# ANALYSIS OF THE USE OF GOOGLE CLASSROOM ON PROTISTA MATERIALS IN 10th GRADE SCIENCE CLASS

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| ARTICLE INFO: | ABSTRACT |
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This research aims to describe students' understanding of the use of Google Classroom for learning protist material in class X SMA Negeri 1 Bilah Hulu in the odd semester of the 2021-2022 academic year and to determine student learning outcomes while using Google Classroom on Protista material in class X SMA Negeri 1 Bilah Hulu semester odd for the 2021-2022 school year. The research method used is descriptive quantitative. The sampling technique is purposive sampling. The purposive sampling technique in this study is seen in students' activeness in class. The results of this study indicate that class X MIA 1 and X MIA 2 obtained an average score and score on the questionnaire using Google Classroom, which is a score of 3.8 with a value of 77, which is in the understanding category but requires a slight improvement, this is because students still need to understand the features of using Google Classroom.

**INTRODUCTION**

Covid-19 has circulated worldwide, especially in Indonesia (Salsabila et al., 2020). The Indonesian government is reducing efforts to spread the virus, and an effort from the ministry of education and culture is to conduct distance learning. Distance learning (PJJ) is a preparation given to students in a state not gathered in one place to directly participate in the learning process from the teacher (Prawiyogi et al., 2020). With Distance Learning (PJJ), teachers can deliver learning materials to students without having to meet in the same room, distance learning (PJJ) is a learning process in education between space and time, and teachers and students use specific methods and media (Septiani & Samputra, 2021).

One way that can be done in learning is by using Google for education. Google for education is an exciting innovation for teaching and learning activities (Salamah, 2020). The rapid progress of education in the world makes Google the most popular search site because the products benefit teachers and students in learning and teaching. As published on the official website, Google For Education has several services that are very useful in the education and learning process in schools, such as Google Classroom, Google Mail, Google Calendar, Google Drive, and Google Docs (Bagas, 2017).

Google Classroom is a tool introduced by Google Apps for Education in 2014. This Google Class facilitates teachers to create and organize assignments quickly, provide feedback efficiently, and communicate with the class easily (Mohd Shaharanee et al., 2016). Google Classroom is designed to help teachers create and submit assignments paperless and includes time-saving features such as the ability to create a copy of documents for each student automatically, can also create a storage folder for each student's work, and students can view any assignments that are close to the deadline collection on the task page. Teachers can also see who has not completed, submit assignments, and provide feedback and grades directly in the Google Classroom application (Maesaroh, 2018).

Multiplatform uses Google Classroom via Personal Computer (PC) and mobile phones. Google Classroom can be obtained from two sites, namely websites or applications. It can visit the website https://classroom.google.com through any program such as Chrome, Firefox, or Web, through the play store on android, or the app store on the iPhone Operating System (iOS) by typing Google Classroom reading.

The use of Google Classroom has advantages and disadvantages. The advantages of Google Classroom are that it is easy to use and helps the learning process during the pandemic, and does not make the cellphone memory complete because everything shared in the classroom is stored in cloud-based storage, while the drawback is that the learning conditions are less conducive and less effective. because various factors such as the internet provider used by students, each of which has different internet network strengths and also the limited quota owned by students cause the learning process to be not optimal. These things can interfere with the online learning process, such as being late in filling out the attendance list and being late in collecting assignments. Some students rarely even never fill out the attendance list or collect assignments (Agung, 2020).

The main features of Google Classroom are: 1) Assignment (task) is an assignment feature that can be stored and rated in the Google Classroom application. 2) Rating (measurement) is a feature in Google Classroom that provides a different assessment. Teachers can attach files to assignments, and students can view, edit, or copy text. 3) Communication, the teacher can provide comments that allow interaction between teachers and students (Setiawan & Wicaksono, 2020).

