

**GONCA URAL**

**THE EFFECT OF COOPERATIVE LEARNING ON ELEMENTARY SCHOOL  
FOURTH GRADE STUDENTS' ACADEMIC ACHIEVEMENT AND SELF  
CONCEPTS TOWARDS SCIENCE COURSE**

**ABSTRACT**

In this experimental study, the effect of cooperative learning on elementary school fourth grade students' academic achievement and self concepts towards science course units which are "Light and Sound" and "Our Planet Earth" were investigated.

The study was conducted at two public elementary schools in the centre of Aydın in 2006-2007 academic years. The participants of the study were 144 students which were divided in two experimental and two control groups. In the study which lasted nine consecutive weeks, cooperative learning method was used in experimental groups and elementary fourth grade Science and Technology lesson curriculum's activities were used in control groups. The measurement instruments "Science Achievement Test" was administered pre-test, post-test and continuance test, "Piers Harris Self Concept Scale for Children" was administered pre and post tests to the experimental and control groups.

As a result, there was no statistically significant differences between experimental and control groups regarding total achievement scores, knowledge level and comprehension level scores in the achievement and continuance tests. Results from the Piers Harris Children Self Concept Scale revealed that there was significant differences among first control group and second control group in terms of Anxiety in the favour of the first control group. In terms of the findings the others, there was no statistically significant differences between groups.

**KEY WORDS** Cooperative learning, Self Concept, Science, Teaching Science, Science and Technology.