

ABSTRACT

Title : Application of Online Teaching Materials Assisted by Interactive Power Point The Concept of Environmental Change To Improve Problem Solving Ability of Class X Students

The ability to solve problems in students can be applied through a problem-based learning system, so that students will be active in the learning process to be able to solve problems from a subject matter and get their own solutions to problems. This study aims to improve the ability of class X students in practicing problem solving on the concept of environmental change material by applying online teaching materials assisted by interactive power points. This study used a pre-experimental method with a one-group pretest-posttest research design. The subjects of the study were 30 students of class X science at one of the state high schools in Bandung. The research data was obtained through a test, questionnaire and documentation.

The results showed that there was an increase in students' ability to solve problems in class X IPA 1 on environmental change materials by applying online teaching materials assisted by interactive power points. Based on the test results the average score of students before being given treatment was 70.33 while after being given treatment the average score of students became 93.5 with a normalized n-gain value of 0.78 which was categorized as high. The student response questionnaire as a supporting instrument for the study resulted in an average percentage score of 97.75% which was categorized as good. The results of the value analysis for achievement for indicators of problem-solving ability are: indicators for identifying problems obtained 90%, indicators for formulating problems obtained 90%, indicators for formulating hypotheses obtained 83%, and indicators for drawing conclusions obtained 86%. Online teaching materials assisted by interactive power point concepts of environmental change based on test results and analysis of achievement indicators can be applied to improve problem solving skills in class x students.

Keywords: Interactive Power point, Environmental Change Concept, Problem Solving Ability