Course Assessment- Part B: Your Results & Analysis

COMPLETE #540

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MTH 111- College Algebra- Pam Morse- Winter 2022

* **Part B: Your Results DIRECTIONS 1. Report the outcome achievement data gathered via the assignments, tests, etc. you identified for each outcome (question 3) of your Part A. (Only include data for students who completed the course. Do not include students who withdrew or earned an incomplete) Data for all 3 outcomes should be reported below.**

Thirteen students finished the course (not dropped/nor received incompletes) Of those 13, I will only be commenting on 10. One student stopped coming after the first exam and did not withdraw and could not be gotten a hold of. Two others never made it to the finals and did not have enough grades to pass without completing the final exam. Of the 10 who were left, all 10 passed the course with a C or better. 40% with an A, 30% with a B, and 30% with a C.

* **Outcome #1**

Demonstrate mastery of exponential, logarithmic, polynomial, power, and rational functions.

* **% of students who successfully achieved the outcome (C or above)**

100

* **Outcome #2**

Model non-trivial real world phenomena using multiple mathematical approaches and to interpret results.

* **% of students who successfully achieved the outcome (C or above)**

100

* **Outcome #3**

Communicate results mathematically and in writing.

* **% of students who successfully achieved the outcome (C or above)**

100

* **ANALYSIS 3. What contributed to student success and/or lack of success?**

One of the things I do when I work problems is to explain my thought process at each step. Even though there are concepts that students should know, they don't always. This allows them to see and hear the mathematics in mathematics and English. Sometimes if we leave steps out students don't know how or quite grasp how to do it when they go try on their own. This is a foreign language to most and seeing it over and over helps to reinforce the terminology and the process. Students homework is done through an online platform. This platform allows them to try each problem 3 times. If they don't get it, they may ask for another problem - it is the same problem, just different numbers. They may do this 99 times. Most of the problems have a video attached that they may watch for help and there is also a button that they may send me a message along with the exact problem they are working on. I try to answer within a short window. If students are working on the problems now, they need the help now, not 24 to 48 hours from now. I also quiz students every week. These quizzes are open notes. If students are not doing well on them, they need to work on note taking since that is where the majority of the questions come from. Now that I have taught this course a number of times (3 years) I have a pretty good idea of where they will struggle. I gear problems to this and back track to prior courses where the concepts were taught. I do it as a refresher as I'm giving them new material. I try to compare new material to old in a fashion that while the concepts may be new, the strategies are ones they have seen in prior courses.

*** 4. Helping students to realistically self-assess and reflect on their understanding and progress encourages students to take responsibility for their own learning. Please compare your students' perception of their end-of-term understanding/mastery of the three outcomes (found in student evaluations) to your assessment (above) of student achievement of the three outcomes.**

I am disappointed that only 3 students took the time to fill out the course assessment. However, of the three that did, all showed an increase in their understanding and abilities from the beginning of the term. For some students this was not only their first college level math class but also their first college class. It was eye opening on time management, note taking and expectations at a higher level. I saw growth in all of the students who really stuck out the course (the 10 who completed the course) and those that asked for help through the homework platform had even a bigger growth.

*** 5. Did student achievement of outcomes meet your expectations for successfully teaching to each outcome (question 4 from Part A)**

My students met my expectations of 70% receiving a B or higher. Of the 30% that received a C, I believe their life at the time of the course hampered their ability to spend more time on the course.

*** 6. Based on your analysis in the questions above, what course adjustments are warranted (curricular, pedagogical, student instruction, etc.)?**

Math 111 will no longer be a 5 credit lecture course but a 4 credit lecture/lab. I will be teaching this course with more exploration on the students part during the class. I believe that students who get an a ha moment do better than an instructor telling them everything. (At least in math). I added in the MyOpenMath homework platform after my first time teaching this class and I have seen a marked improvement in students ability. Those students coming in with weak skills will also be able to take a corequisite course that will help them with the skills they will need to be succesfful.

7. What resources would be required to implement your recommended course adjustments (materials, training, equipment, etc.)? What Budget implications result?

I am in the process of receiving a lab book for College Algebra. (I should have it next week). Should this prove to be helpful, students will have an additional book. However, this lab book is under $16 dollars and the their textbook is OER and online.

*** 8. Describe the results of any adjustments you made from the last assessment of this course (if applicable) and their effectiveness in student achievement of outcomes.**

Since the last assessment of this course I have implemented MyOpenMath homework platform. Students have the ability to watch videos related to a homework problem and/or message me directly on a given problem. Students who actively due the homework have done well in the class. I also have added more hands on and will be doing even more next year.

9. Describe how you explain information about course outcomes and their relevance to your students.

I go over the outcomes at the start of class when we look at the syllabus. I also relate problems to the outcomes when they are appropriate. I explain to my students why they need to be able to think outside the box and why they need to communicate in writing. Many of the skills they are learning they may never use going forward, however, thinking logically is a major part of real life. They are learning skills that will help them in the coming years.

10. Please describe any changes/additions to instruction, curriculum or assessment that you made to support students in better achieving the CGCC Institutional Learning Outcomes: ILO #1: Communication. The areas that faculty are focusing on are: "Content Development"and/or Control of Syntax and Mechanics" and ILO #2: Critical Thinking/Problem Solving. The areas that faculty are focusing on are: "Student's Position" (Critical Thinking) and "Evaluate Potential Solutions" (Problem Solving). ILO #4: Cultural Awareness. The area that faculty is focusing on is: "Curiosity" - Encouraging our students to "Ask deeper questions about other cultures and seek out answers to these questions" ILO #5: Community and Environmental Responsibility. The area that faculty are focusing on are: "Applying Knowledge to Contemporary Contexts" and "Understanding Global Systems" ILO#3 -Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

I have adjusted the report that I have students write each term. I have more mathematics involved and more analysis. Students don't realize just how much they know until they start working on the term paper. I also through in more real-life problems.