"UNGRADING": ADDING LEARNING INTENSIVE WRITING ASSIGNMENTS WITHOUT INCREASING GRADING LOAD

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Abstract

This paper presents five examples of ungraded yet effective writing assignments that can be added to engineering classes. These examples are freewriting, analysis/response papers, sample paper revision with comparison to a model, draft with an individual conference, and journals. Various "ungrading" techniques for handling these assignments and for giving feedback are described. Students write to learn and to improve writing without the professor's extensive written evaluation.

Many engineering educators are interested in including more and better writing assignments in their classes. Perhaps with numerous graded assignments already required, professors may wonder if more writing assignments will enhance students' learning enough to warrant increasing an already heavy grading load. Adding learning intensive writing assignments to engineering classes is possible, however, without adding extra grading, thus achieving learning gain without grading pain.

In Lewis Carroll's *Alice in Wonderland and Through the Looking Glass*,[1] Humpty Dumpty tells Alice that he has received an "unbirthday" present. If I remember correctly, one movie version even has a song with the words "a very merry unbirthday to you." Humpty's coining of that word allows him to have 364 days for presents rather than just the one day for a birthday present. Similarly, I coined the phrase "ungrading." Ungrading allows more opportunities to add effective writing assignments without requiring extensive responses and grading.

What are the benefits of ungrading besides avoiding the extra grading load? Writing assignments can help students to learn course content and also to improve their writing skills. The Writing-Across-the-Curriculum movement (WAC) has long touted the benefits of writing to learn.[2-4] Writing is a means of thinking; as we write, we formulate ideas and problem solve. Writing can help students remember concepts presented in class and in reading assignments. In addition, writing more often can improve students' writing skills. These benefits for the student can occur **without assessment or even feedback**. However, when certain feedback techniques are used, the possibilities for writing improvement increase. Feedback techniques can include the following:

- class discussion
- small group discussion
- peer evaluation
- instructor comments in an individual conference

- self evaluation
- brief, instructor-written comments (e.g., with journals)

Let's consider five options for adding learning-intensive ungraded writing assignments: freewriting, analysis/response papers, sample paper revision with comparison to a model, draft with an individual conference, and journals.

Freewriting

Freewriting is writing to and for the self to generate ideas, to formulate concepts, to "make meaning," and to process information.[5] This writing is free of concerns about grammar, punctuation, organization, and grades. It is, as the writing across the curriculum proponents say, expressive writing, the basis for writing to learn.[6] Since the audience is primarily the writer, only the writer needs to understand it. Of course, there are some freewriting assignments that the instructor will see. However, with these assignments, the instructor should only be interested in understanding the thoughts expressed and not reading critically to assign a grade.

Freewriting can be timed or untimed, but it is usually for a short period from 1 to 15 minutes. If timed, students write for the designated period without stopping until time is up. If they occasionally draw a blank, they are to continue writing, even if they are only writing nonsense, such as "can't think, can't write," until thoughts start to flow again. The theory is that writing generates thinking, that writing is problem solving.

One effective freewriting assignment is to brainstorm a report topic for a written or oral report. This strategy works for a broad assignment where the students are to select their own specific topic. For example, in my technical communication class, students are asked to write a persuasive report but the subject is left open. Students can write for five minutes, listing possible topics. Then after time is called, they circle the topic that seems most promising. They can then do another timed freewriting on that topic to generate ideas about it and perhaps to narrow it further. In this exercise, the professor does not need to read the papers; the students, through writing, have solved the problem of finding a topic.

Another good freewriting assignment is as an exercise to generate discussion.[7] First, the instructor chooses a topic that allows students to draw on their own knowledge. Some sample topics as questions are: 1) "What types of temperature measuring devices would you use in industry, what types in the undergraduate laboratory, and why?"
2) "How can we improve the design of this experiment?" 3) "What are common bad habits of speakers you have observed?" After explaining the topic, the instructor asks students to freewrite for several minutes. Then the students tell the class what they have written. The instructor acts as a scribe, writing down their summarized comments. I have used this assignment in my technical communication class with the third question. It usually results in one of the best discussions we have all semester. The procedure gives students time to think about their responses and to use writing as a means of recalling stored information. More participation, even from usually reticent students, is the result. This is another assignment that the professor does not need to read.

