

4-21-2011

Min-Lin Lo CD Summer 2010

Min-Lin Lo
CSUSB, mlo@csusb.edu

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/trc-cd>



Part of the [Higher Education and Teaching Commons](#)

Recommended Citation

Lo, Min-Lin, "Min-Lin Lo CD Summer 2010" (2011). *Innovative Course Redesign Grant Reports*. 28.
<https://scholarworks.lib.csusb.edu/trc-cd/28>

This Other is brought to you for free and open access by the Teaching Resource Center at CSUSB ScholarWorks. It has been accepted for inclusion in Innovative Course Redesign Grant Reports by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

COURSE DEVELOPMENT GRANT REPORT

NAME: Min-Lin Lo
DEPARTMENT: Mathematics
EMAIL ADDRESS: mlo@csusb.edu
DATE SUBMITTED: April 20, 2011

Title of Grant Award: Course Development Grant--Summer 2010

Project Goal: Employ active learning material and learning buddy system to enhance students' study.

When Implemented: Fall 2010

Brief Description of the Project:

The main goal of this project is to design activities and learning materials that actively engage students in the learning process that promote students' academic success and employ "learning buddy" system to help students in building learning community that they can continue work together and support each other for their other math courses as well as their academic life.

How the Project was Implemented (including how it differed from original plan):

I designed and posted lecture material (contains real life example, engaging problems, and engaging activities) on blackboard.csusb.edu so that students can print them out before they come to class. I used the computer in the classroom to project the notes pages on the classroom screen and use space available on the board to demonstrate problems (sometime students did the problems on the board). Before the quarter starts, I set up discussion board in our course website for discussion space as well as let students introduce themselves and post their photos in order to find their "learning buddy". Throughout the quarter, incentives are given to encourage students to study with their learning buddy and submit weekly learning journal entries. Small group (using learning buddy pairs as the building block) discussion and presentation is used from time to time using different types of active learning methods. I conducted a survey in the end of the quarter and tracked students' progress in MATH 465 as planned in the proposal. However, due to time constraint (allowing students to collaborate with learning buddy to solve problems in class is very time consuming), I was not able to afford using one class time to conduct the "Amazing Race" competition as planned for exam review.

Results of the Project:

By looking at the survey conducted in the end of the quarter, 10 out of 16 students felt that the learning buddy system enhanced their learning for this class. Given the choices, 12 out of 16 students would prefer a class that implements a learning buddy system over a traditional lecture format. While it looks like that I have achieved my project goal, I was a bit disappointed about the class' performance on exams and quizzes. Comparing to my F08 MATH 372 class: although this class did a bit better in Exam 1, but this class did not do better for the other two exams.

I also try to track students' progress by consulting with W11 MATH 465 instructor. MATH 465 is a probability course which students should take right after MATH 372 (Combinatorics). However, there were only 6 students from my class that take MATH 465 in W11. In addition, there are only 4 out of these 6 students that had used the learning buddy system in my class, and only 2 of these four was a learning buddy pair in my class. Though this group of four did not perform better than others that were not in my class, it is worth noting that the only learning buddy pair who took MATH 465 together had obtained an A grade in MATH 465 which is an improvement from my class (they both received B in my MATH 372).

Additional Comments (Lessons Learned, Insights, Future Plans, etc.):

1. Even though pre-typed work sheets are used and students enjoyed the activities, the active learning activities still took so much class time while students still felt not enough activities were used. I will continue thinking about ways on how to employ active learning while be able to finish materials that need to be covered.
2. Though my incentives worked for pushing students to turn in their learning journal weekly, the quality of the journal content was not great. I need to think about additional ways to encourage students on writing good learning journals. Perhaps give them a structure to begin with.
3. Per students' suggestion, next time I employ learning buddy system, I should get learning buddy in group of three or four instead of two. This way in the case that sometimes one student is not available during some for out-of-class study sessions, the group could still function well.
4. I plan to consult with the instructor of MATH465 for this spring 11 quarter to see if I can track more of my F10 MATH 372 students' progress in that class.