

Applied Mathematics Students' Ability to Communicate Findings

Mathematics MA (Applied Math Option) – College of Natural Sciences and Mathematics

Step 1: Student Learning Outcome

Communicate mathematical and computational findings in written and oral forms.

Step 2: Methods and Measures

In spring 2017, students were assessed in Math 597. This course involved students completing a written industrial project and then presenting their results orally. Students are assessed on both the written portion and the oral portion and given a rating on a one-hundred point scale.

Factors considered on the written component were:

- Basic grammar;
- Ability to write both comprehensively and concisely; and
- Writing to industry specifications.

Factors considered on the oral component were:

- Ability to present difficult material in a clear fashion, incorporating ancillary materials (e.g., slides, tables) as appropriate; and
- Ability to respond to questions from their audience.

Step 3: Criteria for Success

The program is successful if, for both written and oral grades, at least 80% of students are rated at 80 or above.

Step 4: Results

The data demonstrated that 100% of students have met the assessment criterion of scoring 80 or above in each component. This exceeds the criterion set by the program.

Step 5: Improvement Actions

As the program met its goal of greater than 80% of students being rated at 80 or more for both written and oral communication, no improvement actions are necessary at this time. However, data will be collected each year so that, every third year, the assessment will include three years of students rather than one, giving the program a larger sample size on which to draw inferences about needed improvement actions.