

Abstract

Ratu Nurul Aulia, NIM 4192441010 (2023). The Effect of Reading, Identification, Constructing, Solving, Reviewing, and Extending Learning Model on Students' Scientific Reasoning Skills on The Topic of Environmental Changes of Class X MAN 1 Medan

This research aims to determine the Effect of Reading, Identification, Constructing, Solving, Reviewing, and Extending Learning Model on Students' Scientific Reasoning Skills on the Topic of Environmental Changes of Class X MAN 1 Medan. This research uses a quasi-experiment with Nonequivalent Control Group Design. Sampling is carried out using the Purposive Sampling technique. The population of this study is all class X Science and Technology MAN 1 Medan which consisted of seventeen classes. The sample in this research consisted of 2 classes, class X Science and Technology 1 (Experimental Class) with the Reading, Identification, Constructing, Solving, Reviewing, and Extending learning model and X Science and Technology 2 (Control Class) with the conventional learning model. Data collection is carried out using a test consisting of 10 essay questions. The results of the research shows that the average pretest and posttest data for scientific reasoning skills in the experimental class is 35.65 ± 7.79 and 79.14 ± 6.95 and in the control class is 33.94 ± 6.05 and 67.76 ± 9.18 . Data is analyzed using Independent Sample t-Test using SPSS Version 26. Based on hypothesis testing, it is found that the Reading, Identification, Constructing, Solving, Reviewing, and Extending learning model has an effect on students' scientific reasoning skills on The Topic of Environmental Changes of Class X MAN 1 Medan. In the experimental class, the N-gain value is greater than the control class. The N-gain for the experimental class is 0.68 in the medium category and in the control class the N-gain value is 0.51 in the medium category. It can be concluded that the Reading, Identification, Constructing, Solving, Reviewing, and Extending learning model has an influence on students' scientific reasoning skills on The Topic of Environmental Changes of Class X MAN 1 Medan.

Keywords : Influence, Reading, Identification, Constructing, Solving, Reviewing, and Extending, Scientific Reasoning Skills