

## **Ventura College Sabbatical Leave Proposal**

On-site Research Project for Fall 2021

(If Fall 2021 classes are on-line due to Covid requesting Spring 2022)

Submitted by Janine Bundy

Mathematics Department

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### **Instructor's Sabbatical Leave Status**

**Full-time Hire Date:** August, 2011

**Part-time Hire Date:** August, 2007

**Previous Sabbaticals:** 0

### **Background of Sabbatical Project:**

Prior to 2019, the mathematics department of Ventura College has offered a robust quantity of developmental math courses, including beginning algebra, to help prepare our students for success in college level transferable courses. Our developmental math class offerings have been significantly reduced due to AB 705. (According to the California Community Colleges' website, "AB 705 was written to clarify existing regulation and ensure that students are not placed into remedial courses that may delay or deter their educational progress unless evidence suggests they are highly unlikely to succeed in the college-level course. Assessment instruments and placement policies have serious implications for equity, as students of color are far more likely to be placed into remedial courses; students placed into remediation are much less likely to reach their educational goals.") In fall 2016 we offered 20 beginning algebra courses; fall 2017 we offered 17 courses; fall 2018 we offered 13 courses, fall 2019 and 2020 we offered 3 beginning algebra courses. We are offering only 15% of the beginning algebra courses we offered just 4 years ago.

Many students entering our college algebra and math for meds classes are highly underprepared for the classes and lacking many necessary basic algebra skills. The learning gaps must be filled in order for the students to become successful in the transferable level classes. A repository of materials is needed so instructors will have appropriate student practice resources at their fingertips to offer to students on an individualized basis to help fill in the gaps. The instructors in our department recognize the value and severity of this need, yet we have been without the needed time to collaborate on such a significant project. The department has a desire to collect an online library of supplemental materials that instructors can access for beginning algebra topics.

### **Purpose of Sabbatical Project:**

The purpose of this sabbatical project is threefold: **(1)** find and evaluate beginning algebra student practice supplemental material covering operations with signed numbers, linear equations, graphing, linear inequalities, factoring, rational expressions and equations, exponents, factorable quadratic equations, and systems of equations. **(2)** create practice supplemental material for any topics in which quality supplemental materials could not be identified, and **(3)** contribute to our math department Canvas repository with the library of student beginning algebra supplemental material.

### **Components of Sabbatical Project:**

- Find and Evaluate Existing Practice Supplemental Material

The first step in this project is to identify practice supplemental material that is already in existence. Multiple websites and will be researched for these materials including Corbettmaths, GeoGebra, KutaSoftware, Math-Aids and Mathalicious. I will need to identify the quality of the materials, verifying that the content is most advantageous to our students. Once a material is identified and classified as acceptable, the material will be posted in the appropriate algebra topic. The goal is to find a minimum of one practice sheet for the main topics covered in our beginning algebra course.

- Create Practice Supplemental Material for any uncovered topics

After identifying existing resources, it is expected that there will be some gaps in complete coverage of our beginning algebra topics. Any topic that is not covered will need to have practice supplemental material created. If needed, I will plan and create practice supplemental material that can be shared with the department.

- Upload all Practice Supplemental Material to our Math Department Canvas page.

After locating or creating quality practice supplemental material, I will upload to our Math Department Canvas page. This information will be easily accessible to all faculty.

### **Value of Sabbatical Project to VCCCD and Ventura College:**

Due to the AB 705 legislation that took place; our math department recognizes a need for practice supplemental material in one organized location. Our department knows the benefit that this repository of needed materials can bring, and I am excited to have the opportunity to complete this project for them. Instructors at Ventura College as well as our neighboring district campuses should have significant benefit from this project.

When instructors recognize a student is missing a concept, the instructor can briefly cover the topic in class or during office hours and then offer up practice materials the student can use to master the concept. Rather than have each instructor search for quality materials or create them, we will have a catalog of material that can be easily accessed. All math instructors will benefit from this quality catalog as well as the students that need the extra support in the form of practice.

On a larger scale, the state has expressed concerns over the low graduation rates of students beginning their college math courses at a developmental level. With successful implementation of this completed project, I believe that the success rates of the college transferable math courses will improve. Improved success rates in our math department bring improved numbers to our campus in funding and accreditation.

### **Value of Sabbatical Project to Ventura College Students:**

All of our students are required to take math classes at VC, and many of them take multiple math classes. Since this project will be available to assist math students in building their developmental skills, the benefits have the potential to reach every student on campus. Even at higher levels of mathematics such as calculus, sometimes students are unfamiliar with some concepts of basic algebra and these materials will help fill in those gaps. Many students need these practice materials to gain complete mastery of the topic.

**Value of Sabbatical Project to the Instructor:**

As a math instructor, I am excited about the opportunity these materials will have in assisting our students in mastering math concepts, and in turn help build the students' confidence as well as increase their enjoyment of the subject. I will be grateful to have a resource that I can quickly access to print out practice materials for students that need to fill in a gap. It can take a significant amount of time to create or locate just one support material. To have access to an organized catalog of beginning algebra materials, to be able to pull those topics up quickly, knowing they are high quality and helpful to the students, is incredibly beneficial to me and my wonderful colleagues. I am a proud graduate of Ventura College and grateful to be an instructor at Ventura College. I feel it is my calling at this time in my life. I continually look for ways to make my, as well as my colleagues' instruction more efficient and effective. This is an opportunity I have been thinking about for a long time and with the passing of AB 705, the necessity of this project seems to be urgent. I would be grateful to have an opportunity to be given the time needed to devote to completing this valuable project.

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

Sincerely,  
Janine Bundy  
Professor of Mathematics