Abstract

This study aims to determine the differences in outcomes between students learning mathematics using SAVI approach and students using the conventional approach in terms of student achievement.

This type of research is experimental research using experimental pretest-posttest design with two classes, one class as the experimental class and one as a control class that has been chosen at random (randomized pretest-posttest control group design). The samples in this study were randomly assigned (Random) of the population. Population of this study were all students of class X SMA Negeri 1 Perbaungan, and the sample is all students from class X-1 as a given experimental class learning using SAVI approach and all the students of class X-2 as a class given control learning by using conventional approach is direct instruction models. Method of hypothesis testing used is the independent sample t-test (t-test).

Result of this research with $\alpha = 0.05$ shows that the students’ achievement after treatment given is higher that before treatment given both by SAVI learning model and Direct Instruction model because in SAVI class $t_{\text{calculate}} > t_{\text{table}}$ namely, $t_{\text{calculate}} = 12.963$ and $t_{\text{table}} = 3.466$ also in Direct Instruction had $t_{\text{calculate}} > t_{\text{table}}$ namely, $t_{\text{calculate}} = 10.152$ and $t_{\text{table}} = 3.466$. But result of this research also shows that the improvement of students’ achievement in SAVI class is better than students’ achievement in direct Instruction class on the subtopic of volume and distance in grade X because from the analysis of gain index of two classes had $t_{\text{calculate}} > t_{\text{table}}$ namely, $t_{\text{calculate}} = 3.281$ and $t_{\text{table}} = 3.273$.

Key words: SAVI model, Direct Instruction model, students’ achievement.