

Teaching and Learning Geometric Transformations in the Context of a Dynamic Environment

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ABSTRACT

Dynamic Geometry Environments provide learners opportunities to construct geometrical objects and explore relationships between them. Within these environments, one can create and explore conjectures and develop explanations.

This presentation focuses on the implications of using Dynamic Geometry Technology for teaching and learning of geometric transformations which includes translations, reflections and rotations. Specifically, the presentation reports on some data from a study which focused on the effects of a dynamic geometry software on prospective elementary teachers' understanding of geometric transformations. Some examples of teacher candidates' initial understandings of geometric transformations will be provided and changes in their preconceptions in the context of technological environment will be discussed.

Keywords

Dynamic geometry environment, teaching and learning geometric transformations, teacher education.