Report on Fall 2014 Sabbatical Leave

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The two-fold purpose of this sabbatical leave was to use case studies to write a chemistry textbook and then use the subject matter contained therein to develop a public outreach program.

During my sabbatical leave I was able to complete 9 out of 10 chapters of the proposed chemistry textbook. I held off completely finishing the textbook to leave room for input from publishers and editors. I have obtained a literary agent and we are currently in negotiations with the scientific publisher John Wiley and Sons for its publication. I have every expectation that the book will be completed within the next year. The subject matter of the textbook consists primarily of case studies which are chosen for their ability to connect the content of chemistry courses to everyday life. Case studies have been shown to enhance curriculum and improve the students’ attitudes toward the course content by showing relevancy. Writing this book has doubled the number of case studies in my arsenal and I have starting including these new case studies into the content of my chemistry courses.

In addition to inclusion in a textbook, these case studies were developed to educate the public about the importance of chemistry in their everyday lives. I used this sabbatical leave to convert many of the case studies, contained in the textbook, into Powerpoint presentations which were then presented to high schools, colleges, and other public meetings to increase the public’s interest in chemistry. During my sabbatical leave presentations were made at: Sonoma State, Piner High STEM Café, The Science

Lastly, these case studies were also used to create two new blogs which promote chemistry to the general public. One blog is through the local newspaper “the Press Democrat”, which can be found at: http://chemistry.blogs.pressdemocrat.com/
The other is located on Facebook https://www.facebook.com/StrangeChemistryStories.
This blog currently has almost 10,000 followers.

Overall, this sabbatical leave allowed me to develop a project which will: increase the general public’s knowledge of chemistry, develop SSU’s public relations, provide a service learning component for SSU’s chemistry courses, and improve SSU’s chemistry curriculum in general.