



## Effect of Problem-Based Learning Model on Learning Outcomes in Microeconomic Course

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### Abstract

The purpose of this research is to analyze effect of problem-based learning model on learning outcomes in microeconomic course. The approach used in this research is a quantitative approach. Population in this study are students from Medan City Private Universities. Due to the large population, sample is determined randomly, namely 50 respondents. The data analysis technique in this research uses simple linear regression analysis. The research results show that problem-based learning model has a positive and significant effect on learning outcomes in microeconomic course.

**Kata Kunci:** *Problem-Based Learning, Learning Outcomes, Microeconomic Course*

### Abstrak

Tujuan penelitian ini adalah untuk menganalisis pengaruh model pembelajaran berbasis masalah terhadap hasil belajar pada mata kuliah ekonomi mikro. Pendekatan yang digunakan dalam penelitian ini adalah pendekatan kuantitatif. Populasi pada penelitian ini adalah mahasiswa Perguruan Tinggi Swasta Kota Medan. Karena populasi yang besar maka sampel ditentukan sendiri secara acak yaitu sebanyak 50 responden. Teknik analisis data dalam penelitian ini menggunakan analisis regresi linear sederhana. Hasil penelitian menunjukkan bahwa model pembelajaran berbasis masalah berpengaruh positif dan signifikan terhadap hasil belajar pada mata kuliah ekonomi mikro.

**Keywords:** *Pembelajaran Berbasis Masalah, Hasil Belajar, Mata Kuliah Ekonomi Mikro*

### Introduction

The aim of national education is to educate the life of the nation and develop the Indonesian human being as a whole, namely a human being who has faith and devotion to God Almighty and has noble character, has knowledge and skills, physical and spiritual health, a stable and

independent personality as well as a sense of social responsibility and nationality. Problems with the quality of education are often associated with declining student learning achievements. There are many factors that cause low achievement of learning outcomes, some of which are well known, namely the nature of the

knowledge, poor implementation of learning, and the character of the learning (Arikunto, 2013).

Learning begins with an explanation of real problems, for example an example of learning fractions at elementary campuses is given which begins by introducing division into the same number, for example dividing a cake, so that students understand division in a simple form and what happens in everyday life. Then the lecturer forms study groups based on where the students sit so that the study groups are less heterogeneous. Next, the lecturer gives the students another problem, but still in the same context after obtaining several steps in solving the problem. Students consider the methods and steps determined by examining and researching.

To overcome this problem, a good learning process is needed. Good learning is learning that focuses on developing students' behavioral interests based on the needs of the students themselves, because active learning must be centered on the students.

Creating a conducive and enjoyable learning atmosphere requires the creation of an attractive learning model (Hamdani, 2010). Students do not feel burdened by the teaching material that must be mastered. If students themselves search for, process and conclude the problems they are studying, the knowledge they gain will stick in their minds longer. Lecturers as facilitators have the ability to choose effective learning models to improve students' critical thinking abilities. It is hoped that the innovation in learning models will create an active learning atmosphere, make it easier to master the material, make students more creative in the learning process, be critical in dealing

with problems, have social skills and achieve more optimal learning outcomes. In order for this effort to be successful, a learning model must be chosen that is appropriate to the situation and conditions of students and the learning environment, so that students can be active, interactive and creative in the learning process. Choosing the right learning model will also clarify the concepts given so that students are always enthusiastic about thinking and playing an active role. Learning objectives will clarify the teaching and learning process in terms of the situations and conditions that must be implemented in the teaching and learning process.

The learning model used by lecturers should be able to help students' analysis process. One of these models is problem-based learning model. It is hoped that problem-based learning model will improve student learning outcomes. The effectiveness of this model is that students are more active in thinking about real problems around them so that students get a deeper and more meaningful impression about what they are learning.

Learning with problem-based learning model presents real life situations for students so that students are not confused and can immediately understand and discover for themselves what is being learned, especially regarding chemicals in everyday life, while one example of chemicals in everyday life is cleaning chemicals (Slameto, 2010). This learning model also involves students actively in the learning process. Students are given the freedom to think more in developing their reasoning in solving the problems they face. The problem-based learning model is expected to be suitable for application to chemical material in everyday life so that students understand the material more

easily so that student learning outcomes can improve (Widoyoko, 2014).

