



## Influence of Problem Posing Learning Model with Support Software Camtasia on The Ability of Understanding Student's Mathematical

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### ABSTRACT

This study aims to find out how students' activities in using the problem posing learning model with the help of Camtasia software affect to the ability of Mathematical Understanding, find out how the influence of the problem posing learning model with the help of Camtasia software on the Students' Mathematical Understanding Ability, to determine student responses in learning using problem posing learning models with the help of Camtasia software. The research is experimental method with the population all students of grade X in 7<sup>th</sup> State Senior High School Cirebon City. The respondent selected used purposive sampling technique. By comparing pretest (before being given treatment) with posttest (already given treatment). Data collection techniques using tests, observations and questionnaires. Data analysis used observation analysis, normality test, regression test and t test. The results of this study indicate that the learning outcomes of students whose learning using Camtasia-based video media is better than students with conventional learning models.

## INTRODUCTION

The development of mathematics education has some basic competencies that students must possess to improve their mastery of the material being taught. According to The National Council of Teachers of Mathematics (NCTM) 2000 (Cahyani & Setyawati, 2017) there are five standard competencies central to learning is problem solving skills, communication skills, the ability of the connection, reasoning, and the ability of representation. Mathematical understanding is the basic for learning in mathematics (Masnia & Amir, 2019; Pamungkas et al., 2018). Mathematical proof is very closely related to mathematical understanding so that students who have difficulty in mathematical proof are mostly caused by their lack of understanding of mathematical concepts and definitions, write mathematical notation or use mathematical language correctly (Sahara et al., 2017). Before students have five basic competencies as mentioned, basically students must have understanding abilities. The ability of mathematical understanding is the key to solving mathematical problems as well as problems in real life (Setiyani, 2019). In line with the opinion of (Afriyani et al., 2018) the effectiveness of learning needs to be measured from the quality of understanding mathematical concepts. The basic mathematical understanding ability is when someone is able to parse or explain a number (Colegrove & Krause, 2016).

Mathematical understanding is about a concept, how students understand a concept, what they do not understand about a concept, or how they can develop a concept (Gülkılık et al., 2015). If a person understands mathematics, he can recognize the relationship between new concepts and previous concepts (Minarni et al., 2016). From the description above it can be concluded that the ability of mathematical understanding

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