

ABSTRACT

The Effectiveness of the Thinking Aloud Pair Problem Solving (TAPPS) and Connected Mathematics Project (CMP) Models on High School Students' Mathematical Problem Solving Ability

Keywords: TAPPS Learning Model, CMP Learning Model, Ability to solve mathematical problems

This study aims to determine the difference in effectiveness between the mathematical problem solving abilities of students who receive the TApps learning model and students who receive the CMP learning model.

This research was conducted at SMA Negeri 2 Sumenep with a focus on the subject of the Sine Cosine Rule. This research was conducted in June 2023. This study used a Quasi-Experimental model, with a pretest-posttest control group design. The sample was selected through the cluster random sampling technique from 12 population classes, 2 classes were taken as samples, namely class X-4 as Experiment I class which received the CMP learning model and class X-5 received the TAPPS learning model. The hypothesis testing method used is the Paired Sample T-Test (t-test).

The results showed that the score obtained from the problem solving ability test using the TAPPS and CMP models showed a significant increase. This conclusion is based on the results of hypothesis testing using the t-test on the posttest value. The result is $t_{count} = 5.074$ and $t_{table} = 2.080$. This shows that there are differences in the learning outcomes of students who receive the TAPPS learning model and students who receive the CMP learning model. Based on the N-gain value of the TAPPS class, which is 0.41 while the CMP is 0.66, it indicates that learning using the CMP model is more effective than the TAPPS model for students mathematical problem solving abilities.