A third freewriting assignment gives the professor feedback on students' questions and concerns about a course or lesson. Unlike the previously mentioned freewriting assignments, the

professor reads this writing. Some professors allot one to five minutes at the end of class for students to freewrite for this purpose.[8] The topic might be to tell the most interesting fact covered that day or to describe what was confusing or vague. Students might also define a term used in class. Reading these student responses prepares the professor for the next class, showing that students need certain points re-emphasized or clarified. In this five-minute freewriting, students can also write about the day's topic and apply it in a new way. For example, the professor might ask, "How can you illustrate a particular law of physics in a simple way to elementary students?"

A fourth freewriting assignment is for students to summarize the lesson or reading assignment. Summarizing helps students learn and retain the course material.[9] Summaries can either be read or unread by the professor. If read, these summaries can show the professor whether or not students understand the material. If unread by the professor, summaries help students learn the material, provide the basis for group discussion, and/or become study sheets.

Freewriting appeals to students and helps them learn for a variety of reasons. It allows students to express their feelings about a particular topic. It offers students time to think and draw information from memory before contributing to a class discussion. It offers the chance to participate in a thought-provoking exercise rather than to listen to a lecture. As an open-ended assignment, it allows students to explore new ideas and new ways to apply what they already know.[10]

Analysis/Response Paper

An ungraded writing assignment that causes students to think critically is the analysis paper. This can be a freewriting exercise, but I have listed it separately because it can also be a brief, in-class or out-of-class paper. With this assignment, the student evaluates items, ideas, or possibilities. The assignment can also be a response to an issue or problem. I recommend using this paper as a basis for discussion; as such, the instructor does not necessarily have to read the papers. However, the instructor can read them and write brief, positive comments on the ideas expressed or, in the case of technical information, correct factual errors. Another option is for students to give peer evaluations.

My most recent analysis assignment was for students to assess five homepages, which won awards based on using good technical communication. The students read the criteria for winning the award, analyzed the winning entries, and brought notes to class. They then wrote their assessment of the winners. My purpose for this assignment was to get their ideas since I was not impressed with some of the winners. These students were quite computer and internet literate; some had their own homepages and had created pages for others. I, therefore, was interested in their informed opinions. I stressed to the students that my purpose was simply to get this information from them and for them to use these winning webpages as a basis for perhaps entering next year's competition.

This assignment caused the students to become familiar with an important segment of course content. They were able to assess several items according to established criteria and according to

their own criteria. By reporting their assessment without the restrictions required for a graded paper, they could suspend the critical self-talk about writing style and focus on the "writing as thinking" aspect.

Revision of a Sample Paper With Comparison to a Model

One helpful ungrading method is to distribute a sample paper to the class and require each student to write a revision. Then the student makes a self-assessment of his or her revision, comparing it to an excellent model revision. The professor may read all or none of the revisions, depending on the procedure selected from those described below. This assignment works well with a paper format being used for the first time, such as a particular short report format. Students can practice reorganizing the information into the required sections.

A sample paper might be a short student report from a former class. The paper should show weaknesses in organization, required details, and writing style, not grammar mistakes or misspellings. In fact, it is helpful if the instructor corrects beforehand all spelling, punctuation, and grammatical errors. Students may mistakenly consider proofreading for and correcting these errors to be an adequate revision. To the contrary, these are surface problems. If left in the paper, these may only distract the students from the deeper level of revision. The purpose is to get students to reorganize sections, make general overview statements, develop generalities with detail, and rewrite lengthy, unclear sentences. If, however, the professor knows that most of the students make a certain grammatical mistake, such as a comma splice, leaving or creating several such mistakes in the paper may be advisable. The students then thoroughly revise this sample paper.

The next step is for students to assess their revision against a model revision. Instructors can provide a model either by rewriting the paper themselves or by using the best student revision. Rewriting the sample paper before giving it to students to revise is quite helpful. By revising the paper first themselves, instructors are able to analyze more precisely what is wrong and experience the degree of difficulty in correcting these weaknesses. They will then be better able to direct the students and explain needed revisions. However, if pressed for time, instructors can wait until the students have completed their revisions and use the best revision as a good example. The instructor can read all the students' papers and select one or have the students break into groups, share papers, and select the best one in each group. Then the class or instructor can select the best one from the finalists.

Students can evaluate the model in or out of class. They can then read the model revision, compare it to their own, and ask questions. As an alternative, the instructor can make a transparency and discuss it in class. Another idea is to have groups select the best features of their members' revisions and combine these into a final group revision.

The self-assessment by comparing the revision to a model helps students in several ways. They learn by doing, by actually writing a revision, which requires a detailed analysis of the sample paper. This process is better than the instructor simply pointing out problems in a sample paper. The student once again is problem solving through writing. By revising the content and

by analyzing the experimental results in the original report, students can improve their writing skills, their knowledge of various report formats, and their technical knowledge.

