ABSTRACT
        A two-semester course in technical writing, developel
at Hinds Junior College, is designed as a practical course which
fulfills the junior college English requirements and helps students
to develop the language skills they will need in the job market and
in technical careers. During the first semester, students are guided
in writing process explanations, instructions, definitions,
descriptions of mechanisms, cause/effect analyses, and classification
and partition analyses. Second semester students are instructed in
writing summaries, letters, reports, and a research paper. Each kind
of writing is treated as a unit of study for which each student
receives an outline to use as a guide for reading and studying
necessary chapters, for keeping up with assignments, and for test
review. Students are also asked to read both publications related to
career choice and literary selections. (Five sample instructional
sheets are included.) (JM)

Setting Up and Implementing A Technical Writing Course in the Two-Year College: A Method

Ann A. Laster

Few, if any, of the students enrolled in my technical writing classes will ever become professional technical writers. Most of these students, however, will become technicians in mechanical, electrical, agricultural, or health related professions, specialists with varying responsibilities for communicating with others, responsibilities which require skill in specific kinds of thought processes and the ability to reproduce these thoughts in clear language and form. Therefore, whatever I can do as a teacher of technical writing to direct these students in developing skills in practical communication, I am committed to doing. I was not always so inclined.

Several years ago as a member of a then small English faculty, I suddenly found myself assigned to teach Technical Writing. And at a time when there was just a bit of the upturned nose on the faces of some of the other department members. My initial reaction was why me, Lord? I had wrestled with remedial English classes, an assignment that also got the up- turned nose. Why couldn't I be assigned a sophomore literature class and have some rest from the mountains of papers from five and sometimes six sections of composition, not to mention the hours spent in individual and group conferences--

But the decision was made. So was it!

My most immediate problem was to develop a philosophy of technical writing. Fortunately I had a colleague to work with and the two of us began to talk about technical writing. Gradually a philosophy evolved.

1. First we felt that a technical writing course, enrolling primarily freshmen and fulfilling the English requirement for graduation from a junior college, should be practical, since it could well be the only college English course for some students.

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2. We felt that the students enrolled should be convinced that the course was designed specifically for them, designed to help them develop language skills that would obviously benefit them as they became workers in the job market. We had already experienced problems with motivating some students who had difficulty relating course content to reality. In technical writing at beginning class meetings when I explain that the course is a practical writing course designed to help the students develop skill in kinds of writing they might well encounter as employees-- immediately faces brighten. Often a student will say, "You mean we don't have to study Shakespeare and Chaucer and all that stuff?" And I reply, "No, you don't." Faces are even brighter. Maybe this is an English class that will be worthwhile.

3. We felt that we as teachers of technical writing had to become familiar with some of the career education subjects taught on our campus so that we could give illustrations that would appeal to the students and so that we could discuss content in writing with reasonable intelligence. We had to become familiar with area industries and service institutions where many of our students are employed following graduation or certification.

Our methods were the following. We consulted with instructors of career education subjects taught at Hinds. We interviewed personnel managers in area industries and service institutions. I was fortunate in that my husband was an industrial technology major, a welder, a machinist, and later the director of a career education complex built on an additional campus; also an uncle was an instructor in refrigeration and air conditioning. My colleague enrolled in and successfully completed courses in general electricity and wiring and printing. We talked to students already employed. What kinds of writing are you required to do on-the-job? Do you have forms to fill out? Could you bring us samples? They did write; they did use forms; they did bring us samples.

And we read books. We collected basic texts used in career education courses at Hinds. We camped in the periodical section of the library. Finally the librarians opened the magazine stacks to us. We read magazines, journals, pamphlets--anything we could find related to career education subjects.

Next we set about to determine exactly how technical writing should fit into the writing program. After some experimentation, currently technical writing at Hinds Junior College is a two-semester course; one of eight approaches to composition, any one of which, upon completion, supplies 6 hours of credit in freshman composition, applicable to graduation from Hinds or for transfer.

And, finally, using all the information gained from talking, reading, and observing, we began to determine course content and methods of presenting that content. Currently first semester in technical writing the students are guided in writing instructions, process explanations, definitions, descriptions of mechanisms, cause/effect analyses, and classification and partition analyses. Second semester students are guided in writing summaries, letters, reports, and a research paper. Each of the aforementioned kinds of writing is treated as a unit of study. Since we at our school are committed to a systems approach, each unit is outlined according to "our system."

(See transparency.) #1 #2

Each student receives a copy of each unit of study and uses it as a guide for reading and studying the chapters covered, for keeping up with assignments, and for reviewing for tests.

