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# Effectiveness of Problem-Based Learning Model on Critical Thinking Ability in Financial Management Course

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#### **Abstract**

The purpose of this research is to analyze effectiveness of problem-based learning model on critical thinking ability in financial management course. This type of research applies a quantitative approach. Population in the study are students at Medan City Private Universities. Based on needs and cost efficiency, sample in this study is 30 respondents. Hypothesis testing uses partial test. The research results show that application of problem-based learning model is felt to be quite effective in making students more active in participating in learning, thereby fostering students' ability to think critically in financial management courses. Statistically, it shows that problem-based learning model has a significant effect on critical thinking ability in financial management course.

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

#### **Abstrak**

Tujuan penelitian ini adalah untuk menganalisis keefektifan model pembelajaran berbasis masalah terhadap kemampuan berpikir kritis pada mata kuliah manajemen keuangan. Jenis penelitian ini menerapkan pendekatan kuantitatif. Populasi dalam penelitian adalah mahasiswa Perguruan Tinggi Swasta Kota Medan. Berdasarkan kebutuhan dan efisisensi biaya maka sampel pada penelitian ini adalah sebanyak 30 responden. Pengujian hipotesis menggunakan uji parsial. Hasil penelitian menunjukan bahwa penerapan model pembelajaran berbasis masalah dirasakan cukup efektif yang membuat mahasiswa lebih aktif dalam mengikuti pembelajaran, sehingga menumbuhkan kemampuan mahasiswa untuk berpikir kritis pada mata kuliah manajemen keuangan. Secara statistik menunjukan model pembelajaran berbasis masalah berpengaruh signifikan terhadap kemampuan berpikir kritis pada mata kuliah manajemen keuangan.

Keywords: Keefektifan, Pembelajaran Berbasis Masalah, Kemampuan Berpikir Kritis

Education is developing rapidly due to technological advances in the era of globalization, knowledge is also easier to

Introduction

find and obtain due to the increasingly widespread information from various parts of the world and social media networks. Education has an important role for every human being in future progress. Education is a teaching and learning process that focuses on human thought patterns that are expected by society to better understand real events in the field that are right on target at the education unit level.

Learning is an effort to create conditions for the creation of activities that enable students to obtain adequate learning experiences. In learning, external factors such as student worksheets, media, and other learning resources are planned according to students' internal conditions (Amir, 2015). Based on this description, it can be understood that in planning and learning processes in schools, teachers play an important role in achieving learning goals.

Students' ability to solve problems can be called critical thinking. Students really need critical thinking skills, with the hope that students can solve the problems they face in everyday life. Along with the increasingly rapid development of the information era and increasingly complex life, the ability to think critically is seen as a basic competency that is as necessary to master as reading and writing. So learning in schools must lead to activities that encourage students to think critically.

Knowledge that requires critical thinking skills because humans are basically managers in everyday life for themselves or their families to meet their needs and realize their desired goals. Therefore, students' critical thinking skills, especially in economics and material management, need to be improved or developed (Daryanto, 2010).

Critical thinking, creative thinking, and metacognition, along with advances in technology, are very helpful for finding information related to the thinking process. Meanwhile, critical thinking can be interpreted as a person's ability to convey thoughts and ideas in a real way about the problem being faced, focusing on decisions that will be believed and carried out. Based on this description, the characteristic of critical thinking skills is that real thinking can provide logical reasons for existing problems regarding something.

Critical thinking is the cognitive ability to see patterns of behavior that require the involvement of active thinking and stating something with full confidence and thinking regularly in seeking the truth because it is based on a problem that will be resolved with concrete and reasonable reasons and has strong empirical evidence so that it is in accordance with the study which has been carried out and analyzed in real terms. Apart from that, cognitive abilities have an important role compared to other factors in students' critical thinking abilities. So educators need to consider students' cognitive abilities during the learning process in class (Sudijono, 2013).

Thinking that is based on logical thinking according to events in the environment can make it easier for teachers to start implementing a thinking process that is based on thinking about analyzing a problem. The connection between complex thinking and an established structure can be carried out and applied by students in their own way that they believe in. So that complex thinking abilities in basic thinking processes have initial thoughts that need to be developed.

The development of students' critical thinking abilities must be carried out during the learning process, teachers direct

students to think critically in solving problems to be solved, but students tend to experience difficulties in starting the thinking process, lack of knowledge and the low level of teaching materials used and teachers do not yet fully use the learning model (Nasution, 2011).

The importance of understanding cognitive aspects and the concept of critical thinking for students has a mutually reinforcing relationship, such as when solving problems related to quality and is worth examining from the cognitive and conceptual aspects in accordance with the problem being studied and discussed to see whether the critical thinking process in solving problems can be achieved resolved well.

The purpose of this research is to analyze effectiveness of problem-based learning model on critical thinking ability in financial management course.

# **Problem-Based Learning Model**

A learning model is a conceptual framework that describes systematic procedures for organizing learning experiences to achieve certain learning goals and functions as a guide for learning designers and teachers in planning teaching and learning activities.

The problem-based learning model is a learning that involves the presentation of authentic and meaningful situations, which serves as a basis for student investigation and inquiry. Meanwhile, defining problem-based learning is a model that presents a problem that is realistic and meaningful to students to be investigated openly and a solution can be found (Rusmono, 2012).