Draft With an Individual Conference

Another ungrading method for assessing writing is an oral evaluation of a draft in a conference with each student. This method is efficient for short papers and small classes of no more than 25 students. The professor should stipulate ahead of time that only major aspects, such as content and organization, will be the focus, not such surface aspects as proofreading for spelling and punctuation errors.[11] The individual conference approach can accomplish much in a short time for both the student and the professor.

The conference can be used in several ways. Students can use the comments about this ungraded report to write the next graded report, or the student can revise this first paper for a grade. Since the instructor has already read the first draft, grading a second draft will take less time. A third option, recommended by Roger Garrison,[12] is for students to write several papers on various topics and to discuss each paper in conference with the instructor. The instructor rates the paper as acceptable (according to predetermined standards) or unacceptable. The students must rewrite unacceptable papers until these are acceptable. Then from this group of acceptable drafts, the student selects a paper or certain number of papers (as designated by the instructor) and rewrites them for a grade. The instructor then grades only these selected papers. For example, in the past I have required students to write two acceptable papers, to revise one of these for a grade, and then to repeat this process or variations of it throughout the semester.

For a successful individual conference, having a strategy defined beforehand works best. It is good to point out strengths as well as weaknesses in this conference. An effective technique is to avoid a scatter-gun approach by emphasizing major errors before minor errors. Thus, the organization and development of the report gets the professor's first attention. Discussing the appropriate arrangement of the paragraphs in the results section, for example, would deserve more emphasis than a few spelling or minor punctuation errors. Depending on the professor's preference (influenced by his or her particular learning style), he or she might choose to proceed in one of two ways. One method is paragraph by paragraph, pointing out strengths and weaknesses from the following major-to-minor categories: organization and development, coherence and sentence structure, usage and vocabulary, punctuation and spelling. Another method is category by category, considering the whole paper for each category (e.g., the organization and development of the entire paper before proceeding to sentence structure). The instructor concludes the conference by summarizing the pluses and minuses of the report sections or writing categories.[13]

The conference method saves time and communicates effectively for several reasons. More oral comments can be made in a shorter time than written comments. Talking about complex problems is easier and more efficient than writing about them.[14] The instructor's comments have more impact in conference than in class or written on a paper because the instructor focuses personal attention on the student and the student's individual writing problems. The conference also often establishes a better rapport between the instructor and the student. [15]

Journals

In describing assignments for ungrading, I cannot leave out journals. However, I only briefly mention them here because most engineering professors are familiar with them. Journals are used and discussed often in engineering education,[16,17] perhaps more than the other strategies. Journals can serve various purposes. A journal can be a record of questions, concerns, and learning experiences in a course. It can also be a learning log, a record of the problem solving thought processes required to complete assignments.

In addition, a journal can be a tool to help students write a graded paper by providing information to be used in the paper. For example, in the senior chemical engineering lab, my students keep a journal called a learning styles log with an entry for each group meeting. At the end of the term, they write a memo relating the Kolb learning styles theory to the group interaction. The assignment helps them learn and apply the theory, but most important, it focuses their attention on ways and means to function more effectively in teams.

Professors can read journals quickly and make comments about the responses rather than the quality of the writing. Reading the comments is necessary when the professor needs feedback on course issues, such as misunderstood concepts. For other types of entries, the professor can merely scan each entry and note the number of entries. Professors who assign journals usually review them at least twice during the term, once at midterm and once near the end. One drawback to collecting them only twice is that reading a half-term's worth of entries takes longer than reading a shorter assignment. When I collect them only twice, I tend to keep the journals longer than I should and get frustrated looking at the stack. For large classes, I recommend the technique of skim and swoop, reading selected passages and writing one or two comments. Journals are primarily for the students' benefit. The main point of collecting them is to underscore the importance of writing regular entries and in some cases, to get feedback on various aspects of the course.

Conclusion

This paper has given a variety of ungraded writing assignments that offer the benefits of writing to learn and to improve writing. I have used all these strategies successfully in one or more of my courses. My experience has been that students learn from all these assignments and that students are most productive with freewriting to prepare for discussion and with revising or writing after an individual conference. As the instructor, I learn the most from reading their freewriting feedback, from rewriting a paper to be used as a model, and from the individual conference. Perhaps engineering educators will find one or more of these assignments helpful in their courses. To paraphrase Lewis Carroll's Humpty Dumpty, "Happy ungrading to you."

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