

**WEB ORIENTED PROJECT BASED LEARNING MODEL IN THE VIRUS  
CONCEPT TO IMPROVE STUDENTS CREATIVE THINKING  
AT SMA PASUNDAN 2 BANDUNG**

**By  
PRANITA NURMATIN**

**ABSTRACT**

*The results of this research carried out in class X MIA 3 in Pasundan 2 High School Bandung on Biology subjects shows that the students' creative thinking skills still on low level, this study aimed to determine the effect of web-oriented Project Based Learning Model on the concept of viruses to improve creative thinking in high school Pasundan 2 Bandung. This research using Pre Experimental method which the population on this research is all of students in X grade on SMA Pasundan 2 Bandung which consists of five classes and taken one class that is sampled, namely class X MIA 3 with 31 students, with the determination of the sample using purposive sampling technique. Data collection was carried out by giving students pretest and posttest tests, student performance and products regarding the concept of viruses. The results of this research are pretest and posttest scores, the pretest average score is 34.30 and posttest average is 75.17 after the students' scores were carried out the N-Gain test with an average of 0.633 with the criteria being and testing the hypothesis by using the normality test on the data pretest is 0.083 and posttest data is 0.068, homogeneity test that the probability value in the significant column is 0.760 or more than 0.05. So it can be concluded that the pretest and posttest values of the population have the same or homogeneous variance. So it can be concluded that the pretest and posttest are normally distributed because  $> 0.05$  t test is  $0.00 < 0.05$ . Then  $H_1$  is accepted or there is a significant difference between pretest and posttest data. Whereas student performance is 83.3% with very good criteria, and product value is 75.8 with good criteria. So it can be concluded that a web-oriented project based learning model can improve students' creative thinking on the concept of viruses in SMA Pasundan 2 Bandung.*

**Keywords:** *Web-Oriented Project Based Learning Model, Creative Thinking Skills, Virus Concept*