

THE EFFECT OF GUIDED DISCOVERY LEARNING ON STUDENTS' SCIENCE PROCESS SKILL AND LEARNING OUTCOMES AT ECOSYSTEM TOPIC IN GRADE X SMA NEGERI 2 KISARAN ACADEMIC YEAR 2014/2015

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ABSTRACT**

The research aims to know the effect of guided discovery learning on students' science process skill and learning outcomes at ecosystem topic. This research was done in SMA Negeri 2 Kisaran. This research used quasi experiment type with pretest-posttest control group design. Population is the whole students in grade X SMA Negeri 2 Kisaran on 2nd semester, consisting of seven classes. Sample was taken using technique of purposive sampling. The number of research sample is 40 students for class experiment and 40 students for class control. The data of learning outcomes is taken by using instrument test in form of multiple choice which has been tested for the validity and reliability, while the data of Science Skill Process is taken by using instrument test in form of essay question from seven indicators.

The data analysis used t-test, from the result of pretest calculation obtained the data both classes are distributed normally and homogeneity, with $t_{count} < t_{table}$ ($1.06 < 1.991$), therefore H_0 accepted, means the cognitive of students before treatment are similar. During the treatment process class experiment was learned by using guided discovery learning model, while class control was learned by conventional learning model.

From the result of data calculation there was differences of mean between the two classes, the value obtained from class guided discovery are 82.8 with deviation standard 7.35 and class conventional 76.92 with deviation standard 8.18. From the result obtained t_{count} is about 2.88 and t_{table} 2.002. Therefore can be concluded that $t_{count} > t_{table}$ it means H_a accepted. By using t-test two tail seven indicators were tested. The result shows science process skill in class experiment significantly higher than class control. By the other words it can be concluded that there is effect of guided discovery learning on students' science skill process and learning outcomes at ecosystem topic in grade X SMA Negeri 2 Kisaran Academic Year 2014/2015.

Key word : Guided Discovery, Science Process Skill, Quasy Experiment,