

Abstract Submitted
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Exploring the Relationship Between Students' Visual Spatial Abilities and Comprehension in STEM Fields XIMENA CID, RAMON LOPEZ, Univ. of Tx. at Arlington — It is well known that student have difficulties with concepts in physics and space science as well as other STEM fields. Some of these difficulties may be rooted in student conceptual errors, whereas other difficulties may arise from issues with visual cognition and spatial intelligence. It has also been suggested that some aspects of high attrition rates from STEM fields can be attributed to students' visual spatial abilities. We will be presenting data collected from introductory courses in the College of Engineering, Department of Physics, Department of Chemistry, and the Department of Mathematics at the University of Texas at Arlington. These data examine the relationship between students' visual spatial abilities and comprehension in the subject matter. Where correlations are found to exist, visual spatial interventions can be implemented to reduce the attrition rates.

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