Date: April 28, 2016

To: De Anza College Student Learning Outcomes Department

From: Byron Lilly

Cc: Moaty Fayek

Subj: Application for $500 LOAC Award

Dear SLO department team. I would like to apply for the $500 LOAC Award so that I can continue to develop a tool I call the "Custom Homework Builder." This work originally sprung out of a SLOAC I did for one of the two SLOs for the course "Business Law I," also known as Business Law. This is a very difficult course and many students struggle with this material. I did a SLOAC on this course in Spring 2009. Here are some details regarding that SLOAC:

Course: Business 18 (Business Law I)

SLO: Be able to predict the outcome of a factually simple contract dispute where that outcome is consistent with either: 1) a basic common law rule followed by a majority of the states, or 2) a basic rule in the Restatement of Contracts (Second,) or 3) a basic rule in Article 2 of the Uniform Commercial Code.

Assessment method: I used selected true/false and multiple choice questions on midterm 2 and the final exam. To be exact, I used 13 questions from midterm 2 plus 54 questions from the final exam.

Results: The average student answered 74% of these questions correctly.

Enhancements:

1. In Spring 2014, I manually built 14 custom homework assignments, by cutting and pasting from a master document, for students who did not pass the midterm. Each missed question on the midterm would generate 1 to 5 short-answer questions on the custom homework. I required students to complete the custom homework, let me grade it, and meet with me to discuss the questions they missed on it before permitting them to retake the midterm. The average improvement from the first to the second attempt on the midterm was 15% that quarter, compared to only 4% the previous quarter when I did not require or offer the custom homework. However, this process was not sustainable because it took my 95 person-hours of my own time to develop and grade the custom homeworks.
2. In Fall 2105, I made three additional enhancements to the course, and specifically the first half of the course (the portion of the course tested by the midterm):
    a. I carefully analyzed all missed questions, and as a result removed about 10 "bad questions" from the midterm, re-wrote or modified 10 more, and wrote 21 new questions for the midterm to round out the coverage of the most important concepts from the first half on the midterm.
    b. I created a new study hints document called "Midterm Preparation Hints Supplement" to complement the Midterm Preparation Hints document which I have posted online every quarter for about the past 8 years.
    c. I built 12 flashcard "decks" in "Quizlet," a free online flashcard quizzing tool, covering everything that's on the midterm and encouraged my students to use these flashcards

as part of their preparation for the midterm. (Two decks per chapter, six chapters equals 12 decks.)

3. In Winter 2016, I built an Access database containing essential the same information as the "master document" I used in my Spring 2014 pilot test of custom homework assignments, then located and hired, using my own money, an Access database programmer to write some code such that, with the push of a button, a custom homework assignment for each student based on their performance on the midterm. This cost me $212.50 out of pocket. The tool was not ready until the end of Winter quarter.

4. Spring 2016: This quarter, I will be using the code written by the programmer, together with the Access database I designed and populated with data last quarter, to offer custom homework assignments to each student who doesn't pass the midterm.

How I would use the money:

To hire a programmer, possibly a different one than the one I used in Winter 2016, to further enhance my Custom Homework Builder tool. It needs a lot of work. Right now, I cannot vary the amount of space between questions. This causes the homework assignment to either be really long (like 45 pages) or to have inadequate space for answers to some of the questions, because some questions require very long answers from the student while other questions require only short answers. That is my #1 problem, but I have a number of other enhancement ideas for the program.