

Learning in covid-19 pandemic: The effect of using zoom cloud meetings on high school student learning activities

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ABSTRACT

Based on the observations made by researchers, some problems arose, such as 1) there were 22% participation aspect, 26 % time aspect, 25% aspect of doing assignments, 9% note-taking aspect, 31% learning frequency aspect, and 31 % aspects of overcoming learning difficulties. This study aimed to determine: 1) whether there was an effect of zoom cloud meetings on student learning activities, and 2) how much influence zoom cloud meetings had on student learning activities. This study used a quantitative approach with a survey method. The population in this study found 113, and the sample found 66, obtained by the Proportional Random Sampling, sampling technique.

The research was conducted at the Jinarakkhita School of Buddhism in Lampung with even semester students as respondents. Results based on the research provide a real picture of the significant influence of the zoom cloud meeting on the Variable of student learning activities. Criteria for testing the hypothesis is to reject H_0 if $t \text{ count} > t \text{ table}$ and vice versa. For the distribution used $dk = (n-2)$ and $\alpha = 0.05$. Data analysis showed that $t \text{ arithmetic} = 3.081$ while $t \text{ table}$ with $n = 66$ and $\alpha = 0.05$ obtained 1.668. Then it can be seen that $t \text{ count} > t \text{ table}$ ($3.081 > 1.668$) or $\text{sig} (0.003 \leq 0.05)$, so it can be ascertained that H_0 was rejected and H_a was accepted so that there was an effect of zoom meeting on student learning activities.

KEYWORDS

Zoom Cloud Meetings;
Learning Activities; Online
Learning

Received: 1 November 2022
Accepted: 10 December 2022
Published: 30 January 2023

Introduction

The Covid-19 pandemic that has hit the entire world community, including Indonesia, has undoubtedly greatly affected the behavior of all levels of society. These layers of society impact government, education, economy, business, religion, and other public services. In education, initially, learning could be done on campus face-to-face, but with the Covid-19 situation, learning is currently being conducted online. Online learning has an evident positive and negative impact that lecturers and university students can feel.

Online learning can improve the quality of education by allowing students to have the ability to learn to be more attractive, interactive, and varied. One way to improve the quality of education is to develop student-oriented learning. This orientation can be acquired through technology in a system known as online learning. One application that can support the lecture process is zoom cloud meetings. With Zoom cloud meetings, students can conduct lectures online without worrying about being left behind in the learning process.

However, if you look at the current situation, it seems that the above conditions have not been appropriately realized. Based on the researcher's observations, many obstacles are still experienced in using zoom cloud meetings. For example, many students complain that zoom cloud meetings waste internet quota, lack student signals, and lack funds to buy internet quota. In addition, there are also obstacles experienced in online learning activities. For example, students cannot do practical learning directly for practicum courses. Some students still have difficulty operating the Zoom cloud meetings application and assignments that are too piled up and lack understanding of the material covered—delivered by the lecturer.

The facts obtained from researchers' observations and learning during this pandemic period learning activities are pretty weak. The slightly soft move can be seen from external problems, including using learning media, in this case, using zoom cloud meetings. In line with what was stated by the Jakarta Religious Education and Training Center (BDK) of the Indonesian Ministry of Religion regarding the Effectiveness of Online Learning in the Covid-19 Pandemic Period (Tuesday, 7 July 2020), it was revealed that problems such as internet connections. One of the obstacles faced by students is the difficulty of accessing the internet in the area where they live. Even though someone uses a cellular network, sometimes the network is still unstable because the geographical location is still far from the reach of cellular signals.

In addition to the observations above, the researcher made observations on Thursday, 25 March 2021, using preliminary research on learning activities by taking 16 students as respondents. From the survey results, it was found that: 1) There are still 22% of students with problems in the aspect of participation, 2) 26% in the aspect of time, 3) 25% in the aspect of doing assignments, 4) 9% in the note-taking aspect, 5) 31% in the aspect of frequency of learning, and 6) 3% on the aspect of overcoming learning difficulties. Based on the facts from these observations, efforts are needed to optimize the innovative online learning process. Therefore, it is necessary to examine the problem of learning activities as the primary Variable, which is associated with other variables that are thought to influence learning activities, namely the use of zoom cloud meetings.

