Literature Study: The Effect of Problem Based Learning Model on Geography Learning Outcomes

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***Abstrak*—** **This study aims to determine the effect of the Problem Based Learning Model on student learning outcomes. This research uses qualitative research methods while the data collection technique used is literature study. Data collection is done by collecting, reviewing, information or data about the findings from written sources such as books, proposals, journals and various relevant scientific articles, then the data obtained is researched, and focused efficiently then described in a narrative. The results of the research analysis show that the Problem Based Learning model has a difference in stage one showing that student learning outcomes have not increased while in stage two there is an increase in student learning outcomes. That is, from several studies that use the Problem Based Learning model can improve student learning outcomes. Based on the review of literature studies, it can be concluded that the use of the Problem Baesd Learning model is very effective and in accordance with Geography subjects by linking some material with students' daily lives so that students can easily understand the material taught by the teacher, so the Problem Based Learning learning model is very suitable for use by teachers in learning activities.**

***Keywords- learning model, problem based learning, learning outcomes, geography students, geography lessons***

1. introduction

The Problem Based Learning model has advantages that are different from other models, the following advantages are explained according to Barret (in Dewi and Oksian, 2015: 93) including: 1) Students are encouraged to have the ability to solve problems in real situations. 2) Students are expected to have the ability to build their own knowledge through learning activities. 3) Learning focuses on problems so that material that has nothing to do does not need to be learned by students at that time. 4) There is a scientific activity in students through group work. 5) The sources of knowledge that students usually use can be obtained from libraries, the internet, interviews, and observations. 6) Students have the ability to assess their own learning progress. 7) Students have the ability to carry out scientific communication in the implementation of discussions or presentations of the results of their work. According to Nisa (2016: 49) Problem-based learning has advantages, 1) The implementation of learning students are actively involved and students learn material meaningfully by learning and thinking, 2) learning orientation is an investment and discovery that is basically an investment discovery that is basically a problem solving so that students' attention can be focused, 3) knowledge lasts a long time, can be remembered when compared to knowledge obtained with other learning models, 4) students' reasoning and critical thinking can be improved, 5) make students more independent and not dependent on anyone, 6) can provide broader and more concrete learning. Based on the problems and results of previous research, it is necessary to apply the right learning model, so that students can play an active role, and have the ability to link the theory learned with everyday life, so that students' thinking skills can improve and get good learning outcomes. To answer the above problems, the researcher chose the title: “The Effect of Problem Based Learning Model on Students' Geography Learning Outcomes”.

1. overview
	1. *Defenition*

Problem-based learning model is a learning model that prioritizes how active students are in always thinking critically and always skilled when faced with solving a problem. The process of how students learn depends on how complex the problems they face. Problem-based learning was first introduced in 1969, from a medical school called McMaster University, Hamilton, Canada. After that, many schools and universities around the world used this method of learning and it is still being used today and continues to be developed. This method directs students in gaining new knowledge, using analysis of various knowledge and learning experiences they have. After that, they connect what they have with the learning problems given by the teachers. In essence, problem-based learning is developed to provide learning experiences for students. The learning process that prioritizes the ability to analyze learning materials from students independently. Using real problems to face, students can learn to think critically. Then develop problem-solving skills and gain knowledge independentlyAccording to Ibrahim, M, and M. Nur, (2010) and Butcher, C (2006) Problem Based Learning, is a learning model in which it involves target students to try to solve problems with several stages of the scientific method so that students are expected to learn knowledge related to the problem and at the same time students are expected to have skills in solving problems. PBL will be a learning approach that seeks to apply problems that occur in the real world, as a context for students to practice how to think critically and gain skills to solve problems.

Based on the understanding of the PBL model above, it can be concluded that the PBL model is a learning activity that expects students to have the ability to analyze a problem, unconsciously students are practicing to think critically so that students can have the skills to solve problems.

1. methods
	1. *Type of Research*

Literature study is a series of activities related to library data collection methods, reading and recording, and processing research materials according to Daniel and Warsiah (2009.80), literature study is research conducted by researchers by collecting a number of books, magazines related to research problems and objectives.

This technique is carried out with the aim of revealing various theories that are relevant to the problems being faced or studied as reference material in discussing the research results. Meanwhile, Sarwono (2006) states that literature study is the study of data from various reference books and previous research results that are relevant to the research to obtain a theoretical basis for the problem to be studied. Literature study is referred to as library research or library research. The limitations of this activity only lead to the production of articles, journals and library collections without the need for field research. This research comes from books, national journals or articles and previous theses that are on the same theme with this research starting from the 2019 period.*Teknik*

* 1. *Data Analysis Techniques*

The data analysis used in this research is the Miles and Huberman model in (Sugiyono, 2010) which suggests that data analysis activities include data reduction, data presentation and drawing conclusions. In this study, data collection was obtained from theses, scientific articles, and journals that are in accordance with the title or theme of this article, to be able to find out the effect of the problem-based learning model on geography student learning outcomes, then the data that has been obtained is then analyzed and studied in depth, critically, and systematically which is then described in a narrative.

1. discussion

Problem Based Learning is learning that provides problems to students and students are expected to solve these problems by carrying out active learning (Hadi 2018). Problem-based learning is one of the learning models based on the theory of learning constructivism. The process in the problem-based learning model will produce skills collaboratively, because learning using PBL will make students learn actively and be directly involved. In addition, thinking in problem-based learning is needed to solve problems faced by students during the learning process (Hidayah et al, 2023). This model emphasizes problem solving as a means to improve students' understanding of the material studied. Problem-based learning is a student-centered learning approach, where they are faced with a real problem that must be solved through the process of thinking, collaboration, and independent exploration. this newly created, highlight all content and import the text file you prepared. You are now ready to style your paper; use the scroll-down window on the left of the MS Word Formatting toolbar.

This problem-based learning model is very suitable for use in geography subjects in learning activities, students will be invited to think critically in solving problems by discussing with classmates besides that geography material is also very suitable for problem-based learning models, according to the results of previous research it is stated that students can easily solve problems such as in physical, social, and economic geography material. from the learning material is very related to students' daily lives so that students can easily solve problems. when the problem-based learning model is used, student learning outcomes increase, therefore the problem-based learning model is very appropriate in learning geography.

Previous studies that students have an average learning outcome of 68.7 after conducting research, hypothesis testing through posttest data on learning outcomes using parametric analysis, namely the t test of two independent samples, found that tcount> t table: 1.96 > 1.71 with dk = 24 at the 5% significance level. This means that tcount is not in the H0 acceptance area or H0 is rejected, so Ha is accepted, which means that there are differences in the learning outcomes of experimental classes using the Problem Based Larning model with control classes using conventional learning. These results show that students who have the same initial ability have different final abilities after being given different treatments (Afandi, Subekti, and Saputro 2024).

1. conclusions

 Through the literature study, it can be concluded that in learning activities, a teacher must have skills or be creative in choosing a method or learning model to be used so that learning activities do not tend to be monotonous. For this reason, the most appropriate model to improve student learning outcomes is the problem-based learning model. The advantages of the problem-based learning model 1) Challenges students' abilities and gives satisfaction to discover new knowledge for students. 2) Increase student motivation and learning activities. 3) Helps students in transferring student knowledge to understand real-world problems. 4) Helps students to develop their new knowledge and take responsibility for their learning. 5) Develop students' ability to think critically and develop their ability to adjust to new knowledge. 6) Provide opportunities for students to apply their knowledge in the real world. 7) Facilitate students in mastering the concepts learned in order to solve real-world problems.

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