The Effect of Using Google Classroom As An English Learning Media on Students' Learning Motivation: The Case of Students at SMP N 1 Juwana in the 2021/2022 Academic Year

ISSN: 2828-7193

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Abstract.

The objectives of this study were to find out whether there is an influence in the use of Google Classroom on students' motivation in learning English. The design of the research was quantitative which belonged to survey research. The population of this research was the nineth grade students of SMP N 1 Juwana which consisted of 325 students. The sample was IX-A and IX-B class which consisted of 60 students. Sampling in this study was done by random sampling. Data collection techniques in this study using a questionnaire. The results of the research shows that there is an effect of using google classroom on students' motivation in learning English. This is shown from the correlation test results obtained value of Sig is $0.001 \le 0.005$ which states that H0 was rejected and Ha was accepted with a simple linear regression equation Y = 38.866 + 0.158X.

Keywords: Google Classroom, English Learning, Learning Motivation

Introduction

Education is important for every human being. Nowadays, education has become a basic need that can make humans more developed and ready to face challenges in the future. One of the efforts that can be done to improve the quality of education is through learning.

Teachers, who are at the forefront of education in a society that is becoming more and more technologically advanced, must keep up with changes in the educational system, as the present method of teaching has evolved along with technical development. Using technology in the classroom is one method to boost students' motivation for learning. Teachers may more effectively fulfill their teaching and learning goals by inspiring pupils to desire to continue studying. Hence, incorporating information technology into education is an effort to improve the standard of teaching and learning activities.

The use of technology is expected to be able to change the learning model so that it is not monotonous because it can be done without having face-to-face activities in class. It is undeniable that currently students have been facilitated by their parents with a smartphone so that if learning activities are carried out using online methods they can follow them easily.

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One of the current uses of technology is e-Learning. There are many e-learning-based platforms that can be used as learning media, including Google Meet, Zoom, Edmodo, Telegram, and WhatsApp. Google Classroom is one of the e-learning-based platforms that can be considered to be a productive and successful teaching tool, though. With Google Classroom, teachers may more readily distribute assignments and other reading material outside of face-to-face class activities, and students can submit work electronically without using paper.

ISSN: 2828-7193

For teachers and students, learning with Google Classroom is challenging because prior to this, learning activities were conducted face-to-face in the classroom. By utilizing Google Classroom, the learning environment will be improved and will become more dynamic, efficient, and engaging. The teacher's main duty is to encourage student desire for learning in order to utilize the advantages of the E-learning system and enhance learning outcomes. Academics are interested in doing research to find out how utilizing the Google Classroom program affects students' propensity to study, particularly when it comes to learning English.

Literature Review

1. Google Classroom As A Learning Media

a. Definition of Google Classroom

There are some definitions about Google Classroom according to the experts. Zhang (2021, p. 3) states that Google Classroom is a Learning Management System (LMS) offered by Google to teachers and students. It is designed to connect teachers and students in online learning activities such as asking questions and creating paperless assignments.

Furthermore, Pinandhito, et al. (2020, p. 7) states that Google Classroom is a platform for online learning that can be accessed for free. It provides efficient features that can make it easier for teachers to manage paperless assignment, especially in all digital era.

On the other hand, Taryn (2020, p. 10) said that Google Classroom is a learning center designed to overcome the problems faced in making paperless assignments that can be used by all levels of education by accessing them online anywhere and anytime.

From the definition above, it can be conclude that Google Classroom is Learning Management System (LMS) offered by Google for teachers and students as a learning medium that provides efficient features to help make it easier to manage assignments. It can be accessed for free online and is not limited by place and time.

2. Learning Motivation

a. Definition of Learning Motivation

There are many different definitions for the term motivation. Uno (2021, p. 1) states that motivation is the basic impulse that comes from within a person that moves the person to behave.

Moreover, Dornyei & Ushioda (2013, p. 3) states that motivation comes from the Latin mover which means 'to move'. It means the power that moves someone to make a choice, to do an activity, and to do an effort.

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Meanwhile, Lestari (2020, p. 2) states that in learning activities, motivation is the overall stimulus or encouragement that grows from within that creates learning activities that provide direction and resilience in the learning process to achieve the desired goals.

