

ABSTRACT

THE ANALYSIS OF STUDENTS' CRITICAL THINKING ABILITY THROUGH THE APPLICATION OF GENERATIVE LEARNING MODEL WHICH IS REVIEWED FROM STUDENTS' COGNITIVE ABILITY

By

CAHYO AGUS SETIAWAN

A critical thinking ability is an important ability in learning and also functions effectively in other aspects of life. Based on that statement, the researcher tried to conduct a research with some purposes to know: (1) The differences of students' critical thinking ability in the process of physics learning with the application of generative learning model and direct instruction model, (2) The interaction between learning model and students' cognitive ability, (3) The differences of students' critical thinking ability and their high cognitive ability in the process of physics learning with the application of generative learning model and direct instruction model, and (4) The differences of students' critical thinking ability and their low cognitive ability in the process of physics learning with the application of generative learning model and direct instruction model.

The research was conducted in SMA 5 Bandar Lampung and using two classes, they were experiment class (Class XI Science 3) with number of sample 37 students and control class (Class XI Science 2) with number of sample 33 students

by used factorial design. In the beginning of research, students were given a pretest to know their critical thinking and cognitive ability in learning to be classified into high cognitive ability students and low cognitive ability students. After three times meetings with the application of generative learning model in the experiment class and direct instruction model in the control class, all samples were given a posttest to know their critical thinking ability after learning process. So, it is found the students' interaction data in learning, students' cognitive ability, and N-gain of students' critical thinking ability which is then processed with variance analysis and ratio test.

The result of research shows that: (1) There are differences of students critical thinking ability in physics learning with the application of generative learning model and direct instruction model, (2) There is no interaction between learning and students' cognitive ability model, (3) There are differences between students' critical thinking ability and students' high cognitive ability in the process of physics learning with the application of generative learning model and direct instruction model, and (4) There are differences of students' critical thinking ability in low cognitive ability students in the process of physics learning with the application of generative learning model and direct instruction model.

Keywords: cognitive ability, generative learning and direct instruction model, and critical thinking ability.