

Effects of HOTS-based module approach on pupil's errors in the topic of measurement and geometry in urban and rural schools

ABSTRACT

This study was to investigate the effect of HOTS-based module approach on pupil's error in the topic of measurement and geometry year five. For the purpose of the study, a quasi-experimental research was conducted on two intact groups. It was conducted in two schools (School1 and School2) located in urban area and two schools (School3 and School4) located in rural area in one of the states in Malaysia. Sample in urban schools was a total of 40 pupils (20 pupils in the treatment group and 20 pupils in the control group) while, for rural schools, 37 pupils (19 pupils in the treatment group and 18 pupils in the control group) participated in this study. The data collection instrument used in this study was the four item problem-solving test on the topic of Measurement and Geometry developed by the researcher. Fong's Schematic Model was used to analyse levels of errors in solving word problem. The analysis of the result from the test showed that pupils in treatment groups in both schools made less errors compared with pupils in control group. This result indicated that pupils who used HOTS-based module committed less errors in solving Measurement and Geometry problems.

Keyword: Higher order thinking skills; Errors; Measurement and geometry