STUDENTS' PERCEPTION ON THE EFFECTIVENESS OF ONLINE-BASED LEARNING (BY USING GOOGLE CLASSROOM APPLICATION)

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Abstract: E-learning in academics which is characterized by the use of multimedia constructs made the process of learning more active, interesting, and enjoyable This study aims to describe students' perceptions about the effectiveness of using the Google Classroom application in learning activities on the eight grade students of SMP Negeri 4 Tondano in the academic year 2021-2022. In conducting this research, researchers used a questionnaire as a medium for collecting data. Researchers analyzed the data in 4 factors such as usefulness, ease of use, ease of learning and satisfaction. Usefulness refers to whether the application is useful and helps learning activities every day. Ease of use relates to the ease of the user in running the application. Ease of learning relates to the ease of users in learning to use applications. And satisfaction refers to user satisfaction with the Google Classroom application. Based on the data, the researcher concluded that Google Classroom application is effective to use as a learning medium.

Keywords: *Students Perceptions, Google Classroom, Online Learning.*

INTRODUCTION

Technology based e-learning encompasses the use of the internet and other important technologies to produce learning materials, teach learners, and also regulate courses in an organization (Liando et al., 2023); (Pelenkahu et al., 2023); (Fry, 2001). E-learning in academics which is characterized by the use of multimedia constructs made the process of learning more active, interesting, and enjoyable (Liaw et al, 2007). Thus, educators and students can learn together at the same time even though in different places.

Since March 2020 the world of education has been affected by the Covid- 19 pandemic and Indonesia is one of the many countries affected by Covid-19 (Liando et al., 2022); (Kandati & Tatipang, 2021); (Lengkoan & Rombepajung, 2022).

Students who usually learn face-to-face in class with a teacher or lecturer, but during a pandemic learning activities are carried out at home. This is done to prevent transmission of the virus due to direct interaction or physical contact. In a pandemic situation, educators (teachers & lecturers) are challenged to innovate and make various   break throughs alternatives concerning the implementation of the main task of teaching (Andries & Lengkoan, 2023). Even though students during the pandemic are in their homes, but the main task of educators still has to run, even educators are expected to be more creative and innovative in designing distance learning and skilled using online media.

This is following the circular letter of the Minister of Education and Culture Number 4 of 2020 regarding the implementation of education policies in the emergency period of the Corona Virus Disease (Covid-19) pandemic. Therefore, learning activities during the pandemic are carried out through personal computers (PC), laptops, and gadgets that are connected to an internet network connection from home. Through this media, educators can do the same learning at the same time using groups on social media, like Telegram, Instagram, Whatsapp, Google Meet, Google Classroom, Zoom, and others. In this study, the author will focus on one e-learning application that is most often used by educators and students as a learning medium during this pandemic, Google Classroom. Google classroom allows teachers to interact and spend more time with students and less time on the paperwork. Google's latest announcement brings new fuctionality to Google Classroom. In the new functionality is the ability to add more than one teacher, as well as to preparing for classes in advanced as well (S. Iftakhar 2016, p. 12-13).

This application also makes it easier for teachers to give assignments and announcements. Google Classroom can be a tool that makes students become active participants and it is easy to use. Learning in the pandemic period, of course, educators and students are required to be creative in carrying out learning activities by utilizing learning facilities or media from the internet. Online learning activities during the pandemic are expected to become a learning culture or a positive habit, both in the community and in every educational institution. The reason that the author chose this title as a research, was to find out the perceptions or views of students

regarding the applications used during the pandemic. Does the Google Glassroom application help them in distance learning activities, or on the contrary, this application does not help their learning activities during the pandemic. Is online-based learning by using e-learning application (Google Classroom effective for students as a learning medium during Covid-19 pandemic situations.

