

2000 - 2001

ASSESSMENT REPORT FOR LEC MATH

Intended Educational (Student) Outcome:

NOTE: There should be one form C for each intended outcome listed on form B. Intended outcome should be restated in the box immediately below and the intended outcome number entered in the blank spaces.

1. Students have sufficient mathematical knowledge to succeed in Math 1010

First Means of Assessment for Outcome Identified Above:

John has this data.

a. Means of Program Assessment & Criteria for Success:
75% of students who complete MAT 0990 with a final grade of B- (80%) or better and take Math 1010 within one semester of completing MAT 0990 will pass Math 1010 with a final grade of C- or better

b. Description of Data Collection & Assessment Results:
This data will be collected through a DPR ran by computer services. It should be noted that this data will be delayed one semester as the students attempt Math 1010.

No data is available at this time. Data will become available Spring, 2001.

a. Use of Results to Improve Instructional Program:
If the data shows that students are not succeeding in Math 1010 we will interact with faculty teaching Math 1010 to discover the weaknesses that our students are demonstrating. We will then investigate alternative methods of instruction for those topics.

Second Means of Assessment for Outcome Identified Above: *This one has been changed*

a. Means of Program Assessment & Criteria for Success:
75% of students who complete MAT 0990 with a final grade of B- (80%) or better will achieve a COMPASS post-test score of at least 51 on the algebra test or 25 on the college algebra test. The post test must be completed before the MAT 0990 final exam is taken.

b. Description of Data Collection & Assessment Results:

While arranging for the COMPASS post-test it became clear that neither the department or testing services could afford to give their testing device to the number of students involved. Although we still believe this test to be an effective measurement device, we will be unable to collect this data unless a funding source becomes available.

c. Use of Results to Improve Instructional Program:

As a result of the difficulty involved with this measurement device, we will explore funding alternatives and/or an alternative device.

Third Means of Assessment for Outcome Identified Above:

a. Means of Program Assessment & Criteria for Success:

No third means at this time

b. Description of Data Collection & Assessment Results:

c. Use of Results to Improve Instructional Program:

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Intended Educational (Student) Outcome:

NOTE: There should be one form C for each intended outcome listed on form B. Intended outcome should be restated in the box immediately below and the intended outcome number entered in the blank spaces.

2. Students have improved their basic mathematical skills in arithmetic and algebra.

First Means of Assessment for Outcome Identified Above:

a. Means of Program Assessment & Criteria for Success:

75% of students who complete Mat 0990 with a final grade of C (70%) or better will have a difference of at least 25 points between their pretest and final exam scores.

b. Description of Data Collection & Assessment Results:

A pretest, correlated with the questions on the final exam, was given on the first day of class. After the final exam was taken, those students who met the given criteria were compared with their pretest scores.

96.6% of students described above achieved the goal.

c. Use of Results to Improve Instructional Program:

We will continue with the process described above. Considering the ease with which we met the goal, we will raise the target points to 40. This would represent the approximate change from the average of the pretests to a passing score on the final exam.

*178 out of 300 improved by at least 40
59.3%*

Second Means of Assessment for Outcome Identified Above:

a. Means of Program Assessment & Criteria for Success:

80% of students who complete MAT 0990 with a final grade of C- (70%) or better will have a final exam score of 70% or better.

b. Description of Data Collection & Assessment Results:

Each instructor reported the number of students in their classes with a final grade of 70% or above, and the number of those who earned a 70% or above on the final exam. The results were then pooled to calculate the percentage of students within the department satisfying the criteria above.

75.3% of students described above satisfied the criteria.

*439 out of 673
65.2%*

b. Use of Results to Improve Instructional Program:

Our failure to satisfy the goal listed above could be due to grade inflation introduced by grading policies used by some instructors. We will discuss the need to place limits on inflationary practices.

