
This article investigates the possible impacts of computers on Turkish fourth and fifth grade students’ geometry scores and further geometric learning. The study used a pretest-intervention-posttest experimental design. One of the three experimental groups contained students who did not have computer experience. Students in the other two experimental groups had computer experience. One of the two control groups consisted of students with no computer experience and the other with computer experience. Results of the study showed that students who had computers at home initially had significantly higher geometry scores. However, these differences were minimized with an appropriate intervention containing computer-based Tangram puzzles. Students in experimental groups learned more than those in control groups. It was found that students who do not have a computer at home also learned as much as those who do have computer at home when their gain scores were considered. The study also observed a difference in the gained scores between students who used the Tangram software and who did not. During the intervention, students actively searched for the solution by turning and arranging the shapes in different orientations, thus, making them internalized or formed solid mental images of basic geometric forms. The study suggests that at schools, it seems more effective to integrate mathematical content and technology in a manner that enables students to do playful mathematical discoveries.

**Keywords:** Elementary education; Computers; 2-D geometry; Tangram software; Pretest; Posttest; Turkey.