The learning materials used in the SMA Negeri 1 Bilah Hulu school follow the 2013 curriculum and the Electronic School Book (BSE). Protist material is material that studies eukaryotic microorganisms such as animals, plants, or fungi. The standard of competence in protists is understanding the principles of grouping living things. The basic competence of protists is to present the general characteristics of the protist kingdom and its role in life. Based on the syllabus of SMA Negeri 1 Bilah Hulu, protists are learning materials taught by teachers in Odd Semesters.

Based on research conducted by Agung (2020), applying the use of Google Classroom in online learning, the results of the study show changes in conventional learning methods in the form of face-to-face meetings between teachers and students in the class, which are carried out with material presentation, discussion, question and answer or practicum into methods. Online using Google Classroom has advantages and disadvantages that both teachers and students feel. The advantages include that teachers can use various media for the learning process, both those contained in Google Classroom or other media linked to the classroom. While the drawbacks are network problems and limited quotas owned by students can be an obstacle in the learning process, as well as the low level of student activity in the learning process. In addition, the teacher finds it difficult to explain the material, and students also

have difficulty understanding the material, which impacts the students' low ability to solve math problems.

This study discusses the analysis of the use of Google Classroom on the material of class X MIA protists. Teachers can apply several learning models according to the needs of a class. One of the learning models is e-learning using Google Classroom. Utilizing the Google Classroom application by using the features found in Google Classroom can make learning innovative and effective during the learning process and assist students in understanding biology learning on protist material to achieve optimal learning outcomes.

Based on the results of observations at SMA Negeri 1 Bilah Hulu as one of the schools that implements technology-based learning by utilizing the WhatsApp and Google Classroom applications, the learning process during the pandemic period continues as planned. WhatsApp (WA) is one of the most active online media used by the people of Indonesia. WhatsApp is an application capable of sending text messages. However, if viewed based on its primary function, as long as the phone is still connected to network access, users can send soft files with pdf extensions, documents, and various other documents. In the WhatsApp application, some features allow users to communicate in groups or individually; with WhatsApp, teachers and students can continue learning (Pustikayasa, 2019).

Through an interview with one of the biology teachers at SMA Negeri 1 Bilah Hulu, during the pandemic, learning took place using WhatsApp because WhatsApp was the best tool besides that which was used during e-learning learning, namely Google Classroom. The use of the Whatsapp application also has shortcomings in biology learning, especially in protist material. The teacher stated that in class XI MIA 1, in general, there was less interaction between students and teachers in participating in learning using WA, so that learning became less exciting and made material that was not studied, which could cause it not to be achieved under the Learning Implementation Plan (RPP) which the teacher has prepared. As for the things that cause learning not to be achieved, namely: signals, there are still students who do not have android phones, and the internet quota of students and teachers has not been fully subsidized.

Based on interview observations conducted on students of class XI MIA 1 SMA Negeri 1 Bilah Hulu, for the use of the Google Classroom application, there are still obstacles faced by students. The obstacles are: Difficulty getting an internet network, the limitations of students in having an Android cellphone are still, from a total of 15 samples of students, eight students still do not understand the features contained in Google Classroom, while the learning process requires a functional relationship between students and teacher. Based on the background of the problem, research was conducted on the analysis of the use of Google Classroom on class 10 protists.

## RESEARCH METHOD

The research was conducted at SMA Negeri 1 Bilah Hulu. The research population was all 160 students. The number of samples taken was 63 students with purposive sampling technique seen from class activity, namely X MIA 1 and MIA 2. The instrument used in this study was a questionnaire on the use of Google Classroom, which contained students' understanding of the use of Google Classroom. Data analysis of students' understanding using Google Classroom using Microsoft Excel.

## RESULTS AND DISCUSSION

The collection of questionnaire data on the use of Google Classroom was carried out after the learning process of protist material was completed. The questionnaire was given through the google form. The collection of the questionnaire uses a closed type by choosing one answer among five answer options, namely strongly agree, agree, disagree, disagree, and strongly disagree; with the indicators of student acceptance on the ease of Google Classroom and Google Classroom display, the indicators are intended to determine understanding students on the use of Google Classroom. The statement items for the variable use of Google Classroom are 20 items. The score of the Google Classroom usage questionnaire can be seen in Table 1.

