

**IMPLEMENTATION OF PROBLEM BASED LEARNING INTEGRATED
WITH MULTIMEDIA BASED ON COMPUTER TO IMPROVE
RESPONSIBILITY AND STUDENT'S LEARNING OUTCOMES ON
REACTION RATE SUBJECT MATTER IN SENIOR HIGH SCHOOL**

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ABSTRACT

The purposes of this research are to determine whether there are significant higher of student's learning outcomes that taught by problem based learning strategy integrated with multimedia based on computer compared by direct instruction method, and to determine whether there are significant positive correlation between the improvement responsibility sense with student's learning outcomes that taught by problem based learning strategy integrated with multimedia based on computer, and to determine whether there are significant positive correlation between the improvement responsibility sense with student's learning outcomes that taught by direct instruction method, and the last to investigate the effectiveness of student's learning outcomes using problem based learning strategy integrated with multimedia based on computer compared by direct instruction method. SMA Negeri 2 Medan is the location of this research and population is all the class XI IPA, and sample was taken randomly as much as two classes, control and experiment class. The student of each class are taken 40 students. Before do the treatment, done Pre – test and Post – test were given to both of the class to know the student's learning outcomes. The treatment in control class is direct instruction method and the other is problem based learning integrated with multimedia based on computer. During the teaching process, the observer looked the responsibility of student against to learning process. SPSS-16 for computer is used to calculate the data and Independent Sample T-Test is used to test the hypothesis. The conclusion are, there are significant higher of student's learning outcomes that taught by problem based learning strategy integrated with multimedia based on computer compared by direct instruction method, and there are positive correlation between the improvement responsibility sense with student's learning outcomes that taught by problem based learning strategy integrated with multimedia based on computer, and there are not significant positive correlation the improvement responsibility sense with student's learning outcomes that taught by direct instruction method, and the effectively of teaching strategy of problem based learning integrated with multimedia based on computer is 11.57%.