Literature review

Learning Activities

The definition of learning activities put forward by (Ariandi, 2017) is student involvement in the form of attitudes, thoughts, and attention in learning activities to support the success of the teaching and learning process and benefit from these activities. In line with (Noor & Munandar, 2019), learning activities are a combination of thinking and doing. Without action means, students do not think. Thinking about something good can increase students' ambition in responding to various things that come their way. Situations that arise make the learning process must be carried out not contextually but following the rules. (Rahmadani & Anugraheni, 2017) Learning activities are all student activities in the learning process, ranging from physical activities to psychological activities.

They were also explained by (Sinaga & Silaban, 2020) that learning activities are activities carried out by students during the learning process to achieve learning outcomes. To achieve optimal learning outcomes in learning, it is necessary to emphasize the existence of student activities both physically, mentally, intellectually, and emotionally. Then (Muttaqien, 2017) argues that learning activities are activities that are both physical and mental. In learning activities, these two activities must support each other in order to obtain maximum results. Research conducted by Mirdanda (2019:7) shows that learning activities are all actions to become students who learn. Therefore, if students are in a "learning" condition, they are considered "active." If "not in a learning condition," it is the educator's task to provide exciting and even challenging activities that can spur students to be involved so that learning occurs.

Explaining the concepts that have been described, it can be synthesized that what is meant by learning activities are all forms of activities carried out by lecturers and students in the learning process. Through learning activities that are carried out consciously and arranged according to learning principles, students' physical and psychological conditions will produce optimal learning outcomes. The indicators are: 1) visual activities, 2) oral activities, 3) listening activities, 4) writing activities, 5) drawing activities, 6) motor activities, 7) mental activities, and 8) emotional activities.

Zoom Cloud Meetings

Monica & Fitriawati, 2020, p. 1636 define zoom cloud meetings as a practical learning media that provides features in scheduling meetings, sharing documents, and chatting to make learning easier. In line with what has been stated by (Haqien & Rahman, 2020) that zoom cloud meetings are a learning media using video. This media is not only used for learning but can be used for office and other matters. Then according to Elsunarti (2020:28-29) zoom cloud meetings is an application that is used to make video calls not only one on one but also in a group of up to 100 people.

Research conducted by (Nasir et al., 2020) explained that zoom cloud meetings are a medium that provides a breaking room feature. Lecturers commonly use this feature by giving a precious peer-to-peer learning experience for building student relationships and confidence. Further supported by the opinion of (Yudiawan, 2020), Zoom cloud meetings are learning media that are primarily used in online classes, which students and lecturers use in the learning process. Also presented by (Kusuma & Hamidah, 2020) is that zoom cloud meetings are learning media with video conferencing used in the learning process that can complement the e-learning platform.

The concepts described above can be synthesized into that zoom cloud meetings are media in the form of video conferencing equipped with document sharing features, chat, and presentation modes that many people can use to help facilitate all activities carried out online, both online and offline. Learning and work processes during the Covid-19 pandemic. The indicators are 1) context, 2) input, 3) process, and 4) product.

Methods

This study uses a quantitative approach with a survey method. This study's independent Variable (X) is Zoom Cloud Meetings, while the dependent Variable (Y) is learning activities.

Participants

The population in this study were all even semester students totaling 113 students. With a sample collection technique, namely proportional random sampling and a representative sample estimation table, the research sample was obtained by as many as 66 people.

Instruments

The type of instrument in this study was a questionnaire and was tested on 15 students. Instrument trials are intended to perfect the instrument in order to obtain the validity and stability (reliability) of the statement items in the research instrument. The instrument grid uses a Likert scale score calculation scale.