The results showed that the data obtained the average score for class X MIA 1 and MIA 2 was 3.8, with the average score in the understanding category, but needed a slight improvement (Table 1). The results of the study based on the frequency distribution showed that the scores from the questionnaire using Google Classroom 1 students were in the category of not understanding, requiring a lot of improvement (1.59%) because students still did not understand the features of using Google Classroom, while ten students were in the category do not understand, need a slight improvement (15.87%) because students still do not fully understand the features of using Google Classroom, 47 students are in the understanding Table 1. Student scores and criteria based on the

| Indicator | Score | Value | Criteria |
|---|---|---|---|
| Admissions at the Ease of Google Classroom | 3,9 | 78 | Understand, it still needs a bit of improvement. |
| User Interface | 3,8 | 76 | Understand, it still needs a bit of improvement. |
| Average | 3,8 | 77 | Understand, it still needs a bit of improvement. |

questionnaire category, but need a slight improvement (74.60%) because students still have to understand the features the use of Google Classroom, five students are in the understanding category, the use of e-learning can be continued (7.94%), from both X MIA 1 and X MIA 2 classes only one student is on a score of 1 to 2.6 with no category got it, needs much improvement.

Table 2. Frequency Distribution of Student Scores

| Category | Frequency | % | Criteria |
|---|---|---|---|
| 1 – 2,6 | 1 | 1,59 | Don't get it, needs a lot of improvement |
| 2,6 – 3,4 | 10 | 15,87 | Don't get it, needs a bit of improvement |
| 3,4 – 4,2 | 47 | 74,60 | Understand, it still needs a bit of improvement. |
| 4,2 – 5 | 5 | 7,94 | Understand, the use of e-learning can be continued |
| Total | 63 | 100 | |

Based on table 2, it appears that there is an understanding of students from the use of Google Classroom on protist material. Thus, students at SMA Negeri 1 Bilah Hulu are included in the category of understanding the use of Google Classroom supported by indicators of the use of Google Classroom, which are described by the average of each indicator, namely: Acceptance of students on the ease of Google Classroom and Google Classroom Display.

The use of Google Classroom in this study is learning using Google Classroom as a means of learning during learning so that teachers and students can easily carry out the distance learning process (PJJ) or commonly referred to as learning from home, a distance learning system known today as e-learning. -learning. In e-learning, learning is not only done in the classroom. However, it can also be done outside the classroom, in line with research according to Suendari (2019), which states that e-learning is beneficial in obtaining the information needed by users by applying e-learning to students. The learning process becomes more attractive and flexible, allowing students to learn independently from home. In the current situation, technology plays an essential role in the educational process. E-learning learning is not only done using an internet connection but can also use electronic media such as radio and television. The main challenge in distance learning is that students can be independent in learning. Dewi (2020) stated that the application that supports online learning is Google Classroom, in line with research conducted by Kurniawan (2020), which states that with technological developments, Google's role is to provide convenience in the field of learning. Google has facilitated teachers with a feature, namely Google Classroom.

Google Classroom is an application that can facilitate interaction between teachers and students who can create online classrooms. Ifthakar (2016) said that Google Classroom has advanced features which can make the right tools for teachers and students, in line with research conducted by Santosa et al. (2020), which states that one of the Learning Management Systems (LMS) is Google Classroom which can help educational institutions, making study assignments and materials done through Google Drive. Students are invited to interact in the classroom via a secret code which can then be added to the student interface. Therefore, teachers must master the LMS in order to be able to use the principles of independent, structured, creative, productive, and innovative learning with the latest electronic learning program interactions following ICT developments (Sari. et al., 2019).

