

Abstract Submitted
for the TSF11 Meeting of
The American Physical Society

Making Laboratories Count – Better Integration of Laboratories in Physics Courses¹ JIM SIZEMORE, AAPT — The quality of K-12 education leaves something to be desired and presents higher education faculty with the challenge of instructing under-prepared students. However, by their own admission, students from many institutions inform us that laboratory sections in science classes, including physics, consist mostly of showing up, going through the motions, and getting grades that boost their overall grade. This work presents laboratories that challenge students to take their laboratory work more seriously including specific rubrics enforcing SOLVE and Bloom's Taxonomy, pre-lab preparation work, and quizzes on pre-lab preparation. Early results are encouraging revealing greater student progress with better integration of laboratory with the rest of a complete physics course.

¹Acknowledgements: Collin College for supporting this work and P. Johnson, M. Brooks, G. Sherman, M. Broyles, and A. Kumar who helped write the instructional content.

Jim Sizemore
AAPT

Date submitted: 07 Sep 2011

Electronic form version 1.4