

THE INFLUENCE OF ONLINE MEDIA AND LEARNING INDEPENDENCE ON THE LEARNING OUTCOMES OF GEOGRAPHY PACKAGE C CLASS XI AT PKBM MASHAGHI BOGOR

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Abstract

This research is a type of 2x2 factorial design experiment. This study aims to test and reveal: (1) Differences in student learning outcomes taught with Google Classroom learning media and student learning outcomes taught with Zoom learning media, (2) Differences in student learning outcomes students who have high independence and low independence who are taught with Google Classroom learning (3) Learning outcomes of students who have high independence and low independence who are taught using Zoom learning media (4) Whether or not there is an interaction between the influence of learning media and independence on student learning outcomes educated in the subject of Geography. The research population was students of class XI PaketC Community Learning Activity Center (PKBM) Mashaghi, Bojonggede District, Bogor. Teaching 2020/2021 which consists of 2 classes with a total of 60 participants. The class that was sampled in the experimental group was class XI. A total of 30 students and the control class was class XI.B with 30 students. Sample selection was done by using cluster random sampling technique. Data were collected by means of learning outcomes tests in the form of multiple choice and questionnaires for independent learning. The collected data was statistically processed using the two-way analysis of variance (ANOVA) technique using a significance level of 0.05. The results showed that: (1) The learning outcomes of students who were taught using the Google classroom media learning media got the highest score of 97 and an average of 80.5 while The Zoom Learning Media got the highest score of 85 and an average of 74. (2) The students' learning outcomes those who are taught using google classroom media and have high independence get the highest score of 97 and an average while those who have low independence get the highest score of 88 and an average of 65, (3) The learning outcomes of students who are taught using Zoom media and have high independence with low independence there is a difference. Learning outcomes of students who are taught using Zoom media and have high learning independence get an average score of 74 and low learning independence 73., (4) There is an interaction between learning strategies and learning motivation on learning outcomes as evidenced by the acquisition of $f_{h} = 1.067 > f_{t} = 1,850$

Keywords: online media, learning independence, learning outcomes

I. INTRODUCTION

The preamble of the 1945 Constitution stipulates that one of the national goals is to educate the life of the nation. The purpose of National Education in Law No. 20 of 2003 concerning the National Education System is to develop the potential of students to become human beings who believe and fear God Almighty with noble character, healthy, knowledgeable, creatively capable, independent, and become democratic and responsible citizens. To achieve these goals, several subjects in the 2013 curriculum structure must be completed at every level of primary and secondary education

Since the end of 2019, the whole world has been shocked by the increasing outbreak of Corona Virus 19 (Covid-19), including Indonesia, this disease has not only hampered the economy, especially in the field of education. The government through the Ministry of Education and Culture (Kemdikbud) has set the new academic year 2020/2021 to start in mid-July 2020. However, the implementation of the new school year this year is not the same as face-to-face teaching and learning activities in schools. During the Covid-19 Pandemic, distance learning became the main choice.

The policy of learning from home means that learning must be carried out online. DID IK participants could not meet face to face with teachers, due to Covid-19. During the Covid-19 pandemic, learning must still be carried out so that students achieve learning outcomes. Teachers must be able to adjust so that learning is effective, learning activities continue even though they are online. Online learning is the only choice in learning activities during the COVID-19 pandemic. The process of distance learning (PJJ) or online learning that is currently being carried out by teachers is very concerning. On the one hand, the curriculum must run but on the other hand, the infrastructure is inadequate and tends to be uneven to support distance learning activities, so that to achieve maximum learning outcomes has not been achieved.

Hasil learning is the ability and skill possessed by students after going through the learning process that describes the achievement of learning objectives. One way to find out the learning outcomes of students is with learning outcomes tests. Student learning outcomes are influenced by several factors, including using media. To achieve quality and quality education, teachers must continuously develop a learning system that can motivate with appropriate learning media. Online learning is an implementation of distance learning.

