Effects of Higher Order Thinking Module Approach on Primary School Students’ Performance and Problem Solving Skills

Noorashikim Noor Ibrahim, Ahmad Fauzi Mohd Ayub, Aida Suraya Md. Yunus, Rosnaini Mahmud & Nur Raidah Salim

Institute for Mathematical Research, Universiti Putra Malaysia, Serdang, Malaysia
Faculty of Educational Studies, Universiti Putra Malaysia, Serdang, Malaysia

Corresponding Author: noorashikimm@yahoo.com

ABSTRACT

Purpose – This study aimed to investigate the use of HOTS-based module approach on the overall performance and problem solving skills of primary school students.

Method – A quasi-experimental, nonrandomized control group, pretest-posttest delayed posttest design was conducted on two intact groups. This study was conducted in two schools in the urban area in one of the states in Malaysia. For school #1, a total of 69 students (37 students in the treatment group and 32 students in the control group) participated. While for school #2, a total of 63 students (31 students in the treatment group and 32 students in the control group) participated.

Findings – The analysis of covariate (ANCOVA) indicated the HOTS-based module approach group outperformed the conventional approach group in the overall performance and problem solving skills in the posttest and delayed posttest. For the posttest, the conventional approach group acquired significant higher scores when compared to the HOTS-based module approach group in the overall performance and problem solving skills. However, in the delayed post-test, the HOTS-based module approach group had significantly higher scores compared to the conventional approach group in both assessments.

Significance – This study showed using the HOTS based Module approach helped students to get better scores and hence it is recommended that this approach should be continued in teaching and learning in the future.

Keywords: HOTS-based module approach, Conventional approach, Problem solving skill, Urban school