

## THE EFFECTS OF MULTIPLE INTELLIGENCE THEORY BASED TEACHING ON STUDENTS' ACHIEVEMENT AND RETENTION OF KNOWLEDGE (EXAMPLE OF THE ENZYMES SUBJECT)

Assist. Prof. Dr.Sibel GÜRBÜZOĞLU YALMANCI  
Kafkas University, Faculty of Education  
Department of Secondary Science Education  
Kars,TURKEY

Ph. D. Candidate Ali İbrahim Can GÖZÜM  
Kafkas University, Faculty of Education  
Department of Primary Preschool Education  
Kars,TURKEY

### ABSTRACT

The purpose of this study is to compare theory of multiple intelligences with the traditional education method by looking at the science teachers' success, permanence of their information about enzyme subject. The research is experimental and it was carried out during 2010-2011 education year of Faculty of Education of Kafkas University, on Science Department's third grade students. In this research two impartial groups were formed and these two groups were used as control and experiment group. There were 30 students in control group and 30 students in experiment group. During the application, the lessons were given traditionally in control group, and in the experiment group; lessons were given according to multiple intelligence method. In the research, before application, the information level of students about enzyme was measured. After application the increase of their information was measured and four weeks later a success test was formed to determine the permanence of information. In the research a SPSS 16.0 package program was used to analyze the datum. To compare the students' points from pretest and difference of arithmetic average of an unrelated t test and experiment were used. For comparing control group's last test and performance test ; Anova test statistics was applied. To determine the meaningful distinction after Anova test, Benforroni test was applied. In the research; the significance level was .05 In the pre-test results before the beginning of application no-meaningful distinction was found between experiment and control group according to t test. After the application ; in the last test and permanence test, multiple intelligence method which was applied on experiment group has a meaningful distinction compared to traditional education method applied on control group.

**Key Words:** Multiple Intelligence Theory, Enzymes, Knowledge Retention, Biology Training.