A COMPARATIVE STUDY OF GRADE 6 SCIENCE STUDENTS’ ACADEMIC ACHIEVEMENT UNDER TEACHER-CENTERED LEARNING METHOD AND INQUIRY-BASED LEARNING METHOD AT PANCHASAP SCHOOL, BANGKOK, THAILAND

Shriya Gorowara¹

Richard Lynch²

Abstract: The purpose of this study was to compare grade 6 science students’ academic achievement under two different teaching methods at Panchasap School, Bangkok, Thailand. The two methods were teacher-centered learning method and inquiry-based learning method. The research included five objectives. Objective one was to determine the students’ academic achievement under teacher-centered learning method in pre-test and post-test. Objective two was to determine if there was a significant difference between pre-test and post-test under teacher-centered method. Objective three was to determine students’ academic achievement under inquiry-based learning method in pre-test and post-test. Objective four was to determine if there was a significant difference between pre-test and post-test under inquiry-based learning method. Objective five was to determine if there was a significant difference in academic achievement in science between teacher-centered learning method and inquiry-based learning method. Two groups of Grade 6 students at Panchasap School, Bangkok, Thailand were used for this research study. The sample size of this study was 83 students where 42 students were under the teacher-centered learning method and 41 students were under the inquiry-based learning method. The data were collected by using a pre-posttest. The pre-post test scores were analyzed by means, standard deviations, paired samples t-test and an independent samples t-test (two-tailed). The findings of the study indicated a significant difference between teacher-centered learning method and inquiry-based learning method at a significance level of .05. Students achieved higher when exposed to inquiry-based learning method.

Keywords: Teacher-centered learning method, Inquiry-based learning method, Comparative study, Pre-test, Post-test, Academic achievement

¹ M.Ed Candidate, Master of Education in Curriculum and Instruction, Assumption University, Thailand. shriyagorowara@hotmail.com
² Assistant Professor, Graduate School of Human Sciences, Assumption University, Thailand
richardlynch2002@yahoo.com