RESEARCH METHOD

E-learning is a learning method that is carried out by utilizing electronic devices to help facilitate the learning and teaching process. Electronic Learning has become a trend and needs throughout the world today, especially in the world of education. E-learning is an educational system or concept that utilizes information technology in the teaching and learning process. (Sharma and Kitchens, 2004) stated that e-learning includes learning with the help of web- based training facilities such as virtual universities and classrooms that allow digital collaboration and technology-assisted distance learning.

E-learning innovation can be defined as the technological or the methodological e-learning forms that are perceived as new by the potential users (Fischer, 2013) and according to (Ally, 2005) e-learning plays a significant role in any nation in the educational growth and it offers opportunities to developing nations to enhance their educational development. From the understanding above, E-learning is a concept or learning system. This education system prioritizes the use of technology. And also more use of information technology assistance in the learning and teaching process. The purpose of using E-learning is to make the learning process more interesting and not boring. Just like online principles in other media, the teaching and learning process in e-learning can be done by anyone, anywhere, and anytime. So, even if the students and teachers live far apart, it won't be a problem.

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching (Wang et al. 2007). The existence of technology during the COVID-19 pandemic is considered very important in helping human life as a support for carrying out various activities both in doing work and in terms of education. E-Learning as said above is indeed very helpful for both teachers in providing subject

matter, as well as for students in learning the material being taught. E- learning presents an entirely new learning environment for students, thus requiring a different skill set to be successful (Romiszowski, 2004).

At this time E-Learning is considered very important in supporting learning activities, especially during a pandemic, e-learning is the best choice of the most effective learning method so the students do not miss the subject matter. E-Learning can be effective if there is a collaboration between teachers and students to succeed, without either of the two being E-Learning will not run smoothly. Apart from that, the effectiveness of E-Learning must also be supported by the expertise and creativity of the teacher in compiling the material to be delivered.

This also includes the teacher's expertise in operating electronic devices. Sometimes E-Learning is also a burden for teachers who have not to master the operation of electronic devices. To overcome this problem, the government conducts a lot of training for teachers who have not to master the operation of electronic devices, especially in remote areas.

Seeing the development of e-learning from time to time which continues to grow following technological developments, it can be concluded that e-learning will be a future learning. Along with the development of the Internet, the use of e-learning systems also grow amazingly. The internet has been used as a tool to do learning activities. Quantitative research is an inquiry into a sociable problem, describe phenomena by gathering numerical data that are analyzed using mathematically structured methods e. g. in particular statistics (Aliaga and Gunderson, 2002). (Punch, 1998: 4) also stated that quantitative research as empirical research where the data is in the form and can be calculated. The researcher will use a questionnaire and will be distributed to students to collect the data. Questionnaire is an instrument in which respondents provide written responses to questions or mark items that indicate their responses (Ary et al, 2010:372).

According to Cresswell. (2012), there are three types of the questions, there are 1) Closed-ended question, 2) Open-ended questions, 3) Semi-closed-ended questions. In this study, researchers will use closed-ended questions in the questionnaire to make it easier for the participants to fill out the questionnaire.

(Sugiyono. 2014:121) Validity is a test to measure an unknown data that can be used to make sure that the data is valid or to make sure the truth about the reality which is the tool of measurement and it is used for counting a valid data. (Adams, 2008:21) stated that, the most commonly used in the attitude or opinion scale is a Likert scale.

Tabel 1. Shows Score

NO.	SCALE	SCORE
1.	Strongly Agree	4
2.	Agree	3
3.	Disagree	2
4.	Strongly Disagree	1

The researcher will use 16 questions in the questionnaire, consisting of 4 questions about the usefulness of the Google Classroom application in online learning activities. 6 questions about ease of use. 1 about ease of learning and 5 questions about students satisfication when using Google Classroom. After collecting all data from students, the next step is to analyze the data. Large amounts of data are converted into concise statements that describe, explain, or predict something about what researchers have and studied (LeCompte & Schensul, 1999). The level of validity with using a rating scale is determined by the following formula:

$P = F/N \times 100\%$

(Surachmad, 1987:15)

Where

P= Percentage

F= Total Numbers of Respondents' responses to each option/item

N= Total Number of all Respondents' responses/item.

