To: bamork@mtu.edu

From: ngrimm@mtu.edu (Nancy M. Grimm) Subject: Re: guest lecture on tech writing

#### Hello Bruce

Friday is my research day, so I just now received your request--sorry for the delay.

I think it's wonderful that your department is piloting this new course and that you are addressing the whole spectrum of project communications.

I have to decline the invitation to give a guest lecture. Because of the increased enrollment in the first-year class and no additional resources, our schedules in the writing center are packed this term. I barely have time to prepare my own lectures and I'm working against a deadline for a book chapter.

But I do have a few suggestions. One thing we learn from working with students in the writing center is that students forget that a technical document has to serve a function for a reader. They are accustomed to writing student papers and exams that report "what they think". Readers of technical documents are asking what they are supposed to -do- with the information; they want to know what the implications are.

The key to success in technical writing is that students have to stop thinking like students and start thinking like professional engineers. And they have to use their imaginations to predict how a reader will be using the document--to make a decision? to develop a similar research project? to

determine cost? to trace the history of a product? You are in a better position than we are to talk to them about how electrical engineers use design reports.

Another issue is that EVERYONE--myself included--underestimates the time it takes to produce a readable document. We tend to do our research and design our projects and think of writing as an afterthought. Big mistake! Writing needs to be considered from the earliest stages of the project. We need to always ask ourselves what we want readers to do with the information.

Multiple drafts and critical readers of those drafts are extremely helpful. Procrastination is the big problem.

Final thought--please encourage students to use the writing center walk-in hours or to form groups/teams in which they help one another.

Suggestions for class exercises--

1. have them bring a draft of a section, exchange the draft (produced on an overhead transparency) with another group, and do critical readings. Each group can use the overhead to discuss writing issues that the authors need to address.

- 2. bring a series of drafts on overheads that you present to the class as a model of a technical writing process,
- 3. have students bring textual information that needs to be relayed in visual form--or vice versa--and have them practice doing this in a way that makes sense to readers. Many instructors complain that students don't take time to integrate designs into the report--they dump it all in appendices, indicating again that they don't -integrate- writing with the design work.
- 4.let them know how you intend to grade the projects--what criteria you will use. If they don't see how the writing is taken into consideration in the grading, it's another reason to procrastinate. Build an exercise by having them apply the criteria themselves to a completed report.

Hope these ideas are useful. Perhaps they are ones you already thought of.

I'll send you copies of our walk-in hours so you can encourage students to use them, and I'll also send a copy of an article entitled "The Science of Scientific Writing." The article focuses mainly on editing skills rather than the overall design of a report. But it offers a good framework for thinking about how readers go about reading.

If there is anything else I can provide, please let me know.

Good to hear from you

Nancy

TECHNICAL WRITING - PROFESSIONAL DOCUMENT MAY HAVE DIFFERENT PURPOSE AND AUDIENCE THAN IN UNIVERSITY CLASSROOM SETTING.

## CLASS:

- DEMONSTRATE THAT YOU HAVE LEARNED SUBJECT
- GIVE WELL-FOUNDED OPINIONS
- DEMONSTRATE BASIC WRITING SKILLS
- OFTEN A PRE-DEFINED FORMAT TO FOLLOW
- READER IS PROFESSOR WHO MAY ALREADY KNOW TOPIC
- DETERMINE COURSE GRADE

### PROFESSIONAL:

- WHO IS TARGETED AUDIENCE (READER) OF DOCUMENT?
- MANY ACCEPTABLE WAYS TO ORGANIZE OR FORMAT.
- WHAT WILL READER USE DOCUMENT FOR?
  - To make a decision?
  - To develop a similar project?
- To determine cost or make an important economic decision?
  - To trace the history of a product?
- OFTEN SEVERAL READERS, ALL LOOKING FOR DIFFERENT INFORMATION:
- Executive summary with recommended actions (CEO).
- Technical abstract (Engineering Manager)
  - Budget or economic synopsis
  - Technical details for manufacturing or

# marketing

## **UNIVERSAL REQUIREMENTS:**

- WHAT ARE EXPECTATIONS OF READERS?
- READERS DON'T READ, THEY INTERPRET.
- DON'T FOCUS JUST ON FORMAT AT SACRIFICE OF CONTENT.

# NEVER UNDERESTIMATE THE TIME IT TAKES TO PRODUCE A READABLE DOCUMENT!