Data analysis

Data from quantitative research were analyzed using descriptive statistics. Data analysis begins with the study of the requirements of the analysis, namely: normality test, homogeneity test, then continued with the determination of the regression equation, the significance test of the regression equation, and testing the hypothesis with a regression test using the ANOVA table.

Results

Descriptive Analysis

Learning Activities

The data obtained from the field are statistically processed into a frequency distribution table. The results show seven classes with a maximum score of 144, a minimum value of 93, and a range value of 51. The descriptive statistical calculations show that the average value (mean) of Learning Activities is 117.24 with a standard deviation of 12.786 and a variance value of 163.47, median 116, 00, and 111 modes.

Zoom Cloud Meetings

The transformational leadership data has the highest value of 137 and the lowest value of 82, with a range of 55. The results of the data calculation show an average of 109.02, a standard deviation of 11.263, a variance 126.84, a median 109.00, and a mode 104.

Analysis Requirements Test

Normality Test

The requirements for the sample data are from a normally distributed population with a significant level of 0.05 or 5%. Based on the results of the normality test obtained from 66 respondents, which includes data on the zoom cloud meetings (X) variable and student learning activities (Y), it is known that the significant (2-tailed) value of the student learning activity variable is 0.200, which means $0.200 > 0.05$. then the data is usually distributed. While the significance value (2-tailed) of the zoom cloud meetings variable is $0.170 > 0.05$, the information is normally distributed. The results of the calculation of normality are presented in the following table.

Table 1. Normality Test Results

		X	Y
N		66	66
<i>Normal Parameters^{a,b}</i>	Mean	109,02	117,24
	Std. Deviation	11,263	12,786
	<i>Most Extreme Differences</i>		
	Absolute	0,100	0,065
	Positive	0,071	0,065
	Negative	-0,100	-0,065
<i>Test Statistical</i>		0,100	0,065
<i>Asymp. Sig. (2-tailed)</i>		,170	,200c,d
Test Distribution is Normal			

Source: Research Calculation 2021 Using SPSS 26.0

Homogeneity Test

The requirement for homogeneity variance is if the test criteria are more than 0.05 or 5%. Based on the homogeneity test results from the Output test of homogeneity of variances, it is known that the significance value of zoom cloud meetings is 0.082, which means $0.082 > 0.05$. The zoom cloud meetings variable data is homogeneous. While the significance value of learning activities is 0.092, which means $0.092 > 0.05$, the data for learning activity variables are homogeneous. Thus it can be concluded that the variance of the two groups is homogeneous. The results of the homogeneity calculation are presented in the following table.

Table 2. Homogeneity Test Results

	<i>Levene Statistic</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
X	3,069	1	130	0,082
Y	2,873	1	130	0,092

Source: Research Calculation 2021 Using SPSS 26.0

Simple Regression Analysis

This analysis aims to predict the value of the dependent Variable if the value of the independent variable increases or decreases and to determine the direction of the relationship between the independent Variable and the dependent Variable, whether positive or negative. Based on the results of simple regression analysis testing, the results show that F count = 9.491 with a significance level of 0.003 < 0.05 , so regression analysis can be used to predict participation variables; in other words, there is an effect of the zoom cloud meetings (X) variable on student learning activities (Y). To find out more clearly can be seen in the following table.

Table 3. Simple Regression Analysis

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	1372,333	1	1372,333	9,491	,003b
	Residual	9253,788	64	144,590		
	Total	10626,121	65			

a. Dependent Variable: Y

b. Predictors: (Constant), X

Source: Research Calculation 2021 Using SPSS 26.0

Analysis of the Coefficient of Determination (R²)

The determinant coefficient (R²) is used to find out how well the sample uses the data. Based on the analysis of the coefficient of determination, the results obtained from the output percentage of the influence of the independent Variable (zoom cloud meetings) on the dependent Variable (student learning activities), which is called the coefficient of determination (R Square) of 0.129. This means that the effect of the independent Variable on the dependent Variable is 12.9% while other factors outside this study influence the remaining 87.1%. To find out more details can be seen in the following table