The use of Google Classroom in this study, namely, the teacher distributes books and worksheets through the Google Classroom feature, namely Announcement and Assignment, which can be accessed by students by downloading reading materials/books and worksheets. Students can comment on the comments column feature on Google Classroom about things they want to ask about the worksheet. In this case, students can use Google Classroom independently to organize learning. Besides that, a limit is set when submitting assignments to Google Classroom, which can make students serious about doing assignments.

Google Classroom also has features that are very useful in online learning, such as Assignments. This feature serves as a place for teachers to share learning materials with students, online conferences, hold online classes so that they can deliver material directly, single view, display all assignments given by the teacher, preparation of online classes, and create many classes at once, direct assessment is an assessment and evaluation of assignments collected by students, announcements, announcements to help teachers provide important information to students, transfer classes, to transfer ownership of the class to another teacher without creating a new class, class integration, integrating source material but also integrating with other applications such as Excite, Code.org, Quizizz, and others, google forms, as importing student quiz scores into Google Forms.

Google Classroom can be accessed via the web, through android and IOS applications, but in this study, using Google Classroom through an android application, according to the results of Mahardini (2020), which states that Google Classroom is an online learning application that can help teachers and students share files. Teachers usually create their classes, share the class code, or invite students to teach and learn activities. To use Google Classroom, teachers and students can access using two ways, namely websites and applications. The website can be accessed using any browser such as Chrome, Firefox, or Internet Explorer. As for the application, it can be downloaded for free through the Playstore for Android and the App Store for iOS.

Based on the description above, it shows that the use of Google Classroom during a pandemic or learning from home can help teachers and students in carrying out learning activities can increase the use of Google Classroom and find out student learning outcomes on protist material. Sagita and Khairunnisa (2019) states that Google Classroom website-based learning can be used to present learning materials, discussions, and assignments related to learning activities.

Acceptance of students at the convenience of Google Classroom is the ability of students to use Google Classroom on protist material efficiently and appropriately without going through the help of others, in line with the results of research conducted by Utami (2019), which states that Google Classroom is easy to use. After all, it is faster to access material, assignments, and important announcements from Google Classroom, which can be accessed via PC or Smartphone; easier to learn because they can access Google Classroom anywhere, so students are interested and happy to learn interested in learning leads to a better understanding of the material presented. Calculating the use of Google Classroom with indicators of student acceptance on the convenience of Google Classroom, it is known that the average score is 3.9 and the value is 78 in the understanding category but requires a slight increase. The student's ability to accept/use Google Classroom on protist material is understood but still needs a minor improvement to understand the use of Google Classroom better.

The Google Classroom display displays feature in Google Classroom, such as the assignment feature. This feature serves as a place for teachers to distribute protist learning materials to students. The online conferencing feature is used to hold online classes so that you can deliver material directly. The single view feature serves to display all assignments given by the teacher. The online class composing feature serves to create multiple classes at once. The direct assessment feature provides assessments and evaluations on assignments submitted by students. The announcement feature serves to provide important information to students. The google forms feature functions to import student quiz scores into Google Forms clearly on protist material, in line with research conducted by Ashoumi (2019), which states that the limitations of learning space and time can be overcome by utilizing applications on the internet, one of which is an application that provided by Google including Google Classroom. Optimizing Google classroom features has a significant impact on learning in the digital era, including 1) learning by utilizing technology is carried out online, 2) flexible because it is not limited by space and time, 3) students are independently directly involved in the learning process that utilizes the internet, 4) learning materials provided by educators are easy for students to access, 5) improve data literacy and technological literacy skills (Rahmanto, 2020).

Calculating the use of Google Classroom with the Google Classroom display indicator, it is known that the average score is 3.8, and the value is 76 in the understanding category but requires a slight improvement. The data shows that students' ability to understand Google Classroom features on protist material is already understood but still needs a minor improvement to understand better the features of using Google Classroom.

**CONCLUSION**

Students' understanding of using Google Classroom for learning protist material at Grade 10 Science SMA Negeri 1 Bilah Hulu is in the understanding category but requires a slight improvement.

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