Based on some of the definition above it can be conclude that learning motivation is a stimulus, encouragement or generator from within or from outside the individual or group that can channel, move and direct the behavior of the individual or group in learning.

3. English Learning

a. Definition of English Learning

English is an international language that is used not only for contact with other countries but also to expand and grow knowledge because science books and specialists are still imported from abroad (Izzan & Mahfuddin, 2014, p. 1).

English as a Second Language (ESL), also known as English for Speakers of Other Languages (ESOL), is a method that is specifically designed for people who use their first language for daily communication as well as for people who have limited English language proficiency, according to Carrasquillo (1994, p. 4).

On the other hand, Crystal (2019, p. 1) states that English is a global language. The statement defines that English is used by various countries to communicate with other countries around the world.

Based on the definition above, it can be conclude that Learning English is a second language that is learned after learning the first language or what is often referred to as the mother tongue. However, English is also a much needed skill that must be possessed by students because English has an important role in students' lives in the future which is used as a global communication tool throughout the world.

Method

Quantitative approaches and qualitative methods are the two main types of research procedures utilized in the social sciences, including education (Muijs, 2004, p. 1). The researcher used a quantitative method to obtain the data for this investigation. Quantitative inquiry was built on the measurement of quantity or amount (Kothari, 2004, p. 3).

The approach of this study was a survey research design. As part of the survey study design approach in quantitative research, a survey of the entire population is carried out to describe the attitudes, viewpoints, behaviors, or characteristics of the population (Creswell, 2012, p. 376). In this study, ex post facto research methods were used. The main flaw in this strategy was that the researcher could only record what had already happened or was happening and had no control over the variables (Kothari, 2004, p. 3).

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The treatment in this study had occurred before the researcher carried it out. Thus, the researcher did not control the treatment, so in this study, the researcher only collected data on the independent variable to the dependent variable. To get the result of this research, the researcher used the questionnaires. In this research, there are two variables, namely independent variable and dependent variable. The independent variable in this study was the use of Google Classroom, and the dependent variable was learning motivation.

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The population of this research was the nineth grade students of SMP N 1 Juwana in the academic year 2021/2022. The total of population were 325 students. The researcher chose two classes to be sampled for this research where each class consists of 30 students. So the total sample of this research is 60 students. In selecting the sample, the researcher used random sampling. The reason of the researcher used random sampling technique was because with the consideration that students have the same position and have the same opportunity to be selected regardless of rank, gender, and class of students.

In this research, the researcher used questionnaire as the instrument in collecting the data. The reason of the researcher collect the data using a questionnaire because a questionnaire was an efficient data collection technique if the researcher knows for sure the variables to be measured and what was expected of the respondents. A questionnaire was a form used in survey design that participants in a study complete and return to the researcher. The form of questionnaire can be devided into two, namely open-ended questionnaire and close-ended questionnaire. According to Creswell (2012, pp. 386–387), in close-ended questionnaire, the researcher poses a question and provides preset response option for the participant. Meanwhile, in open-ended questionnaire, the researcher do not provide the response options; the participants provide their own responses to questions.

In this research, a questionnaire was used to find out the effect of using Google Classroom on students' motivation in learning English. The researcher will use the questionnaire method by distributing questionnaires to students directly. It consists of several written questions about how much motivation students have towards learning English online through Google Classroom. The researcher used questionnaire with a Likert scale. According to Kothari (2004, p. 84), likert scale was developed using an item analysis approach where certain items are evaluated based on those with high scores and those with low scores. In this scale, students can respond to statements with five answers choices from Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD).

Finding and Discussion

Finding:

This research conducted in SMP N 1 Juwana. The researcher conducted it during 6 days, start from September, $19^{th} - 24^{th}$ 2022. The main sample in this study were grade IX students of SMP N 1 Juwana. It was IX-A and IX-B which consists of 60 students. The purpose of this study is to find out how learning activities are carried out using Google Classroom, to find out the kinds of motivation possessed by students who learn English at SMP N 1 Juwana, to examine the effect of using google classroom on students' learning motivation in English subjects at SMP N 1 Juwana.

1. Learning activities carried out using Google Classroom

Online learning activities using Google Classroom as learning media can be said to be very good online learning media, this is in accordance with the data

obtained through observational documentation studies by researchers. The use of Google Classroom in learning can generate desire, interest, motivation and encourage learning activities.