In the era of the industrial revolution 4.0, the role of Geography is as a scientific discipline, the learning process of geography is closely related to skills, behavioral habits. Learning geography plays a role in how students behave and behave towards space with high-level thinking skills, critical thinking and recognizing their character.

Geography subjects need to be given to all high school students and equivalent to high school or Package C to equip students by equipping students with thinking, critical and creative skills. However, the development of these various competencies has not been achieved optimally. In line with the principles of Geography which leads to two developments, namely to meet the needs of the present and the needs of the future, geography education is entrusted with a set of visions in the form of competency packages. Competence is knowledge, skills and attitudes that are reflected in the habit of acting and thinking.

The rationale for using the concept of competence in the curriculum is as follows, (1) Competency relates to the ability of learners to do something in various contexts. (2) Competency describes the experience that learners go through to become competent. (3) Competence is a learning outcome that explains the things that students do after going through the learning process. (4) The reliability of learners doing something must be clearly and broadly defined in a standard that can be achieved through measurable performance.

The development of technology and communication today is growing and has a great influence

on teaching and learning. During the Covid-19 pandemic, students do not only learn anywhere, anytime with electronic learning facilities. E-Learning / online has shortened learning time and made study costs more economical, e-learning facilitates interaction between participants with materials or subject matter, students and teachers. Students can share information with each other and can access teaching materials repeatedly, with such conditions participants' do more strengthen mastery of the subject matter. Inside e-learning that takes on the role of teacher. In online learning, attention is not only paid to learning outcomes but whether students have independence during online learning. The use of learning media is one of the efforts to increase the effectiveness and learning process which in turn can improve the quality of learning outcomes.

By using Google Classroom e-Learning which is one of the Learning Management Systems (LMS) a system in the learning process that contains an integrated system between models, materials, and media to teachers and students which of course is developed first. In online learning participants are required to be independent, how students can find learning resources to answer the tasks given by the teacher. Learning media is a learning process aid in print and electronic form, one of which is online learning with technology used to convey information. In accordance with the advancement of Learning Technology (Instructional Technology) and Educational Technology (Educational Technology) various kinds of sophisticated media and equipment. Independence in students is educating how to be responsible, in doing tasks, being able to take initiative not only on one source in learning, growing confidence that it is true that teacher tasks can be done self-cent, besides that motivation is also very instrumental in doing online learning . Online learning is expected to increase the independence of students, because there are still students who are disciplined when the teacher provides material, still rarely repeat the learning that has been given by the teacher, less responsible in doing the task so that it is not complete. Thus, there are still many students who do not have learning independence. This is because students are not yet familiar, still carried away during the learning period in class, it is necessary to increase their learning independence.

II. THEORY REVIEW

1. Understanding Learning

According to psychological understanding, learning is a process of change, namely changes in behavior as a result of interaction with the environment in meeting the needs of life. These changes will be evident in all aspects of practice. According to Slameto (2013: 2) "Learning is a process of effort made by a person for a new change in behavior as a whole, as a result of his own experience in interaction with his environment. Learning or learning is a major focus in Educational psychology.

Arief Zaenal Abidin (2015: 38) stated that "Learning in an educational perspective has different understandings.

Some expert opinions about learning that is, according to psychologists define learning include:

1. Is the process by which activity changes through reaction to the situation it encounters, but the characteristics of the process of changing the activity cannot be explained based on the tendency of the response, maturity or condition? Meanwhile,
2. learning is a relatively permanent process of behavior change that occurs due to practice,
3. learning is the process by which behavior originates or changes through the practice of exercise,
4. Learning is a change in behavior in an individual that is genetic.

Meanwhile, according to education experts, it defines as follows:

1. Learning is a change in readiness to face the environment, a change in sensitivity, a tendency in the form of response e in action, behavior, understanding or feeling about objects, events and meaning.
2. Learning is an active process.
3. Learning is a function of the overall situation around the individual
4. learning is guided by goals achieved because of living and doing, having experience and trying to understand meaning and;
5. Learning is a change in behavior through experience.

