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# THE EFFECT OF COLLABORATIVE COMPUTERIZED LEARNING USING GEOGEBRA ON THE DEVELOPMENT OF CONCEPT IMAGES OF THE ANGLE AMONG SEVENTH GRADERS

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## Abstract

*This research intends to investigate the effect of collaborative computerized learning using GeoGebra on the development of the concept images of angle among seventh graders who were engaged with computerized collaborative activities that encouraged the development of five types of the angle concept images: verbal, authentic-life, graphical, numeric and dynamic. The research sample consisted of eight seventh grade students who worked collaboratively in groups of two. Two tests (a pre-test and a post-test) were administered to examine the development of students' concept images of the angle. In addition, interviews were held with the participants to study this development. The Constant Comparison Method was used to analyze the data. The results showed positive effects of the visual and dynamic use of GeoGebra, as well as of the collaborative learning on the development of participants' concept images of the angle, especially the dynamic one.*

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