FINDINGS AND DISCUSSION

This research consists of 21 respondents and 16 questionnaire items. Total respondents which answer strongly agree (SA), agree (A), disagree (DA) and strongly disagree (SD), there are four factors that support the result those are Usefulness, Ease of use, Ease of learning and satisfaction.

| Factor	Questions	Scoring			
		A	SA	D	SD
Usefulness	1. Does this application (Google Classroom) help you become more effective? (Apakah aplikasi ini (Google Classroom) membantu anda menjadi lebih efektif?)	24%	67%	0%	9%
	2. Does this application (Google Classroom) help you become more productive? (Apakah aplikasi ini (Google Classroom) membantu anda menjadi lebih produktif?)	6%	86%	0%	9%
	3. Is this application useful? (Apakah aplikasi ini bermanfaat?)	10%	90%	0%	0%
	4. Does this application (Google Classroom) save time when you use it? (Apakah aplikasi ini (Google Classroom) menghemat waktu saat anda menggunakannya?)	16%	45%	39%	0%
Ease of Use	5. Is this application (Google Classroom) easy to use? (Apakah aplikasi ini (Google Classroom) mudah digunakan?)	52%	48%	0%	0%
	6. Is this application (Google Classroom) simple to use when learning? (Apakah aplikasi ini (Google Classroom) mudah digunakan saat belajar?)	43%	43%	15%	0%
	7. Is this application (Google Classroom) user-friendly? (Apakah aplikasi ini (Google Classroom) mudah untuk penggunanya?)	15%	71%	5%	9%
	8. Can you use this application (Google Classroom) without instructions? (Bisakah anda menggunakan aplikasi ini (Google Classroom) tanpa instruksi?)		40%	48%	9%
	9. Do you learn how to use it fast? (Apakah anda belajar cara menggunakannya dengan cepat?)	9%	33%	33%	24%

Ease of Learning	10. This application (Google Classroom) makes learning activities more effective. (Aplikasi ini (Google Classroom) membuat kegiatan belajar menjadi lebih efektif.)	15%	57%	19%	9%
	11. Do you easily remember how to use this application (Google Classroom)? (Apakah anda mudah mengingat cara menggunakan aplikasi (Google Classroom) ini?)	29%	57%	15%	0%
Satisfication	12. Are you satisfied when using this application (Google Classroom)? (Apakah anda puas saat menggunakan aplikasi ini (Google Classroom)?)	9%	67%	13%	9%
	13. Is this application (Google Classroom) fun to use? (Apakah aplikasi ini (Google Classroom) menyenangkan untuk digunakan?)	9%	76%	9%	5%
	14. Does this application (Google Classroom) work as expected? (Apakah aplikasi ini (Google Classroom) berfungsi seperti yang diharapkan?)	29%	52%	19%	0%
	15. Is this application (Google Classroom) convenient to use? (Apakah aplikasi ini (Google Classroom) nyaman digunakan?)	9%	91%	0%	0%
	16. Do you agree this application (Google Classroom) is effective as a learning medium during the Covid-19 pandemic? (Apakah anda setuju aplikasi ini (Google Classroom) efektif sebagai media pembelajaran di masa pandemi Covid-19?)	40%	57%	0%	0%

A. Usefulness

The researcher uses questions about how to use the Google Classroom application in this factor, including questions about whether or not the application is useful and a number of other questions about how to use it. A chart of students'

responses to questions will be displayed below, indicating that this application is effective in assisting students in the online learning process. The chart below lets you see it and look at it.

