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La geometría dinámica como una herramienta de mediación entre el conocimiento perceptivo
y el geométrico

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Abstract

We report on the role of Dynamic Geometry (gd) as a tool mediating between perceptive and geometric knowledge. Here we exemplify how gd changes the structure of the schemes that students had previously developed in other environments. These results are part of a project that was carried out for three years. The theoretical perspective taken is based on two principles: the first one, the cognitive principle, maintains that all forms of knowledge are mediated by the action of a material or symbolic tool. The second, the epistemological principle, sustains that the mediation of a tool transforms the nature of knowledge which is under construction. The experimental phase was developed with 15 students aged 15-18. Results suggest that students can discover and construct new schemes of use as a result of difficulties generated by inadequate use of dynamic geometry tools. Throughout this process, the teacher's role is fundamental.

Keywords

Dynamic geometry (gd), tools vs. instrument, instrumental mediation, perceptive vs. geometric knowledge, college students.

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