ABSTRACT

Critical thinking is a general term of cognitive skills and intellectual disposition needed to effectively identify, analyze, and evaluate arguments and truth claims. Critical thinking is one gold standard of the project-based learning model. This research aimed to know and describe the effect of project-based learning toward students’ critical thinking skill about dynamic electricity.

This research employed a quasi-experimental pretest and posttest with control design. The populations were 60 students grade X-science in SMA N 2 Lintongnhuta academic year 2014/2015. The samples consist of two classes, one class with 30 students as experiment class and one class as control class with 30 students, while the sampling technique used cluster random sampling. Research instrument used essay test of critical thinking ability based on Ennis’ indicator. The data obtained in the study were analyzed by the computer program SPSS 18.

The result showed that student’s critical thinking ability in experiment class which had been treated with project-based learning model had been significantly different from control class which had been treated with conventional learning. In addition, the improvement of critical thinking skill in PBL class was greater than in control class. This meant implementation project based learning has a significant effect toward student’s critical thinking skill. Result of student activity also showed student in PBL class has good collaboration, responsibility, and activeness.

Keyword: Critical thinking, project-based learning, quasi-experimental, Ennis’ indicator, and student activity.