

Abstract Submitted
for the TSS12 Meeting of
The American Physical Society

Comparing MRT scores of introductory STEM classes with a higher-level physics class ELIJAH MURPHY, THAD LOFTIS, Univ. of Texas at Arlington, XIMENA CID, University of Washington, RAMON LOPEZ, Univ. of Texas at Arlington — Science, technology, engineering, and math (STEM) classes require students to use mental spatial skills and reasoning. We can objectively measure a student's mental spatial skills with a Mental Rotation Test (MRT). We compared MRT scores for students in introductory chemistry, math, and physics classes against scores for students in an upper level physics course and found that the upper level physics students scored better on the MRT on average than the introductory students. We have also found a small correlation between students' performance in the upper lever class, as measured by final grades, and the students' MRT scores.

Robert Bruntz
Univ. of Texas at Arlington

Date submitted: 17 Feb 2012

Electronic form version 1.4