Early Improvement in Report Writing Skills Using Critiques: an Update

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Abstract – Developing the written communication skills of engineering students has become a higher priority learning outcome since the advent of the ABET EC2000 criteria. Increased numbers of writing intensive courses, refinements to document requirements and proliferation of rubric development indicate the effort used to address the elevated priority. The sharing of rubrics and standards for the formatting and content of various report styles is intended to help students understand the writing assessment process. Sharing alone, however, does not often improve the outcome since it does not provide a “learn by example” experience. This results in low quality work being submitted in the first two or three reports, while the students learn by example. In an effort to improve student performance on early semester reports, critique-based exercises have been inserted early in junior level laboratory and design classes. The critique assignments involve reviewing previously graded student reports which have been stripped of identifying information to protect the original authors. The students were instructed to evaluate the sample reports guided by the rubrics and standards for formatting and content. The deliverable for the critique assignment included assessing a numerical “grade” for their report sample, along with justifications for the assessments. The technique has been used at multiple institutions with varying levels of success. Results from both institutions will be presented as well as lessons learned regarding the administration of the technique.

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