Table 4. Analysis of the Coefficient of Determination (R²)

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted Square</i>	<i>Std. Error of the Estimate</i>
1	,359	0,129	0,116	12,025

a.Predictors: (Constant), x

b.Dependent Variable: y

Source: Research Calculation 2021 Using SPSS 26.0

Statistical Hypothesis Test

The calculation results obtained from the regression analysis that t_{count} is 3.081 and t_{table} from 66 respondents with dk n-2, so it becomes 66 respondents with a significant level of 0.05 at 1.668. Then it is known that $t_{count} > t_{table}$. With a value of 3.081 > 1.668 or $sig < 0.05$ ($0.003 < 0.05$). So it can be concluded that the two variables have a regression relationship, and there is an influence between the zoom cloud meetings (X) variable on student learning activities, meaning that H₀ is rejected and H_a is accepted. The results of the calculation of the research hypothesis test for more details can be seen in the following table.

<i>Model</i>	<i>Unstandardized Coefficients</i>	<i>Coefficients</i>	<i>Standardized Coefficients</i>	<i>Sig.</i>
	B	Std. Error	Beta	
(Constant)	72,767	14,512		0,000

Table	X	0,408	0,132	0,359	0,003	5.
Coefficients						

Dependent Variable: y

Source: 2021 Data Processing Results Using SPSS 26.0

Then as for the positive and significant influence between zoom cloud meetings on student learning activities, it is shown in the scatter plot of data which shows positive below

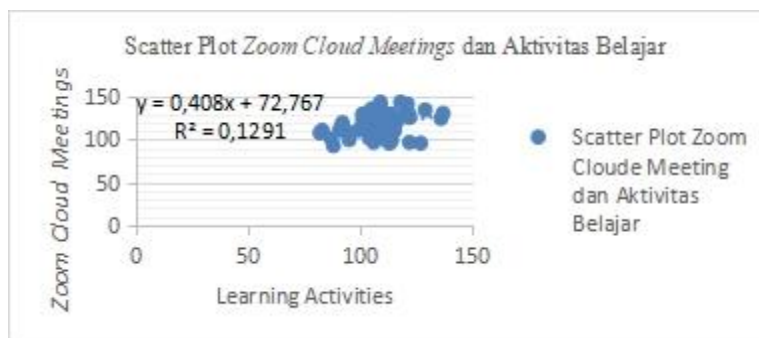


Figure 1. Scatter Plot Data

Based on the results of data analysis and hypothesis testing, it was found that there was a positive influence between zoom cloud meetings and learning activities. The hypothesis testing results indicate that this study's hypothesis can be accepted. This means that the assumptions underlying the theoretical assessment are supported by empirical data from respondents. Further discussion of the research results is explained in terms of the effect of zoom cloud meetings on learning activities.

The results of the study, which show that there is a positive effect of zoom cloud meetings with learning activities, are interpreted that zoom cloud meetings are in the form of video conferencing applications that are equipped with document sharing features, chat, and presentation modes that many people can use to help facilitate all activities carried out online, both online and offline. Learning and work processes during the Covid-19 pandemic. The strength of the influence of zoom cloud meetings with learning activities can be seen in the regression test results with a coefficient value of 0.408. The diversity that exists in learning activities is related to the use of zoom cloud meetings, and it can be seen from the value of the coefficient of determination of 0.129 so that the diversity in learning activities contributes to 12.9%. At the same time, 87.1% is influenced by other factors outside of zoom cloud meetings which were not examined in this study.

The above results are in line with the results of research conducted by Purba, Jhon Herisson, and Nur Rahmah Andayani (2021:21) entitled "The Influence of the Application of Work from Home (WFH) and Study from Home (SFH) on Teaching and Learning Activities in Theory Courses: Case Studies at the Batam State Polytechnic." There is a significant influence between the implementation of WFH and SFH assisted by various applications, one of which is zoom cloud meetings with learning activities. According to the Pearson correlation test, the correlation is significant at the 0.025 level with degrees of freedom (df) = $n - 2 = 120 - 2 = 118$. In addition, it is known that the R Square value is 0.439. This value means that the effect of WFH and SFH (X) on teaching and learning activities (Y) is 43.9%. In comparison, 56.1% of teaching and learning activities are influenced by other variables not examined.

