

Abstract Submitted
for the TSF11 Meeting of
The American Physical Society

A Comparison of Student Spatial Abilities Across STEM Fields

THAD LOFTIS, XIIMENA CID, RAMON LOPEZ, Univ. of Texas at Arlington —
It has been shown that STEM (Science, Technology, Engineering, and Mathematics) students have higher spatial abilities than students in the liberal arts or humanities. In order to track the change in spatial abilities within a group, studies in physics have examined topics in kinematics, chemistry has examined topics on molecular diagrams, mathematics has examined topics related to geometry, and engineering has developed courses specifically targeting students' spatial abilities. It is understood that students in STEM fields improve their spatial abilities while taking STEM courses, but very few studies have done comparisons amongst the different STEM fields. I will be presenting data comparing different STEM students' spatial ability, assessed using the Mental Rotation Test.

Robert Bruntz
Univ. of Texas at Arlington

Date submitted: 08 Sep 2011

Electronic form version 1.4