



## LEARNING OBJECT TO TEACH THE INTERACTION BETWEEN TWO MAGNETICS USING AUGMENTED REALITY

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### Abstract

This paper presents a Learning Object for teaching the interaction of magnetic fields between the two poles of different names developed in Augmented Reality environment. In the environment created in Augmented Reality there is the simultaneous presence of real and virtual objects. In this environment are shown the magnetic fields of two magnets, demonstrating their interaction. In this Learning Object, the student can see this interaction in 3D and interact with the fields. This work was based on the theory of Meaningful Learning, which, according to Ausubel, occurs when a concept is related in a substantive way and not arbitrary concepts with pre-existing in the cognitive structure of the individual. A test with a novel question was conducted to determine if there was a Meaningful Learning. Reviews and evaluations were done to complete the work, highlighting its advantages in the learning process.

**Key Words:** Magnetic fields, augmented reality, meaningful learning.