My application for a DIP Leave for 2013-14 proposed three areas of activity: 1) Engagement in the 2013 international year of “Mathematics of Planet Earth (MPE)” via participation in conferences and/or long-term research programs at research institutes; 2) Revamping of our Department’s Mathematical and Statistical Modeling course (Math 470) to a project-based model; 3) Teacher professional development activities.

1) No appropriate long-term research program in an appropriate field was offered by the national research institutes in Fall 2013, so my MPE participation was limited to shorter-term conferences. In particular, the January 2014 Joint Mathematics Meetings in Baltimore offered a wide variety of MPE-related talks and seminars, in many of which I participated.

2) My approaches to revamping Math 470 were embraced by our Department’s two applied mathematicians, and together we wrote and had funded an application for “Sustainability in the Classroom” funding to research and design the new course. Our newest applied mathematics tenure-track faculty member is currently teaching (Fall 2014) the first iteration of the new design.

3) Most of my effort during my DIP was directed towards teacher development efforts through the California Mathematic Project: North Coast (CMP:NC), which I co-founded in 1999 and have served since then as faculty advisor. I prepared and submitted over $5.5 million in grant applications. We have just learned that the largest, over $5 million, was declined by the National Science Foundation, but the reviews are positive and give helpful feedback for improving the application for future rounds. Annual funding of around $50,000 for CMP:NC core funding was awarded, and several outstanding new partnerships with K-12 districts in our region were established or expanded, especially Sonoma Valley Unified School District and Santa Rosa City Schools.