

The effect of Using Kagan's Cooperative Learning Structures in Teaching Mathematics on Developing the Academic Achievement, the Mathematical Problems Solving Skills and the Social Skills with the Primary Stage Students

Dr. Nasser Helmy Aly Youssef

Lecturer at Curricula and Methodology Dept.

Faculty of Education – Fayoum University

nha02@fayoum.edu.eg

Abstract:

The research aimed to study the effect of using Kagan's cooperative learning structures in teaching mathematics on developing the academic achievement, the mathematical problems solving skills and the social skills with the primary stage students, To achieve this objective, the researcher prepared a manual for teaching chapter XII of the fifth grade mathematical book part II based on Kagan's cooperative learning structures, and also he prepared an academic achievement test, a test in the mathematical problems solving skills, and a test for the social skills, the manual and the three instruments were showed to a group of jury members with the aim of judging. Then the validity and reliability of the instruments were checked.

The research used the experimental method using the pre–post design on two groups: the experimental and the control group. The research sample consisted of 63 of the 5th grade students in Dammam, the experimental (32 students), the control (31 students). Before application of Kagan's cooperative learning structures on the experimental group, the equality of the two groups in, the academic achievement, the mathematical problems solving skills and the social skills was verified.

The results of the research indicated the effectiveness of using Kagan's cooperative learning structures in the development of the academic achievement, the mathematical problems solving skills and the social skills, and the results also indicated that there is a statistically significant positive relationship between the academic achievement, the mathematical problems solving skills and the social skills.

Based on the results the researcher recommended that: using Kagan's cooperative learning structures in teaching mathematics to primary stage students, the importance of improving the mathematical problems solving skills with primary stage students, and make more researches to investigate the using of Kagan's cooperative learning structures in teaching mathematics.

Keywords: Kagan's cooperative learning structures, academic achievement, mathematical problems solving skills, social skills, primary stage.