

İnsan ve Çevre Konularını Kavramaya, Bilgilerin Kalıcılığına ve Çevreye Karşı Tutuma
Jigsaw Tekniğinin Etkisi

The Effects of Jigsaw Technique to Comprehension of Human and Environment Unit,
Persistency of Knowledge and Attitudes towards Environment

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EXTENDED SUMMARY

Purpose and Significance: Nowadays science educators are improving new ways and methods which will enable Science and Technology education more efficient and persistent and they have to use the most effective ones. For this; studying the effectiveness of various methods and techniques on teaching process has a great importance. In this study, the effects of Jigsaw technique to 7th grade students' comprehension of Human and Environment unit subjects, the persistency of their knowledge and their attitudes towards environment are studied.

Methods: This study is a quasi-experimental study with pretest-posttest control group. The sample of this study consists of 7th grade students of a secondary school and located at Yenimahalle district in Ankara. One of the classes from 7th grade is chosen randomly as experiment, and the other one is as control group. While with the control group students the lessons are taught according to the Science and Technology curriculum, with the experiment group those are presented with cooperative learning methods with teaching activities prepared by Jigsaw technique. Survey data is put together with Human and Environment Achievement test and Attitude test towards Environment. HEAT and ATTE are applied to both two groups as pretest-posttest and after application HEAT is applied as persistency test 2 months after than posttest. Study hypothesis are analyzed with related-unrelated samples t test.

Results: t test results show that experiment and control groups are equal in terms of HEAT pretest averages. According to posttest averages, t test results show that there are significant differences/variations on experiment group's side with HEAT posttest, HEAT persistency test and ATTE posttest averages of experiment and control groups.

Discussions and Conclusions: Jigsaw technique is more effective on learning Human and Environment unit than 5E learning cycle. 5E learning cycle model has absolute contribution to students' success as it is in science teaching with Jigsaw technique. Teaching science with Jigsaw technique is more effective on the persistency of students' knowledge. Attitude towards environment of Jigsaw technique applied experiment group has more increase than in control group