The learning objectives according to (Sardiman, 2008: 28) are as follows:

1. To gain knowledge
2. The possession of knowledge and the ability to think as inseparable. In other words, it cannot develop the ability to think without knowledge material, on the contrary, the ability to think will enrich knowledge. Goals are those that have a greater tendency to develop in learning activities.
3. Inculcation of concepts and skills. Calming concepts or formulating concepts, also embracing skill that can indeed be educated, namely by practicing a lot of abilities.
4. Attitude formation.

In cultivating the mental, behavioral and personal attitudes of students, teachers must be wiser and more careful in their approach. For this, it takes the ability to direct motivation and think by not forgetting to use the teacher's personality as an example.

2. Geography Learning

a. Understanding Geography Learning

Understanding geography etymologically, geography comes from the Greek language geo which is earth art and graphe in which means writing or explaining, the combination of the two

words then becomes 'geography' in general, geography can be defined as the study of the similarities and differences in space over physical phenomena and human on the surface of the earth.

Based on the results of seminars and workshops in Semarang in 1988, the Indonesian Geographical Association or IGI argues that geography is a science that studies the similarities, and differences in geosphere phenomena with regional angles, and the environment in a spatial context.

Based on the expert opinion above, it can be concluded that Geography Learning is a lesson about the spatial surface of the earth taught in the formal education system and the material is adjusted to the level of psychological development of knowledge of students at various levels of education. Geography learning is centered on discussing how to study the earth by paying attention to the point of view of Geography and through money, environmental, and complex regional approaches.

3. Online Learning Media

Definition of Online Learning Media

Literally the word media means "intermediary" or "introduction". The Association for Education and Communication Technology (AECT) defines it's any form used for a process of distributing information. While the National Education Association (NEA) defines media as objects that can be manipulated, seen, heard, read or talked about along with instruments that are used well in teaching and learning activities and can be influenced by the effectiveness of instructional programs.

John M. Echols and Hasan Shadily provide a definition of online. On means ongoing, and line means line, line and theme In short, online means the process of accessing information that is ongoing through internet media.

a. Types of Online Learning Media

1. Web Supported E-Learning

Learning is carried out face-to-face and is supported by the use of a website that contains summaries, learning objectives, learning materials, assignments, and is accompanied by a short test.

2. Blended or Mixed Mode E-Learning

The learning process is carried out face-to-face and some are carried out online.

3. Fully Online E-Learning Format

All learning processes are carried out online including face-to-face between educators and students which are also carried out online, teleconference technology is usually an option.

b. Advantages and Disadvantages of Online Learning Media

1. Advantages of Online Learning Media

a. Varied Media

The Internet is a versatile tool that provides information to students around the world. Internet sites contain a variety of media, for example text, audio, graphics, animation, video, and downloadable software.

b. Up-to-date information

Until now, educators have been limited to resources in their classrooms and school facilities. Now, with the ability to connect to resources in the community and around the world, it opens up new views on teaching and learning. Students could access libraries and databases well beyond local boundaries, this expanded the scope of smaller and rural schools and individual participation in home schooling.

c. Navigation

The main advantage of this is that it is able to move easily within and between documents. By pressing a button or clicking from the mouse, users can search for various documents in various locations without moving from their computer.

d. Exchange ideas

Students can engage in "conversations" with experts in a particular field of study. Then, they can participate in activities that allow them to exchange ideas with other students, even those living abroad.

e. Convenient communication

E-mail allows people in different locations to share ideas, just as they do on the phone now, without playing the "phone tag" so common among busy people. Users can "talk" to each other at different times and respond according to their own convenience. Exchanged records can be saved.

f. Low cost

The cost of hardware, software, telephone time, and telecommunications services is cheap and affordable.