Each unit is treated in the same manner. The student first defines the term identifying the kind of writing we are to practice and decides why it is important for a future technician to be able to develop skill in producing the writing. Class discussions on introductory material to each unit are often most enlightening; many of the students are already employed in their

career field while others are older students who have had considerable work experiences, often varied experiences, and these students supply excellent examples to support "why learn to do this kind of writing."

Then the class moves to a discussion of procedure and planning for writing and analyses of sample writings. Then the students write. This discussion and writing is controlled and guided by three major factors.

1. Before writing the student makes two major decisions:

Why am I writing? and Who am I writing for? These two controls, purpose and audience, receive emphases throughout the course. We use various methods to try to make clear to the student that audience and purpose are major factors in controlling technical writing. For example, in writing descriptions of mechanisms, we ask the student to identify a mechanism, then to describe it for three different purposes for three different audiences. Through class discussion we decide what information needs to be included in each description to meet audience needs and accomplish the stated purpose. Then the students describe the mechanism, first so that someone in maintenance could find it and place an inventory number on it, second so a student or an employee can recognize it, understand how and why it functions, and operate or use it, and finally so a technician can locate the mechanism and repair a broken or inoperable part.

In writing definitions, one assignment asks the student to select a term (preferably one related to individual career choice) and define it for three different audiences: a fifth grader as the term might be defined in his weekly reader, an English teacher who wants to understand the term well enough to judge the accuracy and completeness of a student's sentence definition of the term, and a technical instructor who has asked on a final exam for a paragraph definition of the term. Then using the Fog Index each

student determines the reading level of individual writing and decides whether each level is appropriate for the stated audience.

These assignments as well as others offer excellent opportunity for class discussions on the importance of writing to accomplish a stated purpose and to make the purpose clear to a specific audience.

2. In writing longer compositions within the units of study, the student is guided by an outlined procedure for writing and a plan sheet. The Procedure for writing outline helps the student to decide what kind of information to include.

(See transparency.)   # 3   # 4

Third, the students use a Plan Sheet to direct their thinking as they decide on content to include in a composition. (See transparency.) # 5 Then the student writes his composition.

During the earlier weeks of the semester I deal with papers in this way. After class discussion and analysis of one kind of writing, I ask the student to fill in a plan sheet. After I ok the plan sheet, the student uses it plus the procedure for writing outline to write a rough copy of a composition. I read the rough copy and make suggestions for improvement. The student revises the composition and returns a final copy. If the effort merits a C or above, I assign a grade. If not, I return the paper with suggestions for additional revision or with a note to schedule a conference to discuss the composition. I do not assign a composition a grade until it merits a "C," unless the student requests a grade "as is." In other words the student has the opportunity to work to improve his writing within reasonable limits of time, patience, individual capability, etc.

Individual problems such as problems in grammar, mechanics, comprehension, I handle in various ways, depending on the student and the problem area. I use a handbook, programmed texts, the Basic English laboratory facilities

and materials, and the reading department. Whatever ways are used would be determined, of course, by available facilities at an individual school.

I also ask my students to read. Each student keeps a notebook to record summaries of a minimum of two articles per week. I encourage the students to become familiar with publications of materials related to their career choice, particularly journals and other periodicals. I try to impress upon the student the need to read and to keep aware of what is happening within his area. I also ask the student to keep bibliographical information on each reading.

An extra benefit is by the time the students are assigned a research paper, they have done some reading, become familiar with available library materials, and had some practice in summarizing and in writing bibliographical information.

Occasionally I ask students to read "literary" selections because I feel that technical writing students should not be denied exposure to literature. These reading assignments may be made on an individual basis or to a class. Oftentimes dislike for literature has developed as students were required to read selections they did not find appealing or interesting. Therefore I try to direct individuals to selections that relate to the choice of career and/or that might offer insight to life and work. To make reading assignments on this basis requires a deeper than ordinary relationship between instructor and student. Some students develop such a relationship quite easily; others never do. When I feel that the time and the student are "right," I suggest a title. I ask the student to read a few pages; and the student decides then whether to continue reading or not. I must confess that I am not always successful with this method; however I have enjoyed enough success that I continue to use it whenever I think there is a chance that I might change a negative or a neutral attitude toward reading to a positive one or reinforce an existing positive attitude.

7.

Sometimes I assign a selection to a class and try to correlate it to a unit of study through writing assignments. For example, while studying definition I may ask a class to read Galsworthy's "Quality." Then the students individually write a sentence definition of "Quality" as Galsworthy seems to define it and a sentence definition of "Quality" as they perceive it. From here we may go to an extended definition of the term.

Sometimes I assign a selection to a class simply because I believe it reveals values or universal qualities worthy of consideration. For example, selections from Kurt Vonnegut's Player Piano or George Orwell's 1984 or E. M. Forster "The Machine Stops." We may read aloud in class, or we may discuss reading done outside of class. Sometimes the students write in response to reading.