Figure 1. Usefulness
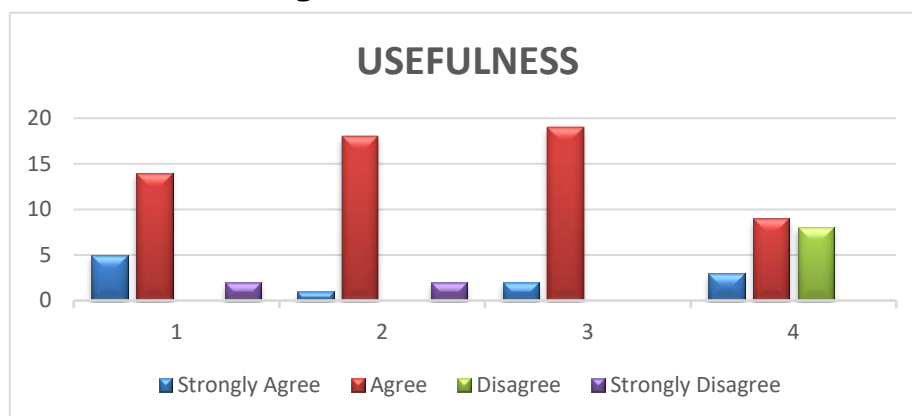
The results of the questionnaire with the usefulness factor, ranked from one to four, can be seen and examined in the graph above. The first question received responses from 5 students who strongly agreed, 14 students who agreed, and 2 students who strongly disagreed. In this particular instance, it demonstrates which responses to the question "Does the Google Classroom application increase your effectiveness?" with the responses of more than half of the participants' students indicating that question one has been deemed successful. The responses from the respondents reveal whether or not it is successful. The data from the chart above can be seen so that Google Classroom's effectiveness can be determined.

second question: Does this app, Google Classroom, help you work more efficiently? as can be seen from the students' responses to question number two—19 of them said they agreed with this—student question number two was also deemed successful because more than half of them said this application can make them more productive. As a result, students are enthusiastic about Google Classroom itself, which enables them to manage all of their subjects and assignments from a single application.

Is this application useful? is the third question in the usefulness factor. They all responded in the same way, demonstrating that during the pandemic, Google

Classroom is helpful for learning. Additionally, the chart above demonstrates that students can experience the advantages of using Google Classroom by simply managing all class schedules and assignments.

The fourth question is, Does Google Classroom save you time when used? For the question itself, number 4, there are approximately 12 students who say that using Google Classroom saves time, but there are also students who say that it doesn't.

B.   Ease of Use

The researcher uses questions about how easy it is to use the Google Classroom application in this factor, such as whether it is easy to use and a number of other questions about ease of use. A chart of students' responses to questions will be shown below. All of the students agreed that Google Classroom is an application that is easy to use and good at helping students learn during a pandemic. The chart below lets you see it and look at it.

Figure 2. Ease to use
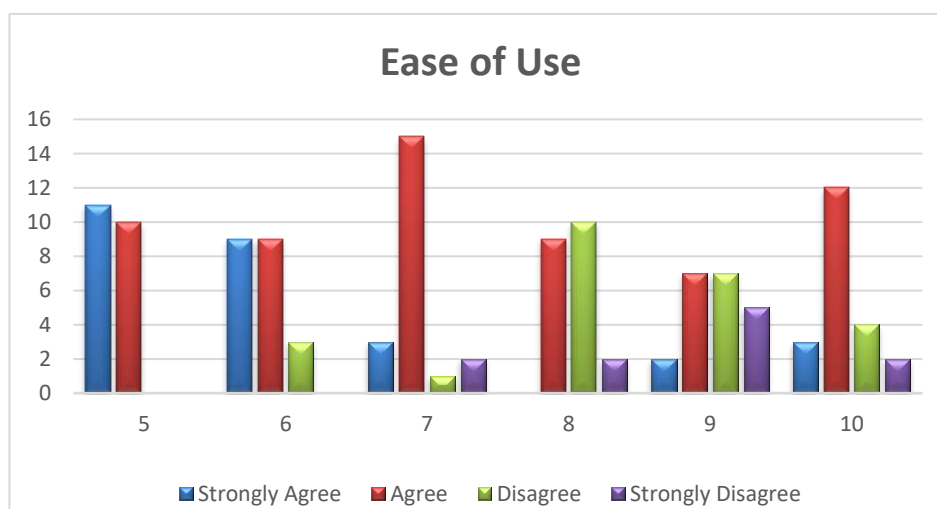
The researcher examines the ease with which students use this application in this chart. Concerning the fifth question, "Is this application (Google Classroom) simple to use?" With questions like this, we can see what students say about how easy it is to use the application. We can see from the data above that every student or respondent agrees with question 5. As a result, the features of the Google Classroom application can assist students in understanding the lessons taught during the pandemic.