2. Disadvantages of Online Learning Media

a. The age of the material that does not pan the bag

One of the concerns of some topics in computer networks, generally on the internet, is the unsuitability of the material for elementary school students. Tobacco and alcohol advertisements on the internet can be displayed alongside games and music that children can enjoy.

b. Copyright

Because information is so easy to access, it is also very simple for an individual to quickly download a file and by making a few changes, he can do his job without much effort.

c. Unprecedented growth

It is estimated that every day thousands of new sites are uploaded to the internet. This growth makes finding information very difficult. To aid in the search for information, some commercial companies and universities provide search engines by following Web links and displaying appropriate results on your queries.

d. Supporting

Good technical support should be available. Without such support and wise management, a computer network will quickly die. For that Technical supervisor is needed to set up and maintain the network.

e. Access

Whether by means of an embedded system or wireless or modem, all users must have a way to connect to the network.

Google Classroom Learning Media

Herman in Hammi, (2017) said Google Classroom is an application that allows the creation of classrooms in cyberspace. In addition, Google Classroom can be a means of distributing assignments, submitting assignments and even assessing the tasks I conclude. Thus, this application can help facilitate educators and students in carrying out the learning process more deeply. This is because both students and educators can collect assignments, distribute assignments, and assess assignments at home or anywhere without being bound by time limits or class hours.

Afrianti, W. E. (2018) said that the Google Classroom application provides opportunities for educators to explore their scientific ideas to students. Educators have the flexibility of time to share scientific studies and provide independent assignments to students in addition, Educators can also open discussion rooms for students online. The use of online-based learning media can affect learning outcomes, so educators must be careful in choosing and using media.

The Google Classroom application in this study uses an interpretive paradigm with qualitative research methods and a case study approach. According to Cresswell (2015: 135-137), case study research includes the study of a case in real life, in a contemporary context or setting. Some characteristics of case study research identify a specific case. There are some obvious entities that occur in individuals, small groups, organizations or partnerships. The more specific the place and time, the more accurate the information can be gathered and with the situation unfolding

Based on the explanation above, it can be concluded that Google Classroom online media is a learning media that facilitates the learning process, in the field of Education, helping teachers

in the form of information technology applied in the field of Education in the form of cyberspace with the support of an internet connection.

The learning outcomes of students after using Google Classroom online media are that students can be independent, especially in using online media applications and independently in looking for learning resources. E learning also facilitates interaction between students and material materials. Students can share information with each other and can access learning materials at any time and repeatedly. Learners who experience a continuous learning process and the results include cognitive, affective, and psychomotor aspects.

4. Learning Independence

a. Definition of Independence

According to KBBI (Big Dictionary Indonesian), the word independent means being able to stand alone while independence is self-learning or a state in which a person is able to stand alone without depending on others. Independence is one aspect of personality that is very important in living this life, never separated from the trials and challenges of individuals who have high independence relatively able to face all problems.

Wangari (Hendriana et al, 2018: 229) Learning independence is a learning process where individuals have a sense of responsibility in designing their learning, and applying and evaluating their learning process. (20)

According to Sumarmo (Nuridawani et al, 2015: 63) indicators that show learning independence are 1. Learning initiatives; 2. Diagnose learning needs; 3. Setting learning targets and goals; 4. Monitor, regulate and control; 5. View difficulties as challenges; 6. Utilize and search for relevant sources; 7. Choose and implement learning strategies; 8. Evaluate learning processes and outcomes; and 9. Self efficacy (self-concept).

Student's with good learning independence can control themselves and act in accordance with their responsibilities (Bungsu et al., 2019), through learning independence student learning outcomes can increase (Fajriah et.al.2019)

According to Lilik et al (2013: 64) 'learning independence is a learning skill where in the learning process the individual is motivated to be controlled and valued by the individual himself

Based on the opinions of the experts above, it can be concluded that the independence of student learning is a learning process of students who do not depend on the teacher alone, but students are able to understand and solve problems given by the teacher. Learning Independence Indicator In the process of teaching, students who have learning independence tend to be calm when faced with a problem. In addition, learners who have their learning independence will be confident in solving problems. Learning independence comes from oneself, does not depend on others and is responsible for achieving the desired learning goals.

b. Relationship of Independence with Learning Outcomes

If connected with students in learning, these students have the initiative in learning independently and are able to be responsible for their own work, students with good learning independence will be able to initiate themselves seriously in learning so that students with good learning independence will be able to carry out the tasks they do to get the best results. Independence is a provision that must be possessed by someone to be able to live well and is a basic skill that students need to have (Ningsih & Nurrahmah, 2016)

