

## **Google Classroom Application Effectiveness in Learning on Learning Activity and Achievement**

**Sugeng Raharjo, Ponoarjo, Wikan Budi Utami**

Program Studi Pendidikan Matematika  
Fakultas Keguruan dan Ilmu Pendidikan  
Universitas Pancasakti Tegal  
E-mail : [raharjo431@gmail.com](mailto:raharjo431@gmail.com)

### **Abstract**

The purpose of this study is to describe: (1) whether the learning achievement using the google classroom application reach the KKM target beyond 55%. (2) whether the google classroom application can improve student learning achievement. (3) how active students are in using the google classroom application. The data collection methods used were tests, observation, and documentation. The research population was the students of class XI. The research sample was XI IPA 3. The sampling technique was purposive sampling. The results showed that: (1) The learning achievement that were taught using the google classroom application, whose value exceeds the KKM is more than 55%. (2) The learning outcomes of students taught using the google classroom application are better with students who are taught using direct learning. (3) The level of active learning of students using the google classroom application is good.

**Keywords:** Effectiveness; Google Classroom Application; Activeness; Learning Achievement

### **INTRODUCTION**

Currently entering the era of the industrial revolution 4.0, the impact of the 4.0 industrial revolution on education is that information and technology affect school activities very massively. New information and knowledge spread easily and accessible to anyone who needs it. Education is experiencing tremendous disruption, in the future the role and presence of teachers in the classroom will be increasingly challenging and require very high creativity.

By balancing the era of the industrial revolution 4.0, the teacher is able to carry out an interesting classroom lesson so that it doesn't bore students. For a pleasant learning process, the teacher must prepare media tools and teaching materials that will be conveyed to students.

Learning is a communication process, namely the process of delivering messages from message sources through certain media, so that students become bored, less active and less motivated in following the learning process which can affect the activeness and learning achievement of students.

Based on observations that the mathematics learning process that took place at the time of the Covid-19 outbreak was by learning online using the google classroom application. In the online learning process there are many obstacles faced, namely students do not understand the material, besides that there

are some students who do not have smartphones and quotas to access the learning process. The KKM set by the school is 70.

Based on observations, the formulation of the problem can be drawn as follows: (1) Does the learning achievement using the google classroom application exceed the KKM by more than 55%? (2) Can the use of the Google classroom application in learning improve student learning achievement? (3) What is the level of active students in learning assisted by the google classroom application?

The google classroom application is an online learning platform on smartphones and personal computers (PCs) with an internet connection. Google classroom as a means of learning activities between teachers and students without face to face face to face so that it is more effective and can save time and space. In addition, google classroom is provided free of charge and has never been used as paid content. (Hasanudin et al, 2018: 17). The advantages of the google classroom application are easy to use, save time, cloud-based, flexible, and free. (Iftakhar, 2016).

## RESEARCH METHOD

This research was conducted in class XI even semester of the academic year 2019/2020 SMA NEGERI 1 DUKUHWARU with this type of research is experimental research. Experimental research aims to compare between online learning assisted by google classroom with direct learning on the activeness and learning achievement of students in derived algebraic function material.

The research approach used in this research is a quantitative approach because the data used is in the form of numbers and the analysis uses statistics to make it easier for researchers to analyze data before and after the study. The research sampling technique used purposive sampling. The research sample of students in class XI IPA 3 SMA N 1 Dukuhwaru, totaling 35 students from a total of 306 students.

Data collection techniques using 3 techniques, namely observation techniques, test techniques, and documentation techniques. Observation techniques are used to describe everything related to the object of research. The test technique is used to measure individual abilities seen from the results of the answers given by students so that it can be seen the extent of their achievement abilities. The documentation technique is used to determine the student achievement value data before online learning.

The data analysis technique used to test the hypothesis is the One-Right Proposition Test, V-Test, and Descriptive Analysis. For the prerequisite test using the normality test and homogeneity test. The normality test used the Liliefors test and the homogeneity test used the Bartlet.

## RESULTS AND DISCUSSION

**Table 1. Results of Normality Test for Students' Learning Achievement**

Class	$L_{count}$	$L_{table}$	Conclusion
Eksperiment Class	0,120237	0,149761	Normal

Based on Table 1, it shows that  $L_{count} < L_{table}$  or  $0.0120237 < 0.149761$ , then the sample comes from a normally distributed population.

**Table 2. Results of the Homogeneity Test of Learning Achievement Value Learners**

$\chi^2_{count}$	$\chi^2_{table}$	Conclusion
0	3,84146	Homogen

From the homogeneity test in Table 2, it shows that  $\chi^2_{count} < \chi^2_{table}$  or  $0 < 3.84146$ , then the sample comes from a population that has homogeneous diversity.

