

## Report on ITL Grant on Writing in the Sciences Fall 2015

Participants: Facilitators—Lydia McDermott and Ginger Withers; Members—Dan Vernon, Arielle Cooley, Susanne Altermann, Frank Dunnivant, Bryn Kimball, Chris Wallace, and Nancy Forsthoefel.

- Did recipients complete what they set out to complete?  
**The proposed goals of this project were to:**
  - 1. identify our common writing goals;**
  - 2. share and develop our best practices for incorporating writing instruction while not sacrificing important course content;**
  - 3. develop specific assignments in participants' current courses that build on these best practices and work toward our identified writing goals; and**
  - 4. plan a publishable study of the pedagogical model(s) we develop.****We made good progress in achieving goals 1, 2 and 3, but within the single semester framework, we did not have time to plan what a publishable study would include. In our initial meeting, we identified some types of writing that were common to most or all of our courses, and then in subsequent meetings, we shared relevant resources associated with assignments, discussed ways to strengthen or revise those assignments.**
- What are the products of their efforts in terms of content, format, and public dissemination?  
**We gathered the writing resources we each use, including material from published sources, and our own projects that we used in our classes. For the purposes of our ITL, we assembled all of these in a shared google drive folder. In addition, we are currently cataloging the resources to make them accessible to others outside of our ITL group. Once we have completed this, we will move the information to the Division III cleo folder. In this way, anyone from the Science Division can access the material we have put together, and be able to use it. Additionally, we developed a small library of writing resource books for the sciences that are currently being housed in the COWS. Because it would take us over the budget of this particular grant, Prof. McDermott is ordering one book in particular for all participants from her COWS budget. It will arrive by the end of this spring semester.**
- Do any of these have potential long-term positive effects on the curriculum or academic program more generally?  
**The benefit to the participants was immediate. We have all adopted or modified projects for our classes based on the work of our ITL. We anticipate, however, that by sharing the work more broadly across Division III, this project will facilitate a more expansive and thoughtful conversation on writing, and provide the basis for future work within the division to identify a set of common writing goals, as well as discipline-specific advanced writing goals, that can be achieved throughout the science curriculum.**
- How many students were directly involved or indirectly impacted by the grant?  
**No students were directly involved. However, the participants all teach both high enrollment courses at the introductory level and advanced courses that include writing assignments. Therefore, this project impacts every course we teach.**
- Did the project enhance the quality of learning experiences offered to students?

Through our discussions, we each sharpened our writing goals for students, and identified new exercises that we are already implementing in our courses. Sharing our assignments and rubrics facilitated introducing or revising assignments. In addition, we learned tips for streamlining grading and improving feedback on writing, something that we anticipate will have great impact on student learning.

- What evidence do you have that demonstrates impact on student learning (if applicable)?  
**We each gathered new tools for assessment that we will each use in our writing projects. Over the long term, McDermott and Withers are interested in tracking the progress of students as they become more aware of, and practice good scientific writing, but that project is at best in the earliest stages of conception.**
- What were the limitations or failings of this project, and how, in retrospect, might they have been better addressed or remedied?

**This was the first systematic conversation about writing in the sciences to happen in our division. To our knowledge, no department has had these discussions, nor have they begun to identify writing goals for their majors. Because, we laid out a very general plan, we had quite a lot of things to talk about in our meetings, discussing all kinds of projects from keeping lab notebooks to helping students plan and write their thesis. We all found this first pass to be valuable both in terms of shared resources, and in brainstorming about potential projects and management of writing with a high student load, but we by no means accomplished all we can envision achieving with regard to teaching writing in the sciences. In future work, it may be helpful to restrict our discussions to a more narrow set of writing projects.**