The purpose of this research is to analyze effect of problem-based learning model on learning outcomes in microeconomic course.

### Method

The approach used in this research is a quantitative approach because this research uses numerical data that can be processed using statistical methods (Alimuddin et al., 2023). A quantitative research approach is defined as part of a series of systematic investigations of phenomena by collecting data to then be measured using mathematical or computational statistical techniques. The aim of quantitative research is to develop and use mathematical models, theories and/or hypotheses related to a phenomenon (Pandiangan, 2023).

Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn (Kurdhi et al., 2023). Population in this study are students from Medan City Private Universities. Sample is part of the number and characteristics possessed by the population (Pandiangan et al., 2023). Due to the large population, sample is determined randomly, namely 50 respondents.

The data analysis technique in this research uses simple linear regression analysis. Simple linear regression is an equation model that describes the relationship between one independent variable or predictor (X) and one dependent variable or response (Y), which is usually depicted with a straight line (Ratnawita et al., 2023).

### Results and Discussion

### Hypothesis Test

Hypothesis testing is intended to see whether a proposed hypothesis is rejected or accepted (Yoppy et al., 2023). A hypothesis is an assumption or statement that may be true or false about a population. By observing the entire population, a hypothesis can be known whether a study is true or false. For practical purposes, random sampling from the population will be helpful. In hypothesis testing there is an assumption or statement of the term null hypothesis. The null hypothesis is the hypothesis to be tested, stated by  $H_0$  and rejection of  $H_0$  is interpreted as acceptance of the other hypothesis stated by  $H_1$ .

**Table 1. Hypothesis Test**

Variable	Coefficient	Prob.
Problem-Based Learning Model	0.116	0.001

Dependent Variable: Learning Outcomes  
Source: Research Results (2023)

The research results show that problem-based learning model has a positive and significant effect on learning outcomes in microeconomic course. Learning is a complex process that happens to everyone and lasts a lifetime. One sign that someone has learned is a change in their behavior. The changes in behavior expected from learning are called learning outcomes.

One of the important components in the teaching and learning process in class to achieve learning objectives is the way the lecturer delivers the material. Therefore, lecturers are required to be creative in order to create a pleasant learning atmosphere in the classroom, increase student activity, and be meaningful so that students can be more

motivated to understand the material well and the learning objectives are achieved.

Microeconomics as a means of scientific thinking is very necessary to increase the ability to think logically, systematically and critically in students. Likewise, microeconomics is the basic knowledge that students need to support their learning success in pursuing higher education. Microeconomics even plays a role in improving the quality of human resources and as a tool to help develop other scientific disciplines.

Including problems for students in teaching microeconomics subjects will make learning more meaningful because they know the lessons learned in class are useful in everyday life. So this learning can help students digest the abstract information presented by the lecturer.

Learning microeconomics is not only about being exposed to theories and concepts, but also about having to do something, know and solve problems related to microeconomic learning. This can be obtained through the problem-based learning model. Problem-based learning can improve critical thinking, analyze and solve complex problems.

Using this problem-based learning model can train thinking skills and will make students more active in the learning process so that they get good learning results. Apart from that, using a problem-based learning model trains students to work together in solving problems. Thus, it is hoped that there will be an influence of the problem-based learning model on student microeconomic learning outcomes.

### **Conclusion**

The research results show that problem-based learning model has a positive and significant effect on learning outcomes in microeconomic course.

Based on the conclusions above, the author would like to convey several suggestions which may be useful for improving the teaching and learning process, namely as follows:

1. It is hoped that teachers can use the problem-based learning model, because the problem-based learning model can improve student learning outcomes with their ability to solve problems.
2. Problem-solving learning model which emphasizes problem solving skills is very well implemented so it can be used as an alternative in learning. However, other materials need to be considered again, lecturers must be able to choose learning models and methods that are appropriate to the learning material, the objectives to be achieved, the time available, and the facilities and infrastructure they have.

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