The problem-based learning strategy requires students to be involved in a research process that requires them to

identify problems, collect data, and use the data to solve problems.

Based on the theory above, it can be concluded that the problem-based learning model is a form of learning that emphasizes learning experiences so that students can construct their own knowledge through presenting real problems so that they are able to learn independently.

# **Critical Thinking Ability**

In general, critical thinking is assumed to be a cognitive process, a mental action to gain knowledge. Thinking abilities are categorized into basic and complex thinking abilities. The thinking process is connected to other behavioral requires active patterns and the involvement of the thinker. Complex relationships are developed through thinking. These relationships can be interrelated with established structures and can be expressed by thinkers in various ways.

Most people define critical thinking as thinking at a high level or also interpreted as high-level thinking. Critical thinking is also often understood as complex thinking and tends to only be suitable at the student level. The impact of understanding the definition above is that many people identify critical thinking as applied to difficult questions. We have to change these views, we have to think in terms of the process of critical thinking, then we also have to think in terms of goals and also in terms of benefits.

Critical thinking is thinking that is accurate, relevant, reasonable, and thorough in the context of analyzing problems, synthesizing, generalizing, applying concepts, interpreting, evaluating supporting arguments and hypotheses,

solving problems, and also in making decisions (Sani, Ridwan Abdullah 2014).

Thinking is generally defined as a cognitive process, a mental activity to obtain knowledge. Critical thinking is the skilled and active interpretation and evaluation of observations and communications, information and arguments.

# Method

This type of research applies a quantitative approach. Quantitative research is research in the form of numbers and analysis using statistics (Alimuddin et al., 2023). Research is carried out by collecting data and using a structured list of questions arranged based measurements of the variables studied which then produces quantitative data. Research that focuses on presenting data in the form of numbers or qualitative figures statistics. In other words, in quantitative research, the researcher starts from a theory towards data in the form of numbers and ends in acceptance or rejection of a theory whose truth has been tested (Pandiangan, 2023). Quantitative research relies very heavily on data collection. The data in question is in the form of measurement results. Therefore, in this research statistics plays a very important role as a tool for analyzing the answer to a problem.

Population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions sought. Population is the subject of research. If someone wants to research all the elements in the research area, then the research is population research (Kurdhi et al., 2023). Population in the study are students at Medan City Private Universities. Sample is part of the

number and characteristics of the population (Pandiangan et al., 2023). If population is large, then of course it will be difficult for researchers to use everything in the population. Based on needs and cost efficiency, sample in this study is 30 respondents.

Hypothesis testing uses partial test. This partial test aims to find out how much influence the independent variable has on the dependent variable with the assumption that the other variables are constant (Ratnawita et al., 2023). The test is carried out in 2 directions with a confidence level of 95% and a significant level test is carried out on the influence of the relationship between individual independent variables on the dependent variable, where the level of significance is determined at 5% and degree of freedom (df)=n-k.

## **Results and Discussion**

Parsial Test

This partial test aims to find out how much influence the independent variable has on the dependent variable with the assumption that the other variables are constant (Yoppy et al., 2023).

Table 1. Parsial Test

| V | <sup>7</sup> ariable        | Prob. |
|---|-----------------------------|-------|
| P | roblem-Based Learning Model | 0.000 |

Dependent Variable: Critical Thinking Ability

Source: Research Results (2023)

The research results show that application of problem-based learning model is felt to be quite effective in making students more active in participating in learning, thereby fostering students' ability to think critically in financial management courses.

Statistically, it shows that problem-based learning model has a significant effect on critical thinking ability in financial management course.

In the application of learning, problem-based learning model is effective on students' critical thinking abilities, which is different from using direct models or direct instruction. In learning activities in the experimental class, the learning carried out is centered on the educator, the educator does what has been created and implements everything that must be implemented using the problem-based learning model.

If students can answer problems at the cognitive aspect level of analyzing, evaluating, and creating. So students have high test results and can answer problems correctly compared to students who cannot solve problems with low-level thinking.

Thus, this is in accordance with the results of research conducted that learning using problem based learning makes all students actively involved, starting from identifying problems, analyzing evaluating problems which is also a critical thinking level process. Therefore, problem based learning can easily support the critical thinking process. When educators give problems to students, students identify the problem, then analyze the problem and discuss the problem in groups so that students can provide a critical evaluation of the problem given by the teacher.

The effectiveness of the problem based learning model can improve critical thinking skills, so that the problem based learning model can be used to stimulate critical thinking in a problem-solving and problem-oriented atmosphere, educators when presenting problems, ask questions and argue when learning using the problem

based learning model. So the characteristics of learning using the problem based learning model are compatible and support each other. Learning stages that are easy to understand are very necessary in implementing learning so that students are not burdened with complicated steps but can focus on the learning process so that they can improve students' critical thinking skills on the topic of temperature and its changes.

## **Conclusion**

The research results show that application of problem-based learning model is felt to be quite effective in making students more active in participating in learning, thereby fostering students' ability to think critically in financial management courses. Statistically, it shows that problem-based learning model has a significant effect on critical thinking ability in financial management course.

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