



## Improving Student Learning Outcomes by using Blog Media in Geography Subjects

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### ABSTRACT

**Purpose of the study:** This research aims to improve student learning outcomes by using blog media. The background of this research is that learning is still teacher-centered, more teachers only use the lecture method, and do not use learning media. Students are less enthusiastic when studying geography, they often fall asleep in class. This causes low student learning outcomes, so the method used to overcome this problem is to use blog media.

**Methodology:** The method used in this research is Classroom Action Research with a sample of 34 class XI high school students. The instruments used were lesson plans, observation sheets, interview sheets and geography learning results tests. This research was conducted at Senior High School Nusantara.

**Main Findings:** Theresearch results showed that student learning activities experienced significant changes and the average N-Gainin cycle I was 0.33 and increased to 0.52 in cycle II. Based on these results, it can be proven that the use of blog media is effective in improving geography learning outcomes

**Novelty/Originality of this study:**In an effort to enrich the learning process, this research allows the use of blog media as an innovative tool. By integrating information and communication technology through blogs, it is hoped that it can create a more dynamic and interactive learning environment. The focus of this research is not only on technological aspects, but also on the impact of using blog media on students understanding and involvement in understanding geographical concepts.

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## 1. INTRODUCTION

Indonesia is one of the most active developing countriesimplementing development programs. Along with the pace of development, the educational factor has a very important role because in its implementation it requires skilled and skilled experts, none other than through education [1], [2]. Therefore, education is one of the tools for achieving successful development and education in Indonesia itself is expected to be able to create quality and insightful human resources that shape a dignified human civilization.Talking about the development of a country, of course it is determined by the level of quality of education. If the quality of education is low, it will be very difficult for a country to build a civilization [3]. Because quality education is what forms competent humans. Intellectual competence, physical competence and spiritual competence, so that with these

competencies one can build civilization for the nation and country in which one lives. So it is not surprising that every country is competing to improve the quality of its education. With various policies and laws created in order to improve the quality of education [4]. For example, the State of Indonesia itself, in order to improve the quality of its education, created a law as a point of achievement that must be produced in the education process.

Teachers must have various potentials in implementing teaching, mastering subject matter, using various methods, media and technical approaches in the teaching process, because these are very important things in order to achieve the expected goals. Apart from that, the teacher's ability to master methods, media and techniques in teaching also functions to increase student motivation and learning outcomes, as well as stimulate students to be more active and critical in the learning process. Future teachers are teachers who have the abilities and skills and how to create optimal learning outcomes. Furthermore, he has sensitivity in reading the signs of the times, and has intellectual insight and is forward-thinking, never feeling satisfied with the knowledge he has [5]. In essence, learning is the process of interaction between students and their environment, so that changes in behavior occur for the better. In this interaction, there are many factors that influence it, both internal factors that come from within the individual, and external factors that come from the environment [6].

Teachers as instructors are tasked with providing instruction in the classroom. He collects lessons so that students understand well all the knowledge that has been conveyed. Teachers as mentors are obliged to provide assistance to students so that they are able to find their own problems, solve their own problems, get to know themselves and adapt to their environment. Apart from that, the teacher is also said to be a manager in the class where he is responsible for all planning, processes and student learning outcomes [7]. Teachers as managers of teaching and learning activities have a task that is not easy because they are a factor that has a big influence on the achievement of the teaching and learning process [8-10]. Therefore, teachers are required to have a number of abilities, skills in their field, and have broad knowledge and insight. There are many types of abilities, skills and expertise that professional teachers must have, because teachers are facilitators and motivators for students [11].

Various problems that arise from teaching experience require educators to find solutions. Among these various problems is the problem of learning media. A teacher is required to be smart in choosing the right learning media to be applied in the classroom learning process, which can activate student learning activities, as well as so that students can understand and master each concept of the subject matter [12]. It was obtained from the results of pre-research observations that in reality there were obstacles faced by teachers while teaching and for this reason solutions had to be found for these problems [13], [14]. Among the problems found: First, classroom conditions were less conducive. From the results of the observations, the main problem expressed by the teacher was the classroom conditions which were not conducive. Second, students' inactivity in participating in learning activities. This can be seen in observations made, when teachers ask questions, sometimes students are reluctant to answer them. And students never even start to ask questions or respond to explanations of lesson material. Third, low learning outcomes [15], [16]. From the above, the final student learning evaluation results are low. The core of the teaching process is none other than students' learning activities in achieving a teaching goal. The goals of teaching will of course be achieved if students actively try to achieve them. Students' activity here is not only required from a physical perspective, but also from a psychological perspective [17]. If only the child is physically active, but his mind and mentality are less active, then it is very likely that the learning objectives will not be achieved [18].