Few, if any, of the students enrolled in my technical writing classes will ever become professional technical writers. Most of these students, however, will become technicians in mechanical, electrical, agricultural, or health related professions, specialists with varying responsibilities for communicating through the written word. Hopefully, their experiences in technical writing will make them aware of the importance of communicating accurate information presented in a form and dialect acceptable to the situation and at a level dictated by the intended reader to enable the reader to understand the information. And hopefully their experiences in technical writing will help them develop confidence in their ability to communicate.

1

Introduction to Technical Writing

Unit Objective: The student will learn the importance of the communication process and the ways communication is essential to the future technician.

Evaluation: Write a paper (2 pages) or present a two-minute talk giving your views concerning the relationship of communication and your technical field.

Learning Objectives The student will	Learning Experiences The student will take notes during the lecture and participate in class discussion.
1. Define "Communication."	1.1 Listen to RT 1, "Introduction to Communication." 30 min. 1.2 Listen to RT. 2, "Communication breakdowns and Language and Meaning." 30 min. 1.3 Listen to RT 3, "Language and Meaning." 30 min. 1.4 Consult a dictionary. 1.5 Read p. 216, Basic Technical Writing.
2. List four ways we communicate.	2.1 Read handout on the communication process. 2.2 Demonstrate ways we communicate.
3. Explain why communication is important to Man.	3.1 View VT 1144, "The Great American Windbag." 30 min. 3.2 Listen to RT 7, "The Communication Process." 30 min. 3.3 Read "Clear Only If Known," by Edgar Dale (Text) 3.4 Find examples of "breakdowns" in communication.
4. Define "technology," "technician," "technical."	4.1 Consult a dictionary. 4.2 Interview your technical instructor. 4.3 Consult the McGraw-Hill Encyclopedia of Technology.
5. Define "technical communication."	5.1 Consult a dictionary. 5.2 Consult at least one book on technical writing in the library. 5.3 Read "What is Technical Writing", pp. 64-69 (Technical and Professional Writing). 5.4 Read pp. 3, 6-7, Basic Technical Writing.
6. List ways the technician communicates.	6.1 See table of contents in WRITING AND READING IN TECHNICAL ENGLISH. 6.2 Scan texts in your technical field.
7. Explain the importance of communication to the technician.	7.1 Review Film 1144 (See 3.1). 7.2 Interview your technical instructor. 7.3 Interview at least one person employed in your technical field.

Definition **BEST COPY AVAILABLE** # 2

Unit Objective: The student will write short and extended definitions of terms.

Evaluation: The student will be evaluated by the writing assignments for Chapter III and by a test covering all materials of the unit.

Learning Objectives	Learning Experiences
1. Define "definition."	The student will read Chapter II, present in a notebook (in outline form) the essential material from the chapter, and take notes during the lecture and discussion of the chapter. 1.1 Review pp. 63-64. 1.2 Consult a dictionary. 1.3 Read p. 238, Basic Technical Writing.
2. Explain why a future technician needs to know how to write definition.	2.1 Review pp. 63-66. 2.2 Read pp. 237-238, Basic Technical Writing.
3. List the conditions under which a term should be defined.	3.1 Review pp. 65-66.
4. List the general principles in writing a definition.	4.1 Review p. 73. 4.2 View transparency on "General Principles in Writing a Definition."
5. List the factors that determine the extent of a definition.	5.1 Review p. 66. 5.2 Read pp. 222-223, "Fundamentals of Definition." (Technical and Professional Writing.)
6. Define "sentence definition."	6.1 Review pp. 67-69.
7. List the three steps in giving a sentence definition.	7.1 Review pp. 66-69.
8. Write a sentence definition.	8.1 Write Application 1. 8.2 Write Application 3. 8.3 Write Application 4. 8.4 Read in reader "Quality." 8.5 Write a sentence definition of "quality," according to John Galsworthy.
9. Define "extended definition."	9.1 Review pp. 67-69. 9.2 Scan pp. 244-259, Basic Technical Writing.
10. Explain the procedure for writing an extended definition.	10.1 Review pp. 73-74. 10.2 Review "General Principles in Writing A Definition." (See 4.1 and 4.2)
11. Write an extended definition.	11.1 Review pp. 69-74. 11.2 Write Application 8. 11.3 Read in reader "Technical Education." 11.4 Write #'s 1 and 2, p. 443.

12. Word definitions according to their purpose and the knowledge level of the reader.

    12.1 Review pp. 64-65, 72-73.
    12.2 Write Application 5.
    12.3 Write Application 6.

13. Recognize a well-stated definition and be able to explain why it is well stated.

    13.1 View student definitions and analyze each.
    13.2 Write Application 2.
    13.3 Write Application 7.

PROCEDURE FOR WRITING A
DESCRIPTION OF A MECHANISM

3

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I. THE IDENTIFICATION OF THE MECHANISM IS USUALLY SIMPLE AND REQUIRES ONLY A FEW SENTENCES.

