

TSF12-2012-000015

Abstract for an Invited Paper
for the TSF12 Meeting of
the American Physical Society

Lessons From a Large-Scale Assessment Project at Texas Tech¹

BETH THACKER, Texas Tech University

Some results of a large-scale assessment project at Texas Tech University will be discussed. We will discuss (1) the use of both written pre- and post-tests and commonly used conceptual inventories as a measure of students' understanding in the introductory courses, (2) the efficacy of multiple choice assessment, based on research on the effect of problem format on students' answers and (3) the need for the development of a more comprehensive assessment instrument(s) that could be used to compare students' analytical, quantitative, computational, laboratory, and critical thinking skills, as well as their conceptual understanding, across courses and universities. We present results of the work done at Texas Tech University and discuss work being done nationally as part of the American Association of Physics Teachers (AAPT) to move towards a more comprehensive assessment of our introductory courses.

¹This work is supported by National Institutes of Health (NIH) Grant 5RC1GM090897-02 and National Science Foundation (NSF) Grant 0737181.