Research on discourse integration has also been carried out by previous researchers, namely Abdillah, Joyoatmojo, & Noviani (2017), with the title Using blogs as a learning medium in improving student learning achievement. The results of his research show that the use of blogs as a learning medium can improve learning achievement [19]. Apart from that, Nia Kurnia, Dewi Koryati & Rusmin (2018) also conducted research on the influence of WordPress blog media on student learning outcomes in economics subjects at senior high school Negeri 6 Palembang. The results of the research show that WordPress blog media can be used as a learning medium by teachers to improve student learning outcomes [20].

Based on the problems above, the author is interested in measuring the extent to which the use of blog media can improve student learning outcomes in Geography subjects. This research proposes an innovative approach by utilizing blog media to improve student learning outcomes in Geography subjects at senior high school Nusantara, offering creative solutions in integrating digital technology with traditional learning. This can provide valuable insight for teachers and schools in designing more effective learning strategies in the future. The urgency of this research is that research on improving student learning outcomes by utilizing blog media in Geography subjects at Nusantara High School is important to identify the potential and effectiveness of this media in increasing students' understanding and involvement in geography learning.

## 2. RESEARCH METHOD

### 2.1. Type of Research

This research method uses the classroom action research method. Implementation and use of blog media in geography lessons. Students are directly involved in the teaching and learning process. In this way, it is hoped that student learning outcomes in Geography lessons will increase.

Researchers attempted to collect, classify, analyze and interpret data regarding the application of Blog media in Geography learning for class XI-A students at Nusantara High School, followed by observations and interviews. After obtaining a description of the data, the author then manages and analyzes the data based on the results of the Pre Test and Post Test Cycles I and II. The author was also assisted by conducting additional discussions with the school principal and several teachers.

The guideline that the author used in writing this thesis was the thesis writing guidebook for the Faculty of Tarbiyah and Teacher Training Faculty of SyarifHidayatullah State Islamic University Jakarta. Classroom action research consists of a series of four activities carried out in two cycles. This cycle can stop if the learning goal >70 has been achieved, this is in accordance with the minimum completeness criteria that applies to senior high school Nusantara.

### 2.2. Place, Time and Source of Research Data

This research was conducted at senior high school Nusantara class XI-A. The time used in this research was the odd semester of the 2023/2024 academic year. The research process was carried out in stages starting from planning and preparing instruments, testing research instruments followed by collecting field data as the core research activity. The research was carried out in August - October 2023.

Primary data sources are taken from the first source, namely respondents. Respondents as data sources were students in class XI-A senior high school Nusantara. Primary Data or main information is obtained through Pre-Test and Post Test, in the form of a number of written questions/questions, and by using observation results as main data and also supported by interview results. Secondary data sources use material that is not from the first source as a means of obtaining data or information to answer the problem being studied. The data obtained comes from notes, reports on student learning outcomes, or documents related to research from related schools and from several libraries.

### 2.3. Subjects or Participants Involved in Research

The parties involved in this research are class XI-A students at senior high school Nusantara. 34 students, who are the objects of this research. The reason for choosing class XI-A senior high school Nusantara as the subject was because the characteristics of the subject matched the title of the research. Because in class So that students feel a new atmosphere in the learning process. Meanwhile, the party involved in this classroom action research is the Geography teacher.

### 2.4. Data Collection Instrument

The data collection instruments used in this research consisted of: observation sheet, interview guide, test. The following is an explanation of these instruments:

1. Observation sheet

Observation is "a systematic, logical, objective and rational process of observing and recording various phenomena both in actual situations and in artificial situations to achieve certain goals" [21]. The observation sheet used consists of an action test in the form of an assessment. Observations are carried out to record student activities in class.

2. Interview guidelines

Interviews are a form of non-test type evaluation carried out through conversation and questions and answers, both directly and indirectly [22]. Interviews during observations were carried out to determine the condition of the students and to get a general picture of the implementation of learning and the problems faced in class. Interviews after the action were carried out to determine the improvement in learning outcomes using blog media. Interviews were conducted with subject teachers and students before and after the research.

3. Field Notes

Field notes are needed to observe all activities during the learning process. Various observation results regarding aspects of classroom learning, classroom atmosphere, classroom management, teacher interactions with students, and other aspects that need to be noted.