**Table 3. Test Results of the Proportion of One Right Party Learning Achievement**

Variable	Use of the google classroom application	
	$Z_{hitung}$	$Z_{tabel}$
mathematics learning achievement	3,142	1.63

The results of the calculation of the proportion test show that the results are consulted with the z table value using the real level  $\alpha = 5\%$ , then it is obtained = 1.63. Thus the result is or is rejected. This means that the learning outcomes of students using the google classroom application that exceed the KKM (70) are more than 55%.

**Table 4 Results of CV Mathematics Learning Achievement Test Results**

Uji CV 1	Uji CV 2
0.169536	0.181933

From the CV test results show that. This means that the learning achievement of students after online learning has increased from learning before being online.

**Table 5 Descriptions of the percentage of students' activeness results**

The level of activity of students	Number of students	The percentage of active students
Very good	26	71%
Good	9	29%

In the table above, it can be described that students who get a very good level of activity are 26 students and those who get a good level of activity are 9 students. The percentage of students with a very good level of activity was 71% and a good level of activity was 29%. Based on table 5, the percentage of students' activeness at the level is very good and good. So, the activeness of students in online

learning using the google classroom application is very good, because when learning online many students ask questions when they have difficulty understanding the material provided by the teacher

The research that I have examined shows that the google classroom application in research can increase the activeness and learning achievement of students.

Research on the use of the Google Classroom application has been researched by Yuda Darmawan in 2019 as a result of his research that online-based learning is effective to complement the implementation of the approach. In addition, the google classroom application can improve student learning outcomes. Research from Dwi Pamungkas, Noor Aini, Nita Novianti, Dwi Sulisworo shows that the results show the google classroom application can increase activity.

## **CONCLUSION**

Based on the results of the analysis that has been obtained, it is concluded that the learning achievement of students who are taught using the google classroom application that exceeds the KKM is more than 55%., In addition to the increase in learning achievement of students taught using the google classroom application with students being taught using direct learning , Furthermore, the level of active learning of students using the google classroom application is good.

## **REFERENCES**

- Susongko, p. (2017). *penilaian Hasil Belajar*. tegal: badan penerbit Universitas Pancasakti Tegal.
- Darmawan, Y. (2020). *Penggunaan Aplikasi google classroom dalam upaya meningkatkan hasil Belajar Matematika Pada siswa kelas X SMA Jurusan IPS*.
- Denis Purnama Sari, R. R. (t.thn.). *Peningkatan keaktifan dan Hasil belajar siswa kelas XI IPS 2 SMA NEGERI 1 Turen Pada Pokok Bahasan Turunan dengan pembelajaran TGT*.
- lestiawan, F. (2018). *PENERAPAN METODE PEMBELAJARAN EXAMPLE NONEXAMPLE UNTUK MENINGKATKAN KEAKTIFAN DAN HASIL BELAJAR DASAR-DASAR PEMESINAN* . *jurnal taman vokasi*, 98-106.
- Rasyid, A. P. (2015). Rasyid, A., Passaribu, M., & Pengaruh Model Pembelajaran Kooperatif Tipe Nht (Numbered Heads Together) dan Kemampuan Awal Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Fisika Di SMP Negeri 2 Poso. *mitra sains*, 3.
- Sugiawan, R. N. (2014). "Meningkatkan Aktivitas dan Hasil Belajar Matematika Melalui Pembelajaran Kooperatif Tipe NHT." . *Jurnal Pendidikan Matematika Unila*2.3

- Sugiawan, R. N. (2014). Sugiawan, R., Nurhanurawati, N., & Meningkatkan Aktivitas dan Hasil Belajar Matematika Melalui Pembelajaran Kooperatif Tipe NHT. *jurnal Pendidikan Matematika unila*.
- Yeskel, Z. (2014). "More teaching, Less tech-ing: Google Classroom Launches Today".. 12 agustus 2014
- Yunita, T. (2018). Kefektifan Model Pembelajaran Make a Match terhadap prestasi belajar peserta didik. *JURNAL PENDIDIKAN MIPA PANCASAKTI*.
- Iftakhar, S. (2016). google classroom :What Works and How? *Jurnal of Education and Social Science*, 12-18
- Agung, M. (2019). Kefektifan model pembelajaran Student Team Achievement Berbantuan Media pembelajaran terhadap keaktifan dan Prestasi Belajar Pancasakti. *Jurnal pendidikan MIPA Pancasakti*, 147-156
- Hasanudin,dkk. (2018). optimalisasi pemanfaatan google classroom sebagai media pembelajaran di SMK 1 Bakinang. *Jurnal Pendidikan Untuk Mu Negri*, vol 2, 17-20
- Dwi Pamungkas, N. A. (2020). Efektifitas Google Classroom Terhadap Keaktifan Mahasiswa Dalam Era Revolusi Industri 4.0. *THEOREMA : The Journal Education of Mathematics* 1 (1), 44-53.