Concerning the sixth question, "Is this application, Google Classroom, simple to use while studying?" As the responses of the students can be seen in the chart above, in addition to managing all existing subjects and conducting online school through Google Classroom, it turns out that it can also make it easier for students to learn. According to the graph above, 18 students concur that Google Classroom makes learning easier for them, but there are also students who disagree. Three students disagreed with the explanation, which focused on how simple it was to use Google Classroom for learning.

The seventh question asks, "Is this application, Google Classroom, simple for users?" Because there are some applications that are too difficult and unfriendly for users, the researcher wants to see if students, some of whom were unfamiliar with the application before the pandemic, respond to this question. 18 of the students who responded to this question agreed that the Google Classroom application was user-friendly. Despite the fact that there were some students who did not agree with this, the data above indicates that more than half of them gave positive responses, indicating that this application is user-friendly.

Answer to the eighth question, "Can you use this application (Google Classroom) without following the instructions?" We can see that students who disagree are greater than students who agree in question number 8. This is because students who agree are students who are new to technology and students who agree are students who already know how to use technology. In question number 8, it turns out that there are nine students who agree and ten students who disagree. Even though the application appears to be simple, it would be helpful to receive instructions before using it to improve performance.

The ninth question asks, "Were you able to use it quickly?" The students of SMPN 4 Tondano face a challenge due to their ignorance or lack of technological background. As a result, many kids use apps to learn at school without first getting help. As a result, learning the application takes a long time and also takes a lot of time so that they can use it effectively. As a result, the data from the existing chart show that nine students agree that the application is simple to learn and that 12 students disagree that it takes time to master.

The answer to question ten about this application (Google Classroom) improves the efficiency of learning activities. The level of usability and utilization of an application can be used to determine its effectiveness. In response to this question, 15 students agree that the application is very effective in assisting students in learning. However, some students disagree, citing inadequate or supportive devices and an environment that is less supportive for the learning process.

C.   Ease of Learning

Questions like "Do you easily remember how to use this application" (Google Classroom) are used by the researcher in this factor to assess how easy it is to learn the Google Classroom application. A chart of students' responses to the questions will be shown below. All of the students agree that Google Classroom is an application that is easy to use and good at helping students learn. The chart below lets you see it and look at it.

Figure 3. Ease of Learning
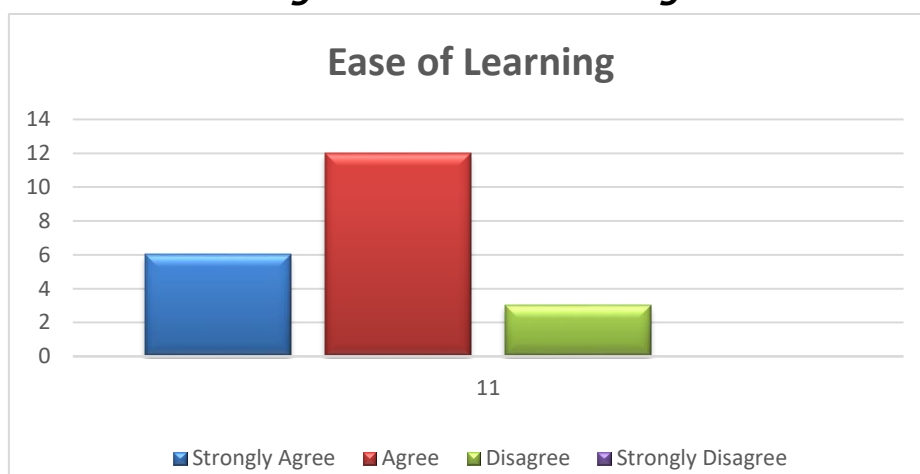
Question number 11, which asks if you easily remember how to use Google Classroom, Students who have never used technology before will struggle to remember if it is only taught once, as the researcher explained in the previous number. Because of this, the teacher's role in the education process is very important. In response to this question, 18 students gave positive responses about how to use this application, which were easy to remember. There were also students who disagreed, but it turned out that more of the respondents chose to agree. from opposing parties.

