

*Writing Self-Assessment for First-Year Engineering Students: Initial Findings* Chris Leslie, Elisa Linsky, Polytechnic University, Brooklyn, New York

Writing assessment runs the risk of sending the wrong message to students. Lab report grading that focuses on mechanical and format errors leads students to think that scientific report writing is a formulaic process: putting different information in the right sections, matching the number of the nouns with the number of the verbs. This approach leads to empty reports and does not give students insight into how one would assess scientific writing. Most importantly, this approach leads students to believe that they are writing reports as a classroom exercise rather than as an apprenticeship in a larger community of thinkers.

This paper is the description of a self-assessment project begun at Polytechnic University in Brooklyn, New York. Starting with the assumption that students need to know more than the structural details of scientific report writing, this program asks students to become involved in evaluating their own work. The semester begins with a survey to encourage students to think about the function of scientific writing and includes many opportunities for students and the writing consultant to enter into dialogue about the assumptions behind the assessment of writing: the reasons for the sections in a report, how (and why) an objective tone is achieved, how to develop a credible argument. This dialogue, parallel but separated from the weekly writing projects, allows the writing consultant to quickly correct student misconceptions, gives the students a critical standpoint for evaluating writing, and offers them an opportunity to discuss their writing issues in a low-stakes forum before getting a formal grade on a report.

This paper will also present the results of a limited rollout of the project. Sections of General Engineering that employed this project immediately demonstrated clear advantages over sections which did not implement the project. It was most successful in creating an environment of active, situated learning, where students were encouraged to write with an awareness of issues of logic and purpose. This paper will present examples of improvements in student writing, as well as survey results (from both students and faculty) that point to the program's success and potential areas of improvement.