   A. DEFINE OR IDENTIFY THE MECHANISM.

   B. INDICATE WHY THIS DESCRIPTION IS IMPORTANT.

II. EXPLANATION OF THE FUNCTION, PHYSICAL CHARACTERISTICS, AND PARTS IS THE LENGTHIEST SECTION OF THE COMPOSITION.

   A. GIVE THE FUNCTION, USE, OR PURPOSE OF THE MECHANISM.

      1. IF THE MECHANISM IS A PART OF A LARGER WHOLE, SHOW THE RELATIONSHIP BETWEEN THE PART AND THE WHOLE.

      2. IF APPLICABLE, STATE WHO USES THE MECHANISM, WHEN, WHERE, AND WHY.

   B. GIVE THE PHYSICAL CHARACTERISTICS OF THE MECHANISM.

      1. TRY TO MAKE THE READER "SEE" THE MECHANISM.

      2. DESCRIBE, AS APPLICABLE, SUCH PHYSICAL CHARACTERISTICS AS SIZE, SHAPE, WEIGHT, COLOR, TEXTURE, MATERIAL, ETC.

   C. GIVE THE PARTS OF THE MECHANISM.

      1. LIST THE MAJOR PARTS OF THE MECHANISM IN THE ORDER IN WHICH THEY WILL BE DESCRIBED.

      2. IDENTIFY EACH PART.

      3. STATE WHAT EACH PART IS USED FOR-ITS FUNCTION.

      4. TELL WHAT EACH PART LOOKS LIKE-ITS PHYSICAL CHARACTERISTICS.

      5. GIVE THE RELATIONSHIP OF EACH PART TO THE OTHER PARTS.

NOTES

I. THE IDENTIFICATION OF THE TERM IS USUALLY BRIEF.

   A. STATE THE TERM TO BE DEFINED.

   B. GIVE A BRIEF DEFINITION.

   C. INDICATE THE REASON FOR GIVING A MORE DETAILED DEFINITION.

II. THE ADDITIONAL INFORMATION FORMS THE LONGEST PART OF THE PAPER.

   A. STATE IN A TOPIC SENTENCE THE KINDS OF ADDITIONAL INFORMATION YOU WILL
      GIVE.

   B. GIVE THE INFORMATION, INCLUDING WHATEVER DETAILS ARE NEEDED TO GIVE
      THE READER AN ADEQUATE UNDERSTANDING OF THE TERM.

   C. USE CONNECTING WORDS AND PHRASES SO THAT EACH SENTENCE FLOWS
      SMOOTHLY INTO THE NEXT AND SO THAT ALL THE SENTENCES IN A PARAGRAPH
      HANG TOGETHER AS A UNIT. (SEE TREATMENT OF TRANSITION, PAGES 529-531.)

III. GENERALLY THERE IS NO FORMAL CLOSING, ALTHOUGH A COMMENT OR SUMMARIZING
     STATEMENT IS OFTEN INCLUDED.

PLAN SHEET FOR WRITING INSTRUCTIONS   #5

PURPOSE - IN THIS PAPER I WILL EXPLAIN HOW TO

AUDIENCE (INTENDED READER)-I AM WRITING THIS
EXPLANATION SO THAT_____
(A CLASSMATE ABSENT WHEN THIS WAS
EXPLAINED BY THE INSTRUCTOR. A GENERAL
ADULT READER. A HIGH SCHOOL STUDENT.
ETC.) CAN UNDERSTAND WHAT I AM SAYING.

SPECIAL PREPARATION- MY INTENDED READER WOULD
NEED TO HAVE THIS BACKGROUND. KNOWLEDGE.
OR SKILLS IN ORDER TO UNDERSTAND THIS
EXPLANATION:

SIGNIFICANCE- THIS OPERATION IS IMPORTANT
BECAUSE (GIVE BY WHOM. WHEN. WHERE. AND
WHY THIS OPERATION IS CARRIED OUT):

EQUIPMENT AND MATERIALS- FOR THESE DIRECTIONS
TO BE CARRIED OUT. THE FOLLOWING EQUIP-
MENT AND MATERIALS ARE NECESSARY:

TERMS- I WILL NEED TO EXPLAIN THESE WORDS OR
TERMS:

STEPS- THE MAJOR STEPS ARE THESE (LIST AS
IMPERATIVE VERBS):

CAUTIONS FOR THE READER- TO AVOID MAKING
MISTAKES. OR.TO EMPHASIZE ESPECIALLY
IMPORTANT POINTS. I WANT TO MENTION
THESE THINGS: