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# EFFECTS OF AUGMENTED REALITY TECHNOLOGY IN SCIENCE EDUCATION ON STUDENT'S ACHIEVEMENTS

## Abstract:

Augmented reality (AR) is defined as a technology that allows virtual information on real-world environment. AR has attracted attentions in education to interact with real and virtual objects. Providing and demonstrating 3D objects, AR in education makes learning effective. AR is effective for teaching events that are not possible to see with the eye, materializing abstract concepts, and presenting complex information. Because subject of "Solar System and Space" in science education cannot possible to see with the eye, have abstract concepts and complex, AR is used in this study. The aim of the study is to determine the effects of AR technology on students' achievement. For this reason, quasi-experimental design is used. This design can be used for comparing two or more groups. In this study, total 100 elementary students in 7th grade, is divided into two groups. When 50 students in A and B class is chosen as the experimental group, 50 students in C and D class is selected as the control group. While AR is used in experimental group, it isn't used in control group. As a data collection tool, academic performance test is used. The findings revealed that students used AR in the experimental group are more successful than control group. This result can be explained by AR potentials. It is though that AR attracts the attention of the students in experimental group and provides an effective learning environment.

## Keywords:

Augmented Reality, Science education, Students' achievement

**JEL Classification:**  I29