

## **Impact of Higher Order Thinking Skills (HOTS) module based on the Cognitive Apprenticeship Model (CAM) on student's performance**

### **ABSTRACT**

This study intended to examine the difference in students' performances in terms of measurement and geometry between urban and rural schools. This research used a quasi-experimental design. This study involved a total of 63 students from urban school and 51 students from the rural school. This study conducted a pre-test, post-test, and post-delayed test to measure the students' performance. The treatment group utilized the Higher Order Thinking Skills (HOTS) based Module framed Cognitive Apprenticeship Model (CAM). The analysis of covariance showed that there is a significant difference between the post-test and post-delayed tests for the urban school. This finding revealed that the HOTS approach in teaching mathematics was more effective than the conventional teaching approach for students in an urban school. However, the result of rural schools showed that there is no significant difference in both tests. This result revealed that teachers and students from rural schools need more time to familiarize and practice the use of the HOTS approach. Hence, continuously using this approach in teaching and learning in the future should be recommended.

**Keyword:** Higher-order thinking skills; Academic performance; Measurement and geometry; Experimental study; Rural and urban area