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The design provided by Google Classroom is in accordance with learning needs, teachers can easily send learning materials in the form of documents, power points, photos or videos to students online so that communication and interaction occurs between teachers and students without having to meet face to face. In addition, Google Classroom can also help students to make it easier to understand learning material so that they can create independent learning experiences.

Based on the results of observations made by researchers through documentation studies, Google Classroom has several features that facilitate online learning needs, namely the main page that can display student assignments, class arrangements, all data stored on Google Drive, and can be accessed easily via smartphone.

In addition, there are also other features that teachers can use in developing learning materials, including creating assignments, creating topics, creating announcements, and creating questions. A feature in Google Classroom that is often used by teachers is create assignment which functions to give assignments to students. In the create assignment, the teacher can also include a deadline for submitting assignments so that students can submit assignments according to the deadlines set by the teacher so that they can make students more disciplined in submitting assignments. There is also a create topic feature which functions to share learning topics that will be discussed in the Google Classroom virtual class so that students can actively participate when discussing learning topics. In addition, there is a create announcement feature that can be used by teachers to convey information to students. The create question feature is no less interesting than other features. This feature is used by teachers to ask questions to students. Another advantage of Google Classroom is that there are no advertisements in it so that it provides comfort for its users.

2. The kinds of motivation possessed by students who learn English at SMP N 1 Juwana.

Motivation can be said as an important aspect to carry out certain activities to be successful. Almost all the activities carried out require motivation as a driving force and encouragement in doing their best, one of which is learning English. When a student is motivated to learn English, they will do their best to get good results. They will seek any effort to be able to master English. Conversely, if a student is not motivated to learn English, they will not try to master English or even don't care.

Based on the questionnaire that has been distributed to students, it provides information that most students have motivation in learning English that grows from their intrinsic motivation, intrinsic motivation is motivation that comes from within a person. Students of SMP N 1 Juwana who enjoy learning English because of their own desires and pleasure. There are several reasons that make students motivated to learn English such as students wanting to learn English because they want to improve their English skills, they will be more confident when participating in English activities, and they learn English because they really enjoy English. From these reasons students will be encouraged to try so they can achieve their goals in learning English.

Furthermore, from the results of the questionnaire, information shows that students of SMP N 1 Juwana who are motivated to learn English are also due to extrinsic factors. Extrinsic factors are factors that arise from outside a person. Based on the results of the questionnaire, information shows that there are several external factors that motivate students to learn English such as wanting to get good grades in exams, wanting to get praise or appreciation from other people or the possibility of continuing their education abroad. In this finding, students have good motivation in learning English, so it will be beneficial for teachers for students to succeed in learning English.

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3. The effect of the use of Google Classroom on learning motivation of students SMP N 1 Juwana.

To find out whether there were an effect in the use of Google Classroom on students' motivation in learning English at SMP N 1 Juwana, the researcher analyzed the data as follows:

a. The Results of Instrument Trial of the Research

This analysis was carried out by distributing questionnaires to respondents outside the sample as many as 15 respondents who were students of class IX-C SMP N 1 Juwana. The questionnaire given to the respondents consisted of 25 questions for the use of the google classroom application and 30 questions for learning motivation.

1) Validity Test

This analysis was carried out by correlating the calculated r value with the r table value with a significance value (α) = 0.05. The standard of measurement used to determine the validity of the instrument is if r count > r table and the value of r is positive, then the item is declared valid. However, if r count < r table then the item is declared invalid (Machali, 2021, p. 92). The results of the test of the variable instrument using google classroom (X) and learning motivation (Y) can be seen in table 4.1 below:

Table 4. 1 The Result of the Validity of the Experimental Instruments for Variables X and Y

Variable	Validity	Number of Item	Total
The Use of Google Classroom	Valid	1, 4, 6, 7, 10, 15, 16, 17, 18, 19, 20, 24, 25	13
(X)	Invalid	2, 3, 5, 8, 9, 11, 12, 13, 14, 21, 22, 23	12
Learning	Valid	1, 2, 4, 5, 6, 7, 10, 11, 14, 15, 16, 17, 20, 22, 23, 25, 26, 27, 28,	19
Motivation (Y)	Invalid	3, 8, 9, 12, 13, 18, 19, 21, 24, 29, 30	11

Based on the results of the validity test of the variable of the use of google classroom (X) which consists of 25 question items, 13 items are

valid and 12 items are invalid. So it can be concluded that valid statements can be used for data collection, while invalid statements are not used.

