase. Interest in learning arises through a process of observing on an object which will then also produce an assessment that gives rise to an interest in learning (Rivai & Programs, 2021).

In the implementation of an education, learning is a very long process that will lead to an achievement. In order to produce an achievement, in a learning and teaching process, an appropriate strategy is needed. The strategy in the lesson is a process or method that can be implemented by teachers so that they can master the material that is conveyed and can be well received by students with the aim of being able to change an aspect of cognitive, emotional, and psychomotor students who become more mature. good (Sebrina & Putri, 2021). In an effort to improve a learning outcome, there are still several other factors that might be able to give a greater influence in improving student learning outcomes, a teacher must be more innovative and creative in developing and using a media that will be chosen, so that it can facilitate a learning process. the learning process of students in following each learning process that goes well (Pahlavi, 2021).

The most important use of learning media is to help the process of interaction between teachers and students in the learning process so that learning becomes more effective, efficient and attracts students' interest in learning. Utilization (Daulay, 2021). In a

learning process, students and teachers who are at school can change a system in learning at home, namely by using a system in online or online lessons. Online lessons are carried out using a gadget on each, either in the form of a smartphone or tablet, and a laptop, as well as a computer. In the use of an online lesson, it is felt that it is the right strategy in replacing a lesson in the room. Changes to strategies in learning are certainly complemented by the existence of a new learning media, as a support in learning activities (Sijabat et al., 2021). During the pandemic period, educators or teachers should be more active in carrying out lessons online at home so that students cannot feel bored and enthusiastic while carrying out distance learning. so that students' interest in learning can increase and understand physical concepts(Nurmaulidina & Bhakti, 2020).

V. Conclusion

Based on the results of the explanation above regarding Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the Ranking District for biology learning outcomes for Class XI Science students at SMAN 1 in the Subdistrict Ranks 63.73% (2.) Students are more active and independent Online Learning on Learning Outcomes Biology Class XI Science Students at SMAN 1 in the Ranking District obtained 53.81% (3.) Understanding of the material captured in Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 throughout the Subdistrict Rank 43.91% (4.) Students' Motivation and Interest in Online Learning on Biology Learning Outcomes of Class XI Science Students at SMAN 1 in the District of 53.81 (5.) Use of Applications in online learning in Online Learning on Biology Learning Outcomes of Class XI Science Students in SMAN 1 throughout the District 58.79% rank. In this case that students have an effect on online learning on learning outcomes obtained by students. This online learning system can make the learning process more effective and efficient when compared to using a conventional system. Due to the use of the system can provide convenience to various parties, teachers, and students in the learning process.

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