Further research Valery Rendika, et.al (2021:221) entitled "Zoom-Based Online Learning on Student Learning Readiness During the Covid-19 Pandemic". There is a significant effect between zoom cloud meetings and learning activities. According to the Pearson correlation test, the correlation is significant at 0.05. In addition, it is known that the value of r square is 0.498 or 49.8%. This means that the online "zoom" based learning model's contribution to student learning readiness is 49.8%. In comparison, 50.2% is a contribution from other variables. The higher the effective use of zoom cloud meetings, the higher the increase in learning activities. Based on the description above, the results of the descriptive analysis conducted by the researcher show that there are statement items with low-value categories. This affects the use of zoom cloud meetings on student learning activities. The zoom cloud meetings variable item is seen from product indicators. Namely, students are less inspired by the material delivered by lecturers through the zoom cloud meetings application. In connection with these indicators, several things cause students to be less inspired, such as classical learning methods, sometimes monotonous learning models, and lack of innovation in designing teaching materials. While the learning activity variable items are seen from the drawing activities indicators, students have difficulty finding the location of a classmate's house through maps to work on joint assignments. In connection with these indicators, several things make students difficult in the process of doing

collaborative assignments, such as the weak internet network in the student's residence, cell phones that do not support the maps feature, and minimal internet quota.

In connection with the above, if students carry out learning activities through zoom cloud meetings by showing aspects of visual activities, oral activities, listening activities, writing exercises, drawing activities, motor activities, mental activities, and vigorous activities to the fullest, learning activities will be more effective. Practical learning activities help students identify the most technical feelings, values and attitudes as well as topics to support effective learning (Sinar, 2018:16). Then, the essential learning activities will meet the needs felt by students, therefore learning behavior is needed to have a goal to solve the problems faced to meet learning needs (Suardi, 2018:14). In addition, in line with Lestari (2020:22) the learning activities carried out can provide added value for students in the form of the following: Students have the awareness to learn as a form of motivation to learn true; Students seek to experience and directly experience themselves, which can have an impact on the formation of an integral personality; Students learn according to their interests and abilities; To develop a disciplined attitude and a democratic learning atmosphere among students; Learning is carried out concretely so that it can create understanding and critical thinking and avoid verbalism; and To develop a cooperative attitude among students so that higher education becomes alive, in line, and in harmony with life in the surrounding community. The explanation that has been conveyed means that the learning process can run effectively if it is supported by student learning activities that follow the objectives.

Discussion

Efforts can be made to increase learning activities by optimizing the use of zoom cloud meetings. This is explained as follows: Having media and learning facilities for online learning. In this regard, if lecturers have media and learning facilities using zoom cloud meetings in an exciting and innovative way, learning activities will be better; The need for an online learning system. It was explained that if students have internet networks or other supports that can support the learning process using zoom cloud meetings, learning activities will be more conducive and more effective; The environment for implementing the online learning system. This relates to the suitability of the place to take part in the online learning process, both lecturers and students if they are able to maximize the learning environment properly. Then the obstacles / obstacles faced can be minimized so that learning activities run smoothly; Availability of online learning facilities. Lecturers and students should have a zoom cloud meetings application available on their respective laptops/androids, so that they become a supporting tool in online learning. In addition, having subject matter as learning material is of course very necessary in supporting online learning.

So that the use of zoom cloud meetings and existing learning materials can help improve learning activities towards a better and more active direction; Understanding of students and lecturers in the use of zoom cloud meetings. Things related to understanding are interpreted as the role of the lecturer in providing stimulus to students in the online learning process, so that students are more focused on learning, the subject matter presented by the lecturer must be more varied and easy for students to understand.