The purpose of this statement is that students with good learning skills will be able to live independently and be able to become complete human beings in the sense of not depending on others. The level of learning independence can be determined by how based on the initiative and responsibility of the ab he has (Nova Fahrada, Bansu I. Ansari, 2014)"29 Therefore it can be determined that the more learners carry out their activities individually, the more motivation increases (Murdi et al., 2019) (Egok, 2016)." 30

It should be realized that the relationship is very close between independence and learning outcomes, the higher a person's independence, the higher students will be able to carry out their activities on their own. The results showed that students with good learning independence tend to learn well and can evaluate what they do (Jumaisyaroh et al., 2015)." 31

Based on the above opinion, this study is expected that teachers will be able to increase their motivation and independence so that these students can achieve their best learning outcomes.

A. Figures and Tables

Table 3.1: 2 x 2 factorial design

Media Learning (A) Learning Independence (B)	Google Classroom media (A1)	Media Zoom (A2)	Sum
Height (B1)	(A1B1)	(A2B1)	$\sum B1$
Low (B2)	(A1B2)	(A2B2)	$\sum B2$
Sum	$\sum A1$	$\sum A2$	A x B

Information:

- 1) A1B1 group of students whose learning uses Google Classroom who have high learning independence.
- 2) A2B1 group of students who learn using Zoom media who have high learning independence.
- 3) A1B2 = group of students who are taught using Google Classroom online media who have low learning independence.
- 4) A2B2 = group of students who are taught using Zoom media who have the independence of learning ren.

- 5) A1 = Group of students given Google Classroom online media learning as an experimental class.
- 6) A2 = Group of students given Zoom media learning as a control class (comparison).
- 7) B1 = High learning independence.
- 8) B2 = Low learning independence.
- 9) $\sum A1$ = Overall Students which buses Learning Media Google Classroom.
- 10) $\sum A2$ = All students who use learning media Zoom
- 11) $\sum B1$ = All students who have Lemandarin tall
- 12) $\sum B2$ = Overall low independence learners
- 13) A x B = Interaction between learning media and learning independence of class XI students Package C PKBM Mashaghi Bojonggede in learning Geography.

Table 3.2: Composition of Sammop members

Media Online Independence Learn	Google Classroom	Zoom	Total
Tall	14	14	28
Low	14	14	28
Total	28	28	56

A. Mathematical Formulas

Statistical Hypothesis

1. Ho: $\mu A1 \leq \mu A2$
Ha: $\mu A1 > \mu A2$
2. Ho: Interaction A x B = 0
H1: interaction A x B \neq 0
3. Ho: $\mu A1B1 \leq \mu A2B1$
H1: $\mu A1B1 > \mu A2B1$
4. Ho: $\mu A2B2 \leq \mu A1B2$
H1: $\mu A2B2 > \mu A1B2$

Information:

$\mu A1$: Average score of students who are taught with Google Classroom online media

$\mu A2$: The average score of students who are taught with Zoom media.

A: Google Classroom online learning media B : Zoom Learning Media

- μ A1B1: The average score of the group of students with high learning independence who were taught using Google classroom online learning media.
- μ A2B1: The average score of the group of students with high learning independence who were taught using Zoom media.
- μ A1B2: The average score of the group of students with low learning independence who were taught using Google classroom online media.
- μ A2B2: The average score of the group of students with low learning independence who were taught using Zoom media.

III. RESEARCH METHODS

The purpose of the study is to know and test about:

1. Differences in Geography Learning Outcomes of Class XI Package C PKBM Mashaghi students, Bojonggede District, Bogor Regency who were taught using Google Classroom online media with those learned using Zoom media.
2. The Influence of Online Media Interaction and Learning Independence on Learning Outcomes Geography of Class XI Package C Students at PKBM Mashaghi, Bojonggede District, Bogor Regency
3. Differences in Geography learning outcomes of students who have high independence by being taught using Google Classsrom online media with those learned using Zoom media.
4. Differences in Geography learning outcomes of students who have low independence who are taught using Google Classsrom online media with those who are learned to use Zoom media.

