THE IMPLEMENTATION OF GUIDED DISCOVERY-INQUIRY LABORATORY LESSON LEARNING MODEL IN IMPROVING SENIOR HIGH SCHOOL STUDENTS' ACHIEVEMENT AND CHARACTERS DEVELOPMENT ON THE TOPIC OF SOLUBILITY AND SOLUBILITY PRODUCT

Wika Prayogi (Reg. No. 4103332028)

ABSTRACT

The implementation of Guided Discovery-Inquiry Laboratory Lesson learning model in improving senior high school students' achievement and activeness, cooperation, and responsibility development on the topic of Solubility and Solubility Product based on the 2013 curriculum were investigated in this study by comparing the result to Direct Instruction learning model. This study involved 60 homogeneous students of 11th grade in SMAN 1 Percut Sei Tuan which were equally divided into 2 classes; those were 30 students treated by Guided Discovery-Inquiry Laboratory Lesson as experimental class sample and 30 remaining students treated by Direct Instruction as control class sample. Students' achievement (measured by posttest scores) of experimental class sample gained (78.8±1.28) % of improving to be averagely 84.167±1.019, while control class sample gained (61.8±1.67) % only to be averagely 72.667±1.216. By comparing those values, there was significant difference between students' achievement in both classes with associated significance value of <0.05 and t_{count} of > t_{table}. Students' characters development was also measured. The average of students' activeness, cooperation, and responsibility scores in experimental class sample was successively 91.554±0.407; 90.222±0.498; and 87.407±0.450 while in control class sample was only 67.815±0.520; 74.889±0.510; and 77.222±0.602 respectively. By comparing each character score, there was significant difference between students' characters development in both classes with associated significance value of <0.05 and t_{count} of > t_{table} for each. The improvement of students' achievement and characters development had been obtained. By comparing overall result in both classes, the researcher examined the correlation of students' achievement to each character development of activeness, cooperation, and responsibility in each class sample. The correlation test was also statistically studied, where there was positive and significant correlation between those two variables in each class sample with associated significance value of <0.05 and t_{count} of > t_{table} for each. But the correlation of students' achievement to characters development in experimental class sample was totally higher than the control one. Thus, guided discovery-inquiry laboratory lesson learning model was statistically proven to be able to improve students' achievement and characters development and statistically better than direct instruction on the teaching of solubility and solubility product based on the 2013 curriculum but it was still recommended to investigate this kind of learning model to other subject matters and enlarges the variables to be studied.