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Profile of Problem Based Learning to Improve Students' Critical Thinking Skills

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ABSTRACT

This article was created to identify the effect of the Problem Based Learning model in improving students' critical thinking. The data collection method is in the form of a literature study. This article explains that problem-based learning is a learning model that focuses on students' solving problems in physics concepts. Critical thinking is the student's ability to analyze and evaluate the information received to conclude appropriately. The results of the literature study showed an increase in students' critical thinking skills in the learning process with the Problem Based Learning (PBL) learning model. The application of Problem Based Learning has an average increase of about 50% after the learning pattern is applied. The existence of the PBL learning model is effectively used to improve students' critical thinking, which incidentally in solving physics concepts requires the ability to analyze and evaluate to conclude.

INTRODUCTION

Physics is a science that studies natural phenomena and their interactions to instill interest in being able to think critically about concepts related to everyday life. Many students believe that physics is a complex subject to understand because they learn a lot about mathematical equations so that physics is identified with numbers and formulas. Learning that only receives material from the teacher causes students to be passive (Aisyah et al., 2013). Pelawi & Sinulingga (2016) stated that students tend to memorize understanding, formulas, and lack a learning approach related to natural phenomena, and accept whatever is explained by the teacher without knowing the meaning of the lesson.

Based on observations in several schools in Sumenep in September 2021 it was found that students' critical thinking skills in solving physics problems were still low. The low critical thinking ability is shown by the number of students who make mistakes in applying the basic concepts of physics and how to work on the problems given. This results in students working on the problem without solving steps and focusing on the final answer. As a result, students' reasoning abilities cannot develop optimally. The ability to reason cannot be separated from the ability to think critically. On the other hand, critical thinking is critical because students can choose the best choice carefully and behave according to logic (Novtiar & Aripin, 2017). Sunaryo and Fatimah (2019), in their research, confirm that there are five indicators of critical thinking skills, namely reasoning, inference, situation, clarity, and Overview. While Wuningsih (2019), namely analysis, formulating, strategies and conclusions.

The results of observations also show that in learning activities in the classroom, teachers still use conventional teaching methods and have not applied varied

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