

ABSTRACT

THE CORELATION BETWEEN THE COGNITIVE PROCESSES AND PERFORMANCE IN OF LEARNING DISCOVERY BASED SKILL THE PROCESS OF SCIENCE WITH COGNITIVE THE PRODUCT OF STUDENTS

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Physics is a branch of SCIENCE (natural sciences) includes subjects that can be said to be difficult to understand by students, resulting in student learning outcomes especially in the realm of cognitive ability is low. In addition, the learning process at school nowadays tend to be conventional resulted in many students have difficulty in receiving, responding, as well as developing the material given by the teacher.

Implementation of learning physics by using the method of discovery can gave rise to science process skills (KPS) students. As for this research aims to find out the relationship between the cognitive processes and performance in discovery learning with cognitive-based KPS students products. In this research, cognitive product students is measured from the posttest, whereas the assessment of cognitive processes and performance based KPS done by observation. Cognitive processes-based KPS can be measured from the attainment of indicators: predict, formulating hypotheses,

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designing an experiment, and conclude. then the work based kps can be measured from the attainment of an indicator : conducts experiments , perform observations and measurements , interpretation, and apply a draft . now design this study using the pre eksperimental design with type one shot case study . engineering analysis of data and the testing of hypotheses of cognitive processes , labor and the students use cognitive capability test correlation bivariat and linear regression .

Based on the results of the analysis of the relationship between cognitive processes with the cognitive value of simple products obtained correlation (r) of 0,780, which shows there is a strong connection. Then from the results of the analysis of the relationship between cognitive performance by students of students obtained grade product correlation (r) of simple 0.860, which showed a very strong relationship. In addition also of the analysis of the relationship between cognitive processes and performance with cognitive products show students a very strong relationship, it is characterized by the acquisition value of the multiple linear regression analysis (R) of 0.838.

keywords : the cognitive processes, performance, cognitive products, and methods of learning discovery