

Ventura College Sabbatical Leave Proposal

On-site Research Project for Spring 2017

Submitted by Michelle Beard

Mathematics Department

October 2015

Instructor's Sabbatical Leave Status

Full-time Hire Date: August, 2006 **Part-time Hire Date:** January, 2005

Previous Sabbaticals: 0

Background of Sabbatical Project:

The mathematics department of Ventura College has had a long-time struggle to make our online classes as successful as possible. The math department offers online classes for six different levels. However, in the past 5 years, every single class has had a vast difference in success rates between the traditional and online courses. The online courses have success rates that are as much as 35.2% lower than the same course offered in a traditional setting. Simply reading material from a text is insufficient to understand a mathematical process.

Though the success rates are not as high for online classes, these courses are still full every semester. Students are pleased with the options in flexibility that the online courses can offer a busy schedule.

All of the online instructors use varied programs, such as *My Math Lab* or *Alex*, to offer online platforms to their students that are specialized in mathematics. However, these programs alone do not do an adequate job of teaching the material to the students. While the instructors in our department all recognize the severity of this need, no one has been able to devote the needed time to collaborate on such an enormous project. The department has a desire to collect an online library of videos that students and instructors can access for each topic in our course studies.

Purpose of Sabbatical Project:

The purpose of this sabbatical project is threefold: **(1)**find and evaluate mathematical videos that teach any of our 100 algebra topics, **(2)**create videos for any topics in which quality videos could not be identified, and **(3)**create a website with the library of topics, links to online videos, and access to created videos.

Components of Sabbatical Project:

- Find and Evaluate Existing Videos

The first step in this project is to identify videos that are already in existence. The main sites that will be researched for these videos include Khan Academy, Lynda.com, and Youtube. I will need to identify the quality of the video and then verify that it is close-captioned. Each video will pass a quality check, verifying that the content is most advantageous to our students. Once a video is identified and classified as acceptable, the link will be cataloged into the appropriate algebra topic. The goal is to find a minimum of one video for all 100 algebra topics that are covered in the sequence of our algebra courses.

- Create Videos for any uncovered topics

After identifying existing resources, it is expected that there will be some gaps in complete coverage of our algebra topics. Any topic that is not covered will need to have a video created. Some of our instructors teach a topic in a unique way, and so the goal is to have multiple options available for these types of topics. Using Livescribe, CCCConfer, or personal equipment, I will plan and create videos that can be shared with the department. These videos will also be uploaded to my own unique YouTube channel.

- Create a website with the library of topics and videos

After locating or creating videos that present quality instruction, I will create a website to list the algebra topics and include links to all the videos. Grant Jones, VC's IT supervisor, has agreed to help me create a page on the Ventura College website which will contain the necessary information. This information will be easily accessible to all faculty and students.

Value of Sabbatical Project to VCCCD and Ventura College:

Our math department has had this goal for several years. However, no instructor has had the necessary time to devote to this project. Our department knows the benefit that a video library can bring, and I am excited to have the opportunity to complete this project for them. Online instructors at all three campuses will have the most direct benefit. Each week, instructors will have easy access to provide the links on D2L that the students need to watch as video lectures for the week. Rather than having each instructor search for quality videos, we will have a catalog of videos that can be easily accessed.

Not only are online instructors benefitting, but all instructors will have access to the website. The benefit can be realized by all math instructors at all three campuses. When an instructor wants a video to present in class or a link to share with students, the ease of locating a quality product will be felt by any math instructor.

On a larger scale, the district has expressed concerns over the low success rates of online math classes. With successful implementation of this completed project, I believe that the success rates of the math courses will improve. Improved success rates in such a large department brings much better numbers to our campus in funding and accreditation.

Value of Sabbatical Project to Ventura College Students:

All students are required to take math classes at VC, and many of them take multiple math classes. Since this project will be available to math students, the benefits will reach every student on campus. The video links will be available on the college website, so any student can find the website and use the video links.

Students in online classes will be made aware of this resource by their instructor. Students can know that the videos they watch will cover the material that they are required to learn since all videos have passed a quality check. The videos are cataloged by topic which will make it easy for students to find the video that is pertinent to their topic.

Online students are not the only students to benefit from this project. Traditional students often miss class time for varied reasons. With this completed project, they can easily access a high quality video which will teach the material that they missed during their class period. Students who did not fully understand the material presented in class will have the same access to hear another lecture and thus increase their understanding. Students also benefit on being able to play back material as many times as they need to gain complete mastery of the topic.

Value of Sabbatical Project to the Instructor:

As an online instructor, I am excited about the ways in which I can implement these materials into my online classes. I also am glad to have a resource that I can use for students who miss a traditional class period and want to have a good explanation. I love being an instructor at Ventura College, and I am always looking for ways to make my instruction more effective. This is a project that has been on my mind for several years, and I would greatly appreciate being given the needed time to devote to completing this task.

Thank you so much for your time and consideration of this important project.

Sincerely,

Michelle Beard
Professor of Mathematics