So from this, student learning activities will increase and get better in the learning process; The quality of the material delivered in the online class. This is related to the material provided by lecturers to students through zoom cloud meetings, it needs to be more interesting, not monotonous and weighty so that students can more easily master the material presented and create learning activities with qualified material quality; Implementation of the online learning system. Regarding the online learning system, it is more directed to the use of zoom cloud meetings which is practical to use because, with the completeness provided by the zoom cloud meeting application, lecturers and students are expected to be able to maximize the applicable system. Through the convenience supplied by the Zoom cloud meetings application in supporting the learning process, learning activities will become more educative; Lecturer activities. Matters related to lecturer activities can be seen from the lecturers' efforts in utilizing the use of zoom cloud meetings, presenting material through zoom cloud meetings, and interacting with students during the learning process. All efforts made by lecturers to assist students in online learning are needed so that student learning activities can be improved for the better; The results obtained in the use of zoom cloud meetings. These results are about how students gain experience from zoom cloud meetings, inspiring creativity, active learning, and so on. Based on this, if the results obtained are maintained, learning activities will become more inspiring; and have a Scientific Impact.

Regarding the output obtained by students participating in the learning process using zoom cloud meetings. If students take lessons seriously, the impact of science is in the form of good grades in each subject matter, overcoming difficulties that arise, and feeling helpful in learning with zoom cloud meetings. So it can be concluded that using zoom cloud meetings as needed will make learning activities more optimal.

The results of this study indicate the effect of zoom cloud meetings on student learning activities. The author realizes that there are still shortcomings in this study, so the authors provide suggestions, namely: To the Jinarakkhita Institute of Buddhism, Lampung, continue to increase the use of zoom cloud meetings to help the learning process during the pandemic to increase positive learning activities; To the readers, the results of this study are expected to add insight into knowledge related to the use of zoom cloud meetings for student learning activities, related to aspects that support the learning process. Especially those who are interested in knowing more about the use of zoom cloud meetings at the Jinarakkhita School of Buddhism in Lampung; and Further researchers are expected to be able to develop, measure each Variable more deeply and improve existing research supported by the latest information, according to the conditions experienced so that the benefits and results of research can be felt directly by researchers, the community and high school students.

Conclusion

Based on the research analysis results, it was concluded that there was a positive and significant influence between zoom cloud meetings and student learning activities. The considerable effect of Zoom Clouds Meeting on student learning activities at 12.9% and the remaining 87.1% were influenced by other factors outside this study. Therefore, it is necessary to formulate implications for increasing learning activities through zoom cloud meetings. Increased learning activities through zoom cloud meetings, following research on the effect of using zoom cloud meetings on student learning activities. Then it implies that improving zoom cloud meetings is predicted to increase learning activities. The results showed that the effect of using zoom cloud meetings on student learning activities was very significant. Zoom cloud meetings is a video-conferencing application equipped with document sharing features, chat, and presentation modes that many people can use to help facilitate all activities carried out online, both the learning process and work during the Covid-19 pandemic.

Acknowledgements

All praise and gratitude the writer prays to the presence of God Almighty. Because of His blessings and gifts, so the writer can finish this research. With the completion of this research, it is not an end, but a new beginning to start a new life adventure. The author is fully aware that there are people who contribute to the completion of this research. There is no best offering that the author can give other than gratitude to those who have helped the author a lot. In particular, the author would like to thank Wistina Seneru, S.Pd., M.Pd and Hendri Ardianto, S.Pd.B. M.Pd as supervising lecturers who have been patient, took the time, volunteered their energy and thoughts and also paid attention in providing assistance during the process of writing this research Thank you also to STLAB Jinarakkhita Lampung for giving the opportunity to be able to conduct research there. All the shortcomings and imperfections of this research, the authors really look forward to input, criticism, and constructive suggestions towards the improvement and refinement of this research. There were quite a lot of difficulties that the writer experienced in preparing this research, but Praise God, it was resolved properly Finally, the writer hopes that this research will be useful for all parties and that the good deeds that have been given will be rewarded by God Almighty

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