# THE EFFECT OF NEW APPROACHS ON STATISTICAL LITERACY: PROJECT BASED LEARNING

Yrd. Doç. Dr. Timur Koparan
Bülent Ecevit Üniversitesi
Ereğli Eğitim Fakültesi
timurkoparan@gmail.com

Doç. Dr. Bülent Güven
Karadeniz Teknik Üniversitesi
Fatih Eğitim Fakültesi
guvenbulent@gmail.com

**Abstract**

In this study, it was aimed to investigate the effect of project based learning approach on students' statistical literacy levels towards change. With this aim, a performance test was developed related change concept This test is include 10 open-ended question. Quasi-experimental research design was used in the study. At intervention group statistics is given for four weeks according to project based learning approach. The sample consisted of total of 70 students studying at two different 8th grade classes of a middle school in 2011–2012 academic year in Trabzon The data were analysed with Rasch (1980) model. All raw scores transformed lineer score by Winsteps 3.72 to obtain equal interval scale. Lineer scores were used in ANCOVA analysis. According to gained between the achievements of intevention group and control group there is a substantial difference statistically in favor of intevention group. The results of the study revealed that the project based learning increased students' statistical literacy levels towards change concept in the intervention group. Students' statistical literacy levels were displayed before aplication and after application by person item maps. Besides study was supported by the qualitative data.

**Key Words:** Change Concept, Statistical Literacy, Project Based Learning, Middle School Students.