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While the results of the validity test of the learning motivation variable (Y) consisting of 30 question items obtained 19 valid items and 11 invalid items. So it can be concluded that valid statements can be used for data collection, and invalid statements are not used.

However, in this study the items used for data collection were 13 statement items for the variable of the use of google classroom (X) and 17 statement items for the learning motivation variable (Y).

2) Reliability Test

The reliability test was carried out by looking at the internal conditions based on Cronbach Alpha. If the Cronbach Alpha value > 0,7 then it can be declared reliable, on the contrary if the Cronbach Alpha value < 0,7 then it was declared less reliable. The standard for measuring instrument reliability through the Cronbach Alpha technique are as follows:

Table 4. 2 Category of Cronbach Alpha

Category	Description				
\geq 0,900	Perfect				
0,800 - 0,899	Good				
0,700 - 0,799	Accepted				
0,600 - 0,699	Questionable				
0,500 - 0,599	Weak				
< 0,50	Not Accepted				

(Machali, 2021, p. 106)

Based on the results of the calculation of the reliability of the instrument on the variable of the use of google classroom and the variable of learning motivation with the help of SPSS, it can be seen as follows:

a) Reliability Test of The Use of Google Classroom (X)

Table 4. 3 Reliability Statistic of The Use of Google Classroom

Reliability Statistics

Cronbach's Alpha	N of Items
,732	25

Based on the results of the calculation output with the help of SPSS, the Cronbach's Alpha value of 0,732 from 25 statement

items was obtained. So it can be concluded that the research instrument is included in the category of accepted reliability.

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b) Reliability Test of Learning Motivation

Table 4. 3 Reliability Statistic of Learning Motivation

Reliability Statistics

Cronbach's Alpha	N of Items
,797	30

Based on the results of the calculation output with the help of SPSS, the Cronbach's Alpha value is 0,797 from 30 statement items. So it can be concluded that the research instrument is included in the category of accepted reliability.

3) Normality Test

This test aims to determine the residual value or differences that exist in the study whether the distribution is normal or not. The output results of the normality test with the help of SPSS are as follows:

Table 4. 4 The result of Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardiz ed Residual
N		60
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	2,35526332
Most Extreme Differences	Absolute	,093
	Positive	,054
	Negative	-,093
Kolmogorov-Smirnov Z		,721
Asymp. Sig. (2-tailed)		,676

Test distribution is Normal.

Based on the results of the normality test in table 4.5, it can be seen that the probability value of sig 2 tailed is $0,676 \ge 0,05$. So it can be concluded that the residual value was normally distributed.

4) Linearity Test

The linearity test aims to determine the form of the relationship that occurs between the variables in the study whether there was a linear and significant relationship. The output results of the linearity test with the help of SPSS are as follows:

Table 4. 5 The Results of Linearity Test

b. Calculated from data.

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ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Use of Google Classroom	Between Groups	(Combined)	215,483	19	11,341	2,575	,006
		Linearity	64,361	1	64,361	14,614	,000
		Deviation from Linearity	151,122	18	8,396	1,906	,045
	Within Groups		176,167	40	4,404		
	Total		391,650	59			

Based on the results of the linearity test in table 4.6, it can be seen that the value of sig is $0.000 \ge 0.05$. So it can be concluded that there is a linear relationship between the independent variable and the dependent variable.

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5) Analysis of Regression

Analysis of regression is used to explain the mathematical relationship between the dependent variable (Y) and one or more independent variables (X).

a) Simple Linear Regression Test

This test is used to measure the influence of one independent variable (X) on a dependent variable (Y) and predict the dependent variable using the independent variable (Machali, 2021, p. 191). The output results of the simple linear regression test with the help of SPSS are as follows:

Table 4. 6 The Results of Simple Linear Regression Test From the Anova Table

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64,361	1	64,361	11,406	,001 ^b
	Residual	327,289	58	5,643		
	Total	391,650	59			

a. Dependent Variable: Learning Motivation

b. Predictors: (Constant), The Use of Google Classroom

Based on the results of the simple linear regression test in the Anova table above, it can be seen that the calculated value of F is 11,406 with the value of Sig is $0.001 \le 0.05$, so the regression model is feasible to use to predict learning motivation or in other words there is an influence on the variable using google classroom (X) on learning motivation (Y).