D.   Satisfaction

The researcher uses questions about how easy it is to learn the Google Classroom application in this factor, such as whether you are satisfied with it. A chart of students' responses to the questions will be displayed below. All of the students agree that Google Classroom is a user-friendly application that excels at assisting students in the learning process and that they are pleased with its performance. The chart below lets you see it and look at it.

Figure 4. Satisfaction

The 12th question asks, "Are you satisfied with the use of Google Classroom?" According to the chart that is currently in use, almost all of the students are satisfied with this application and agree with it. As many as 16 students say they like it, and only 5 students say they don't. As a result, in the event of a pandemic, we can be confident that students will benefit greatly from the Google Classroom application.

The thirteenth question asks, "Is this app (Google Classroom) fun to use?" The fact that 18 students or respondents responded in a way that was in agreement with the questions demonstrates how enthusiastic students are about using Google Classroom. During the pandemic, this makes Google Classroom one of the most widely used educational applications.

The fourteenth question asks, "Does this application, Google Classroom, work as expected?" The results of the student responses are clearly visible; approximately 17 students responded positively, and the remaining students disagreed. However,

based on the findings of this analysis, it is possible to conclude that Google Classroom is the solution for students in need of an adequate application facility. Google Classroom is a versatile application that is able to collect assignments and manage all of the classes that are currently in session. As a result, this application is one that is anticipated.

The 15th question asks, "Is this application (Google Classroom) easy to use?" In terms of convenience, this Google Classroom application is convenient because we can use the same account on multiple devices. Based on the students' responses, which all agree and were positive, it can be concluded that this application can make students feel at ease.

Question 16: Do you agree that Google Classroom is an effective learning tool during the Covid-19 pandemic? which can be used at a young age during a pandemic and is extremely helpful throughout the learning process.

Discussion

We have seen the results of each student's response to the questionnaire that was given to them. The results are very good, and they say yes. Despite the fact that some of the questions were answered with disagreement, each question received a positive response. However, this is because of a lack of technological mastery and ignorance. Google Classroom is an application or media that is very helpful for students during a pandemic because almost all schools have used it to contribute to the learning process that every student at the school goes through.

This application is also very useful for a number of other reasons, including the ability to collect assignments. Not only can the teacher give assignments, but students can also collect them through this application, and the teacher can determine whether students collect their assignments on time or not. Second, each subject can be organized into a single folder or class. So, from the first meeting to the last, students will only click on the class that is scheduled at that time. There will be no need to be confused because the class name and the material will be very clear. The third thing is that the teacher can keep track of attendance using Google Classroom, so students don't have to use other apps to keep track of attendance. Last but not least, teachers can use the Google Meet link to connect to Google Classroom for online meetings.

Therefore, students do not need to relocate existing classes or links. However, the only way to connect to the instructor, who will be holding an online meeting at that moment, is to open the classroom and click on a camera icon. As a result, the Isa book concludes that this application has a number of useful features and can assist students in a variety of ways. It is undeniable that this application is a media that is really needed during the pandemic to assist students in the teaching and learning process because of its convenience, usability, and convenience.

Conclusion

During the pandemic, it is possible to draw the conclusion based on the aforementioned data that the Google Classroom application is extremely effective in the education sector. not only assisting the teacher with class management. However, it also assists students in a variety of ways, including attendance, online meetings, and assignment collection. As a result, we are able to identify which Google Classroom media are efficient to use and can aid in learning.

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