



## Escenarios de aprendizaje para la solución de problemas apoyados con matemática dinámica.

### ABSTRACT

Problem solving has been investigated in mathematics education for more than 60 years ago since the pioneering work of George Polya ( Polya , 1965). His four step method: understand the problem , devise a plan , carry it out and look back , still apply as a general framework. In recent years the emergence of dynamic mathematics has scaffolded this and other methods of solving mathematical problems (Christou , Mousoulides , Pittalis & Pitta - Pantazi , 2005) , this has generated great interest in new ways of teaching and learning mathematics and in building dynamic learning scenarios to support the different stages of problem solving. A teaching-learning approach for problem based learning, based on the construction of dynamic learning scenarios and the notion of co-action is discussed and presented in this article.

**KEYWORDS :** Dynamic mathematics, GeoGebra, problem solving, Polya, education, mathematics

### OBJETO DE ESTUDIO

La solución de problemas es un tema importante en la enseñanza y aprendizaje de las matemáticas. Los educadores y matemáticos George Pólya (1887-1985) y Alan H. Schoenfeld (1943- ), con sus continuos e importantes aportes en el área han destacado dos aspectos que enfatizaremos en el Taller . El elemento integrador de diferentes áreas matemáticas y el aspecto formativo, en lo que tiene que ver con el desarrollo de habilidades creativas y estrategias heurísticas.