Third Means of Assessment for Outcome Identified Above:

c. Means of Program Assessment & Criteria for Success:

No other means established at this time.

c. Description of Data Collection & Assessment Results:

c. Use of Results to Improve Instructional Program:

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Intended Educational (Student) Outcome:

NOTE: There should be one form C for each intended outcome listed on form B. Intended outcome should be restated in the box immediately below and the intended outcome number entered in the blank spaces.

3. Students can use their mathematical skills and critical thinking skills to solve application based word problems.

First Means of Assessment for Outcome Identified Above:

a. Means of Program Assessment & Criteria for Success:

75% of students who complete MAT 0990 with a final grade of C (73%) or better will achieve a score of 73% or better on the application problems on the departmental final exam.

b. Description of Data Collection & Assessment Results:

Each students final exam score is recalculated using only those questions that are application based word problems. The percent of students in the department that have achieved the goal stated above is then calculated.

70.7% of those students described achieved the goal.

c. Use of Results to Improve Instructional Program:

We will first evaluate the application problems to make sure they are in the scope of the class. If it is determined that they are, we will schedule departmental training sessions to share ideas on improving the way we instruct students on applying their skills. We will also investigate ways to improve students critical thinking skills.

47 out of 118

39.8%

Second Means of Assessment for Outcome Identified Above:

a. Means of Program Assessment & Criteria for Success:

70% of students who complete a questionnaire at the end of MAT 0990 will show that they believe they can use their skills to solve application based word problems.

b. Description of Data Collection & Assessment Results:

A departmental questionnaire will be given at the end of the semester.

10/6/10

c. Use of Results to Improve Instructional Program:

Our questionnaire was not developed in time for Spring, 2000.

Third Means of Assessment for Outcome Identified Above:

c. Means of Program Assessment & Criteria for Success:

There is no other means identified at this time

c. Description of Data Collection & Assessment Results:

c. Use of Results to Improve Instructional Program:

1. **Students have sufficient mathematical knowledge to succeed in MATH 1010.**

First Means of Assessment

75% of students who complete MAT 0990 with a final grade of B- (80%) or better and take MATH 1010 within one semester of completing MAT 0990 will pass MATH 1010 with a final grade of C- or better.

~~1999/2000:~~ 74% passed
2000/2001

2. **Students have improved their basic mathematical skills in arithmetic and algebra.**

First Means of Assessment

75% of students who complete MAT 0990 with a final grade of C (70%) or better will have a difference of at least 25 points between their pretest and final exam scores.

1999/2000: **96.6% of students described above achieved the goal**

Modification: a difference of at least 40 points between their pretest and final exam scores.

2000/2001: **59.3% achieved the goal**

Ideas

-Use increments instead of the same difference for all students. For example, students scoring 0-20 on pretest improve by 40 points, students scoring 20-40 on pretest improve by 30 points, etc.

Second Means of Assessment

80% of students who complete MAT 0990 with a final grade of C- (70%) or better will have a final exam score of 70% or better.

1999/2000: **75.3% of students described above satisfied the criteria.**

2000/2001: **65.2% of students described above satisfied the criteria.**

Ideas

-Final count for higher percentage of overall grade
-Students must achieve a minimum score on final exam to receive a passing grade.
-Individual questions from final exam test fewer concepts.

3. **Students can use their mathematical skills and critical thinking skills to solve application based word problems.**

First Means of Assessment

75% of students who complete MAT 0990 with a final grade of C (73%) or better will achieve a score of 73% or better on the application problems on the departmental final exam.

1999/2000: *70.7% of those students described achieved the goal.*

2000/2001: *39.8% of those students described achieved the goal.*

Ideas

-Have the application problems on the final exam be free response so as to be able to assign partial credit.

-Have the application problems on the multiple choice final exam be multiple part problems

Second Means of Assessment

70% of students who complete a questionnaire at the end of MAT 0990 will show that they believe they can use their skills to solve application based word problems.

2000/2001: *66.5% of those students described achieved the goal.*