

PROOF STRATEGIES PREFERRED BY STUDENTS IN THE GEOMETRY

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ABSTRACT

New geometry program in Turkey was developed by TTKB and became effective in 2009. The most significant innovation contained in the program its use of synthetic, vectoral and analytical approaches simultaneously towards proof in geometry. In addition the program encourages geometry teachers to make common the use of all these approaches among students instead of conventional synthetic approach. The first graduates of this program completed their education 2013. Analysing the use of approaches by these students in solving problems is significant in that it may provide useful insights about the efficiency of the program. The study aims at identifying proof strategies preferred by students and the reasons for their choices. For his aim 51 senior high school students attending three different Anatolian High Schools participated in the study. They were asked to answer two questions which can be solved through using all three approaches towards proof. They were also asked to indicate the reason for their choice of the approach they used. The findings of the study showed that majority of the students used the synthetic approach while solving the problems.

Key Words: Geometry program, proof, approaches towards prof.