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Erica Slate Young* (erica.young@usma.edu), P.O. Box 184, West Point, NY 10996. *Improving the Validity of Assessments in Undergraduate Mathematics: Lessons We Can Learn From the Analysis of High Stakes Tests.*

Evaluating the validity of an assessment involves looking at the appropriateness, meaningfulness and usefulness of the test through an empirical investigation into the underlying constructs. Examining the validity of an assessment is important because otherwise, we cannot be sure what the assessment is actually measuring. This paper will highlight work done on the validity analysis of a state administered, multiple choice exit exam given to eleventh graders, focusing on how we can improve mathematics assessments in general. In the analysis of the exam, both qualitative and quantitative measures were used and the results show that students relied more on test taking strategies than on mathematical content knowledge to answer the questions. This is something we need to consider when designing assessments as well as when evaluating them. Are the students answering the question we are asking using the concepts we think we are testing? Until we are sure of the answer to that question, we may not have a valid measure of student learning. Once we have a valid measure of student learning, we can begin to assess their true understanding of the mathematics we teach. (Received September 20, 2007)