

# Implementation of Contextual Chemistry-Vodcast in Chemistry Learning Based on Problem Based Learning Models

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## ABSTRACT

The ability to think at a high level (HOTS) is one of the important abilities possessed by students in high school (SMA / MA). One model that is widely used to train HOTS is Problem Based Learning (PBL). However, the high load of senior high school / MA chemistry learning material (overload) and large class capacity makes the implementation of PBL unable to run optimally to train students in mastering HOTS. In addition, the independence of learning factors of students is still quite low, causing teachers to provide learning material in class so that the application of PBL is constrained. Using vodcast media is one solution to this problem, because vodcast is an alternative media to replace the teacher's lecture role in class. It is expected that students have learned the concepts of subject matter before they take part in classroom learning. This study aims to determine the differences in learning independence and analytical thinking skills of students who use vodcast media and students who do not use vodcast media in chemical learning using PBL models

This research is an experimental research. The experimental design used is Quasi-Experimental with Posttest Only Control. The population used was 4 high schools in Yogyakarta and each school took 2 samples as a control class and an experimental class. The number of samples was 249 students. The data was taken with a questionnaire instrument to measure learning independence and essay questions to get data on students' analytical thinking skills. Data were analyzed qualitatively.

The results showed that there was no difference in learning independence and analytical thinking ability of students who took part in learning with PBL models supported by vodcast media and without vodcast on acid-base material and salt hydrolysis. In addition, there is no significant relationship between learning independence and analytical thinking skills.

Kata Kunci: *vodcast, PBL, learning independence, analysis thinking skill*