A. Place and Time of Research

This research was conducted at the MASHAGHI Teaching and Learning Activity Center (PKBM), Bojonggede District, Bogor Regency. Especially class XI Package C learners.

Research activities are carried out in odd semesters of the 2020/2021 academic year according to the schedule set by the management of PKBM Mashaghi, Bojonggede District, and Bogor Regency.

B. Research Methods and Design

In this study, an experimental method was used with a 2x2 factorial design. This study aims to determine the influence of media and learning independence on the learning outcomes of geography package C Class XI at the Community Learning Activity Center (PKBM) Mashaghi, Bojonggede District, and Bogor Regency for the 2020/2021 academic year. According to Hadi (1985) "experimental research is research conducted to determine the consequences caused by a treatment given intentionally by researchers." Experimental research produces the most considered evidence regarding hypothesized causal relationships

This research is Quasi Experimental Design (Pseudo Experimental) in this design comparing two experimental groups and control groups, this study uses an experimental method with a 2 x 2 factorial design. In this design, each independent variable is classified into 2 (two) sides, namely learning using online media Google Classroom (A1) and Zoom (A2). While the attribute variables are classified in two tendencies of high learning independence (B1) and low learning independence (B2), while the dependent variable is student learning outcomes (Y). Research design this experiment was planned using a simple 2 x 2 factorial design.

IV. RESULTS AND DISCUSSION

Based on the results of hypothesis testing that has been carried out, research results are obtained that hill several research hypotheses. In each of these research results, the following discussion is presented:

There are differences in student learning outcomes in Geography subjects that use Google Classroom online media learning using Zoom learning media. The results of the analysis of research data through a two-track anava test were decided to reject H_0 and accept H_a . This shows that the results of learning geography with the distribution of flora and fauna of students taught with Google Classroom online learning media are higher than the geography learning outcomes of students taught with zoom learning media. The results of learning geography on the material pereb aran flora and fauna students using Google Classroom online media obtained an average score of 79.86 and by using Zoom media obtained an average score of 76.97. This result is due to various factors that can affect the learning outcomes of learners. These factors can come from the students themselves such as intelligence and can also come from and outside the students such as learning strategies designed by the teacher. Factors that affect learning outcomes are of three kinds, namely internal factors, external factors and learning approach factors. Internal factors are factors that come from within students such as intelligence, motivation, external factors are factors that come from outside themselves such as the school environment, learning facilities and learning time. The factor that also determines is the learning approach factor. This factor relates to all the ways and strategies used by teachers and students in supporting the effectiveness and efficiency of the process of learning certain material. To get learning results must go through a certain process that is influenced by factors from within oneself the individual and from outside the individual

Contains a discussion of the results of research and testing presented in the form of theoretical descriptions, both qualitatively and quantitatively. The results of the experiment should be displayed in the form of graphs or tables. For graphs can follow the format for diagrams and images.

V. CONCLUSION

Based on the results of research and data analysis, this study produced the following conclusions:

1. Overall, the learning outcomes of Geography students in class XI Package C at the Mashaghi Community Learning Activity Center (PKBM), Bojonggede District, and Bogor Regency who were taught using Google Classroom online media were higher than students who were taught with Zoom media.
2. There is an influence of interaction between online media and learning independence on the results of learning geography tolas XI Package C at the Mashaghi Community Learning Activity Center (PKBM), Bojonggede District, and Bogor Regency.
3. The results of learning Geography class XI Package C at the Mashaghi Community Learning Activity Center (PKBM), Bojonggede District, Bogor Regency for students who have high learning independence who are learned using Google Classroom online media are higher than students who are taught using Zoom media.
4. Learning outcomes of Geography class XI Package C at the Mashaghi Community Learning Activity Center (PKBM), Bojonggedde District, Bogor Regency for students who have low learning independence who are taught using Google Classroom online media with those learned using Zoom media

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