

Enhancing higher-order thinking skills among home science students: the effect of cooperative learning Student Teams Achievement Divisions (STAD) module

ABSTRACT

This study aims to investigate the effectiveness of the cooperative learning module using Student Teams-Achievement Divisions (STAD) techniques in enhancing students' HOTS achievement in the topic of the digestive system and food absorption. A quasi-experimental design was used in this study to gauge the effectiveness of the module. Purposive sampling technique was used to choose the respondents. The study involved 182 students who represented the experimental group and the conventional group. Students were given an intervention by using Home Science STAD Module for five weeks. Descriptive statistics and paired sample t-test were used to determine the effectiveness of the Home Science STAD module on students' HOTS achievement. The findings show students' understanding increased for the digestive system and food absorption topics. There was a significant difference in students' HOTS achievement between the experimental learning and conventional learning group. The finding shows the students were actively engaged in teaching and learning. Post-test result shows that the students were able to answer the HOTS question correctly and they can deliver clear explanations and justifications compared to the answers in the pre-test. Findings from this study revealed that the Home Science STAD Module was appropriate to serve as a guideline for teachers who apply and integrate HOTS in the teaching process. Further studies can apply cooperative techniques in other educational contexts in promoting HOTS among students.

Keyword: Higher-order thinking skills; STAD; Cooperative learning; Home science education; Quasi-experimental