

STEP1: Preparing to Assess

Course: Math 203

Semester: Spring 2011

SLO's being assessed:

1. Students will clearly and coherently pose applications and a variety of models for mathematical concepts including operations on number systems from whole numbers to rational numbers on exams.
2. Students will identify and calmly analyze mathematical problems using higher-order critical thinking skills and then apply appropriate techniques/strategies to problem solving on exams.
3. Students will present topics in elementary mathematics in a clear and accurate manner, demonstrated through oral presentations and in written form.

Planned process of assessment Review all the final exams (Question number 1). Use a 2 point rubric to assess each of the 3 SLO's listed above.

Criteria--How well must a student perform to be considered successful? Is there a rubric? Rubric for each SLO is 2 points (2 = used correct model, strategy or was clear; 1 = wrong or somewhat unclear; 0 = not present) A total of 5 or 6 points is successful.

What percent of students should be successful for the department to consider the SLO as being met? (100% is of course ideal, but not likely) 75%

Expectation—how well are you expecting students to perform? I hope to see the 75% of the students get above a 4.

STEP 2: Analyzing Data

(Attach spreadsheet, etc)

Number of students evaluated: 22

What percent is this of the total students still enrolled in the course?
100%

Total number of sections of the course:
1 section

Number of sections that were involved in the assessment:
1 section

If some sections were not involved, explain.
N/A

What percent of students were successful according to your earlier criteria?

11/22 = 50%

Is this an acceptable result? No. However it is 9% higher than the previous year.

How does this compare with your expectations? Teaching students to be clear in their explanations of how they attempt to solve a problem is difficult. We need to spend more time on how to write a solution. They modeled the question (only two used no model and 7/22 = 32% got a 2 on the rubric), they mostly used an appropriate strategy (13/22 = 59% got a 2 on the rubric), but the majority were unclear or lacking explanations (only 6/22 = 27% got a 2). Although most of the students were still unclear in their explanations, the 27% was a 50% increase from last years' 18%.

Did you notice any particular problem areas? Clarity of presentation of solution to an unknown problem.

What changes, if any, need to be made in curriculum, textbook, auxiliary material, teaching approaches, etc? We need to put even more stress writing up the solutions to problems, helping the students to explain the model and problem solving techniques with more accuracy.

Does the SLO accurately reflect what we want students to know or should we revise it? Yes it is an accurate SLO.

Evaluate the assessment process: (Was it informative? Was it efficient? Can you think of alternate methods of assessment?) Perhaps we could assess the formal written solutions to problems rather than solutions on a test where time is a factor.

STEP 3: Evaluating Changes

(To be completed at least one semester after Step 2)

Semester:

What changes were made in response to the results of the assessment?

Has there been observed improvement in the quality of student learning due to the changes?

Are there plans to reassess the initial SLO?