Table 4. 7 The Results of Simple Linear Regression Test From the Coefficients Table

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Coefficients^a

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	38,866	2,237		17,373	,000
The Use of Google Classroom	,158	,047	,405	3,377	,001

a. Dependent Variable: Learning Motivation

Based on the results of the simple linear regression test in the Coefficients table above, it can be seen that the constant (α) value is obtained at 38.866. In addition, it is known that the regression coefficients (β) is 0,158. Thus, the following regression equation can be obtained:

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$$Y = \alpha + \beta X \rightarrow Y = 38,866 + 0,158X$$

Discussion:

1. Learning activities carried out using Google Classroom.

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3. The effect of the use of Google Classroom on learning motivation of students SMP N 1 Juwana.

One of the benefits of using English learning media is that it can foster learning motivation. In this study, the researcher wanted to find out how much a students can be motivated to learn when using the google classroom application in English subjects. Based on the results of the data analysis above, it can be seen that the relationship between the use of google classroom on learning motivation is evidenced by the magnitude of the correlation coefficient (r) of 0,405, the hypothesis results can be stated that there is an effect of the use of google classroom on learning motivation is acceptable and the relationship between the use of google classroom on learning motivation is at the level of sufficient correlation. This can be proven by the Sig value of $0,001 \le 0,005$ which states that H0 is rejected and Ha is accepted.

Then it can be proven also using the results of simple linear regression analysis obtained a constant value (α) of 38,866. And the value of the regression coefficient (β) is 0,158. The results of this study indicate that there is a positive influence. From the results of the analysis, it is obtained a simple linear regression equation Y = 38,866 + 0,158X.

From the results of the analysis, the researchers concluded that the use of google classroom has a positive influence on students' motivation in learning English.

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Conclusion

From the data analysis in the previous chapter, the researcher concluded that the result of the research is that there is an effect of using google classroom on students' motivation in learning English at SMP N 1 Juwana. It can be shown by the value of constanta (α) is 38,866 and the value of coefficient (β) is 0,158. From the results of the analysis, it is obtained the simple linear regression equation Y = 38,866 + 0,158X.

References

- Carrasquillo, A. L. (1994). Teaching English As A Second Language. Garland.
- Creswell, J. W. (2012). Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research (Fourth Edi). Pearson.
- Crystal, D. (2019). *The Cambridge Encyclopedia of The English Language* (Third Edit). Cambridge University Press.
- Dornyei, Z., & Ushioda, E. (2013). *Teaching and Researching Motivation* (Second Edi). Routledge.
- Izzan, A., & Mahfuddin, F. M. (2014). How to Master English. Kesaint Blanc.
- Kothari, C. R. (2004). Research Methods and Techniques. New Age International (P) Ltd.
- Lestari, E. T. (2020). Cara Praktis Meningkatkat Motivasi Siswa Sekolah Dasar. Deepublish.
- Machali, I. (2021). Metode Penelitian Kuantitatif: Panduan Praktis Merencanakan, Melaksanakan, dan Analisis dalam Penelitian Kuantitatif. Fakultas Ilmu Tarbiyah dan Keguruan Universitas Islam Negeri (UIN) Sunan Kalijaga Yogyakarta.
- Muijs, D. (2004). Doing Quantitative Research in Education. SAGE Publications Ltd.
- Pinandhito, K., Martia, D. Y., & Prasetya, B. (2020). How I Use Google Classroom as a Teacher and Student. CV Jejak.
- Taryn, M. (2020). Google Classroom The Top 5 Hidden Features To Master Google Classroom For Teachers And Students. Boost The Quality Of Online Teaching And Improve Your Students' Engagement. Daniele Bonaddio.
- Uno, H. B. (2021). Teori Motivasi dan Pengukurannya: Analisis di Bidang Pendidikan. Jakarta: Bumi Aksara.
- Zhang, M. (2021). Teaching With Google Classroom (Second Edi). Packt Publishing Ltd.