



EO 1110 Course Implementation

One-Page summary of an example of data collected and action taken, AY 19-20

Cal Poly Pomona

Upon entering the second year of implementation of the new EO 1110 coursework, the Cal Poly Pomona team collected both quantitative and qualitative data. For this one-pager, we have an example of qualitative data and the actions taken based on the information collected.

Professor Anne Cawley collected videos from all students in her MAT 1900 (Quantitative Reasoning for Problem-Solving) and MAT 1051 (College Algebra Stretch 1) courses in Fall 2019. Students were asked to record videos responding to prompts about their successes and obstacles in their first semester. Examples of prompts include:

1. What was one activity/lesson that really stood out to you? What about the activity left you feeling empowered to do be able to do mathematics?
2. For many of you, this is your first semester as a college student. How do you think that you have grown as a student? Please describe this in detail.
3. Talk about a moment this semester when things may have become too overwhelming for you. This could be because of personal/home life challenges, challenges as a student – it doesn't have to be related to math. What did you do to overcome that moment?
4. What are two things that you are going to do differently next semester at the start of the term to ensure that you are successful in Spring 2020?
5. On a scale of 1 to 10 (1=lowest, 10=highest), how would you have ranked your confidence in your math abilities prior to this course? How would you rank yourself now? If there was a change, what do you think contributed to it?
6. What resources did you use this semester to help you in MAT 1051? Resources include tutoring at the LRC, going to office hours, forming study groups with other students, getting outside tutoring, getting help from family/friends, using online videos (Kahn academy, others), etc.

Because MAT 1051 was a part of the summer Early Start Math program, Professor Cawley specifically asked students to reflect on the following question: For those of you who took MAT 1051 in the summer, what were some things that you struggled with this fall? What were some things that you feel worked better for you this fall?

The online web app FlipGrid was used to collect the responses. FlipGrid can be set so that students can see each other's videos, or so that the videos are only visible to the instructor. In this case, the assignments were private, meaning that only the instructor had direct access to the videos. That way, students felt confident to share their experiences and highlight ways in which we can help to support them more fully.



After reviewing the videos, Professor Cawley selected clips to share with the EO 1110 Steering Committee. The videos revealed some of the hardships and obstacles faced by the students as they tried to complete the first semester of college. The impact of seeing the students, in their own words, was immediate. Seeing and hearing the students' voices really allowed their words to hit home.

In some cases, the obstacles faced by students stemmed from difficult home situations, work/school balance, or other factors that are out of our control. However, we also identified some of our own practices that were inadvertently putting up roadblocks for the students. Based upon the qualitative data collected in these videos, we decided to switch the first half of the stretch courses (College Algebra stretch 1) and (Intro Stats stretch 1) to CR/NC courses. Because these students have very few units accumulated (or in the case of Early Start, no other contributing units), a low grade has a disproportionate impact (e.g., students were starting the fall on academic probation, athletes were not allowed to perform, students lost financial aid). The remedial courses offered before EO 1110 had no impact on GPA, and we learned that the changes we made had a much stronger impact on students than we anticipated. We recognized that the completion of the full stretch series was equivalent to B4 GE completion, therefore, we changed the final semester of stretch (College Algebra Stretch 2) and (Intro Stats Stretch 2) to be graded.