Suggested Guidelines to Obtain Valid Results

By the ECETDHA & SME Test Development Team

To evaluate the success of your program in delivering key skills and competencies to your students, the data from the test must be both valid and reliable. This means that students taking the test must see value in the test and give their best effort when taking the test. It is important that you establish some basis in your use of the test that gives it value for you students.

The ECETDHA and SME suggest that students' performance on the test be in some manner reflected in their academic performance in your program or in courses within your program. The following are some ideas that might be useful as you organize your testing activity:

▶ **Bonus Points/Extra Credit** — Use student test scores to award bonus points or extra credit to improve grades in a capstone course or project. Higher scores earn greater bonus or absolute test scores can be awarded as extra credit.

▶ **Use Test Score as One Component of Grading** — Use the assessment test score as one component of the grading rubric in a capstone course. If used, keep in mind that the test covers a broad range of core topics in EET and extremely high scores are unlikely for most students. Thus, assessment test scores should be assigned using a standardized curve.

▶ **Class Competition** — Set the test up as a class competition and award prizes based on student results. If you have multiple sections of a capstone course, set the test up as an inter-class competition pitting class averages on the test against each other. Class and individual prizes could be awarded with this approach.

▶ **Alternative Class Assignment** — Offer the test as an alternative task that could be used at a student's discretion to replace another class assignment (i.e., research report, oral presentation, lab exercise, etc.). This would likely require the establishment of some minimum level of performance on the test, which emphasizes the need to recognize that high test scores are likely to be rare.

The above list is neither exhaustive nor exclusive. Users of the test are welcome to use whatever incentives they view as appropriate, and if you have other suggestions, the ECETDHA and SME would love to hear them and share them with other users of the test. Our main interest is to give students the proper incentive to do as well on the test so that the data generated helps in your program evaluation as both valid and reliable.

EET Outcome Assessment certificates will be available from the ECETDHA including sponsorship recognition from SME and IEEE upon request. Users of the test can establish criteria for award of the certificates and use those as reward/recognition of student achievement on the test.