4. Tests (pre test and post test)

The test given to students is to determine the level of student success in implementing learning using blog media to achieve the minimum completeness criteria determined by the school. The written test is

in the form of a pre-test and post-test in Cycle I and Cycle II. Pre test is a test given before teaching begins and aims to find out to what extent students have mastered the teaching material to be taught. Meanwhile, the post test is a test given at the end of each teaching unit program. The purpose of the post test is to find out to what extent students have achieved the teaching material after experiencing a learning activity [23]. The pre-test questions are made the same as the post-test questions. The test is in the form of a multiple choice objective test with 20 questions. This test was given to students in class XI-A senior high school Nusantara before and after learning activities using blog media.

## 2.5. Data Analysis Techniques

Data obtained from the research instrument was analyzed using descriptive analysis of each cycle and using N-Gain to see the difference between pre tests with a post test in each cycle, to see differences in learning outcomes in each cycle. This research is considered successful if after taking action there is an increase in learning outcomes measured by the minimum completeness criteria provisions for the Geography subject at senior high school Nusantara. Gain is the difference between the pre-test and post-test scores. Gain shows the increase or mastery of students' concepts after learning is carried out by the teacher.

## 3. RESULTS AND DISCUSSION

### 3.1. Initial Reflection Analysis

Based on the problems mentioned above, the researcher carried out an analysis to find solutions to the problems faced by Nusantara High School students. Especially how students at these schools can be more active and have a serious attitude in the Geography learning process, as well as improving geography learning outcomes. To achieve good learning results, of course you have to try to make students' attitudes more serious in learning activities. Therefore, researchers are looking for learning models/media that try to make students more active and have a good attitude in Geography learning activities so that the expected Geography learning achievements are achieved.

### 3.2. Action plan

The process of teaching and learning activities using blog media includes the following learning stages:

a. Choosing

The values chosen here are the values contained in the geography lesson material and will be chosen freely according to the material to be taught, of course these values are considered without any coercion.

b. Prizing

There is a feeling of joy and pride in the values he chooses, so that these values will become an integral part of him. Affirming the values that are an integral part of him in public. This means that if we consider value to be a choice, then we will have the courage and full awareness to show it in front of other people.

c. Acting

Doing something based on chosen values, and repeating behavior in accordance with the chosen values. This means that the values that are chosen must be reflected in their daily life choices.

### 3.3. Action Implementation Stage

The first cycle was carried out in class XI-Aon Monday the 9th September 2023 at 7.00 – 8.30 by discussing Biosphere material. In the learning process in cycle II, from the preliminary activities to the closing activities, the process is the same as cycle I. The only thing is that there are additional variations in the material in the blog, such as videos and the addition of images related to the material.

### 3.4. Observation Stage

a. Field Notes

Based on the results of observations during the learning process during the second cycle using blog media, field notes were obtained as follows: When the learning process took place the classroom atmosphere was conducive, this happened because students were getting used to and felt comfortable with learning geography in the classroom using blog media.

b. Interview

Based on field notes in Cycle II, it can be seen that the actions given using blog media in Cycle II were in accordance with the plans made. The learning atmosphere by implementing learning media using student blog media is more optimal. This is because students already understand the steps for learning media using blog media as a whole, so they can create an effective learning atmosphere.

After the implementation of Cycle II actions was completed, interviews were conducted outside the classroom at 01.30. The same as in Cycle I, interviews were conducted with 6 students, who were members of one group in the research. Recording was carried out by researchers by interviewing each student in one group which was used as an interview sample. The following data is obtained in outline:

1. Students can easily use blog learning media, but even though at first it is still a little confusing for some students, students feel happy because there is a new learning media that they have never had before.
2. Most students enjoy material related to the biosphere.
3. All students were active in asking questions during the lesson, all students asked a lot of questions.

Based on interviews conducted with 6 students as a sample, it can be seen that the majority of students are getting used to and liking learning media using blog media. Students are motivated to pay attention to the teacher's explanations.

c. Learning outcomes

Based on the test results (Pre Test and Post Test) obtained in cycle II, by discussing the distribution patterns of flora and fauna on the surface of the earth. with a total of 34 students in one class using blog media. Pre Test score data is obtained from test results before students study the material and blog media has not been implemented, and Post Test scores are obtained from student learning results after blog media is implemented.

### 3.5. Reflection Stage

Based on observations during the second cycle of research, information was obtained that Geography learning in class XI-A had begun to be effective. Students are starting to get used to using learning media, namely blog media. In the learning process, students appear to be more active in the learning process, thereby creating a more effective learning situation compared to cycle I. The average score for the pre-test in cycle II is 59, an increase compared to the pre-test in cycle I which was only 48. After the post test was carried out At the end of the cycle the data obtained was that the average score for Post Test results from Cycle II was 81, an increase compared to Cycle I of 67 with the highest score being 100 and the lowest score being 70. There were no more students who got a score below the minimum completeness criteria of 66. All students had exceeded minimum completeness criteria or it can be said that success reaches 100%. If calculated using the N-Gain formula, students' abilities have increased by 0.52 or fall into the medium category. The results from cycle II have reached 100%, meaning the action can be stopped and there is no need to continue in the next cycle.

