ExamStat™ is the new, Web-based, assessment-reporting tool for all exams scored through Testing Services. BYU’s Faculty Center and Testing Services designed ExamStat™ to help instructors make critical decisions about their assessments, including student performance, grades, and improvements of those assessments. The convenience of ExamStat™ reports provides instructors valuable information about the effectiveness of an individual test. Among others, these reports include Analysis Summary, Improvement Suggestions, Item Summary, and Student Scores.

To create better assessments, I suggest that you start by examining the Improvement Suggestions in the ExamStat™ report. Based on specific statistical calculations, this report presents several categories and then indicates the actual questions from your assessment that the system has identified as potential problems. I have listed below the problem categories that appear in the report and how you can use that information to improve the assessment of your students’ learning.

**Possibly Mis-Keyed:** This may mean you made a mistake on your answer key. Regardless, you must check into this problem. If you change your answer key, you must then ask Testing Services to rescore your tests.

**Negative Discrimination:** Students who have performed poorly on this exam performed better on these questions than those who scored high. Check these items to see if there is something that is pulling knowledgeable students away from the correct answers.

**Poor/Moderate Discrimination:** Statistically, these questions appear to be either too easy or confusing to students. You should examine these questions carefully to determine if you need to make changes in them.

**Difficulty:** These questions appear to be too easy or too difficult for your students. You should examine these questions and make sure that they are worded appropriately to meet your instructional goals.

**Problem Distractors:** This section of the report lists questions in which high-scoring students have consistently selected incorrect answers. You should review these questions very carefully and consider replacing the confusing incorrect options.

It is important to remember that ExamStat™ is not a panacea. It does a good job of providing you with statistical information about your exam’s performance among those students who completed it. However, as useful as it
is, ExamStat™ cannot make decisions for you about grading or other qualitative matters. It does not know what assumptions to apply about your exam content, course instruction, student characteristics, and other exam validity issues.

For example, if you have a small class size, some ExamStat™ statistics such as those reporting discrimination and difficulty may be questionable because the sample size is too small to be statistically meaningful. Moreover, if your exam includes multiple student sections taught at different times or by various instructors or TAs, there may be some ambiguities in the statistics because of those differences.

Still, ExamStat™ is a valuable tool to help faculty evaluate and improve their assessments. As you use ExamStat™, you will be able to quickly understand how your exam is performing and identify any problem areas that need your attention. You can also use this information in reporting feedback to your students.

If you want to know more about ExamStat™ and how you can use it to improve your assessments (or if you have other questions about assessing student learning), please feel free to contact me at bryan_bradley@byu.edu or give me a call at 422-8194.