### 3.6. Cycle Decisions

Based on the results of cycle II reflection obtained from the learning outcomes and student learning activities as well as positive student responses regarding the learning media used, namely blog media, this learning shows that students' understanding and psychomotor skills in understanding the material discussing the biosphere have reached the expected criteria. This is proven by the N-Gain value in the Pre Test Cycle I of 48 increasing in the Post Test to 67 and the N-Gain value in the Pre Test Cycle II of 59 increasing in the Post Test to 81. With the lowest value in Cycle I being 50 (under the minimum completeness criteria) and the highest was 90, while in cycle II, the lowest score was 70 (above the minimum completeness criteria) and the highest was 100. Or it could be said that in cycle II the score achieved by students had exceeded the minimum completeness criteria of 66. Therefore there was no need to continue with the learning actions in cycle III.

### 3.2. Discussion

Based on the results of observations made by researchers, the situation of class XI A Senior High School Nusantara is classified as a busy class, with different student criteria, some are quiet and some are active. Overall, the learning that was carried out in cycle I by applying blog media in learning activities was student-centered or it could be said that students were more active than teachers, even though this was not done by all students. By applying this blog learning media, it can improve student learning outcomes, this can be seen in the Pre Test and Post Test scores in cycle I with a total of 1620 in the Pre Test, and an average increase of 48 in the Post Test with a total of 2270, and the average-average of 67. And obtained an N-Gain value of 0.33 in the medium category. Meanwhile, in the Pre Test and Post Test in cycle II, the number of Pre Tests was 2010 with an average of 59, increasing to the number of Post Tests of 2780 with an average of 81. And obtained an N-Gain value of 0.52 in the medium category. From Cycle I and Cycle II there has been an increase compared to before the implementation of blog media learning media, because in this learning media, students can ask the teacher if they don't understand, then each student can learn from each other, or in other words need each other, provide motivation, as well as creating an open learning situation, besides that the blog media learning media is also able to provide a change for the better in students [24], [25]. The learning activities shown by student activities in class in cycles I and II can be said to be good, this can be seen from every meeting from cycle I to cycle II, and

each student can understand the learning media of this blog media [26]. At the end of the lessons in cycle I and cycle II the teacher draws conclusions together with the students [27].

Research that reveals an increase in student learning outcomes through the use of blog media in learning Geography subjects at Nusantara High School has significant implications in the context of modern education [28]. By utilizing blog media as a learning tool, teachers can expand the learning space outside the classroom and enrich students' learning experiences through easy access to current information and multimedia. In addition, the use of blog media also encourages students' active participation, strengthens their digital literacy skills, and promotes independent and collaborative learning [29], [30]. These implications provide a strong foundation for the development of learning methods that are innovative and relevant to developments in information technology, so that they can increase the effectiveness of learning and student academic achievement in this digital era [31]. One of the limitations that may be encountered in this research is obstacles related to the accessibility and availability of technology. Although blogs can be an effective tool for improving student learning outcomes, there are challenges associated with the technological infrastructure in educational environments that may not always support optimal use of blogs by all students. This can limit the effectiveness of blog implementation in improving overall student learning outcomes.

#### 4. CONCLUSION

Based on the research results, it was found that learning Geography using blog media can improve student learning outcomes, this can be seen in the Pre Test and Post Test scores in cycle I with the number of Pre Tests being 1620, and an average increase of 48 in the Post Test with the number amounting to 2270, and an average of 67. And obtained an N-Gain value of 0.33 in the medium category. Meanwhile, in the Pre Test and Post Test in cycle II, the number of Pre Tests was 2010 with an average of 59, increasing to the number of Post Tests of 2780 with an average of 81. And obtained an N-Gain value of 0.52 in the medium category. From Cycle I and Cycle II there has been an increase compared to before the implementation of blog learning media, because Geography learning uses media. Blogs create an open learning situation, increase enthusiasm, increase students' interest in learning, vary learning resources, increase the effectiveness of students' learning in understanding the material and besides that, blog media learning media is able to provide a better change for students.

The recommendation from this research is by utilizing blog media, students can access learning materials interactively, allowing them to be actively involved in the learning process, share ideas, and discuss with classmates and teachers. Through the use of blog media, it is hoped that a learning environment that motivates and enriches students' learning experiences can be created, so that they can improve their understanding and academic achievement in Geography subjects.

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