TECHNICAL WRITING PRACTICALLY UNIFIED THROUGH INDUSTRY

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Agricultural Technical Institute
The Ohio State University
Wooster, Ohio

INTRODUCTION

In order to understand how our technical writing program is set up, I feel you need to have some general background concerning the Agricultural Technical Institute (ATI) which is located in Wooster, Ohio. The Institute is a two-year agricultural college, an administrative unit of The Ohio State University College of Agriculture. ATI opened in 1972 with a beginning class of 198 and is now in its ninth year with an enrollment of about 760. We offer an associate of applied science degree in seventeen technologies, ranging from a traditional dairy science program to a less traditional beekeeping program.

Our student body is diverse, with students from large urban areas and small rural areas; most are from Ohio, though some are from other states and even other countries. Most of the student body is 18-20 years of age and unmarried; of the 766 students, 509 are male and 257 are female. About 33% of the incoming class is placed in a developmental communication skills program and about 50% is placed in a developmental math program. Less than ten percent of our students transfer to bacculaureate-granting institutions.

ATI has four academic divisions under which the seventeen technologies fall, and one academic division, General Studies, under which support courses fall. Below is the breakdown:

Animal Industries Technologies

Dairy
Horse
Livestock--Beef and Swine/Sheep

Horticulture Industries Technologies

Floriculture
Greenhouse
Landscape
Nursery
Turf

Agricultural Mechanics Technologies

Soil and Water
Forest Products
Materials Handling

Agricultural Businesses Technologies

Agricultural Research
Agronomic Business
Beekeeping
Crop Production
Food Marketing

General Studies

Chemistry
Biology/Botany
Math
Social Sciences
Communication Skills
Developmental Education

Technical Writing courses are taught in the Communication Skills area, an arm of the General Studies Division. How we unified these technical writing courses with industry is the topic of today's presentation.

The objectives of the Institute, as set forth in our bulletin, include that of offering a college-level program in selected agricultural technologies so that our graduates possess occupational competence in their technologies. This goal of occupational competence posed a challenge to those of us teaching technical writing. Traditional courses of instruction in technical writing have not been directed to agriculturally based two year colleges. If we were to help fulfill the objectives of the Institute, we had to offer a technical writing program demonstrably based upon the writing tasks of the students' occupations.

Our original technical writing course had already been in existence since the school opened, but it became clear that it was not fulfilling the individual needs of the students in the technologies or the needs of the students in the industries once they graduated. Each technology at ATI has an advisory committee composed of eight to fifteen people in actual industry positions including farm operations. The members, according to ATI requirements, are persons who are recognized by their industry as prominent and successful with a thorough understanding of their total industry needs, challenges and trends. An important point of the committee's formation is utilization of the advice and counsel of such a committee once its members have been brought together. The advisory committees meet separately at least annually to review their programs and make recommendations to the technology coordinators in order to strengthen the program they represent. Courses are added, revised and deleted quite often as a result of industry input. I felt the best place to start in our attempt to unite with industry was to go directly to industry. I got in touch with each member of each advisory committee. Letters went out requesting examples of actual writing they required of their employees, if they were managers, or were required of themselves, whether managers or employees. Many of our advisory committee members run farm operations as well as private businesses, some work in government Extension Offices, or in Soil Conservation District Offices, still others do research or run beekeeping operations, while yet others work in fertilizer or grain and feed operations. Our letters, therefore, went out to over 200 people in all major industry areas of agriculture requesting their comments on what they saw as the need for our English courses to incorporate.

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I read and scrutinized all the responses and the actual examples they sent. The result was the revision of one technical writing course and the creation of a second writing course. Students in most technologies have a choice; they may take T113 (Appendix A), our original, revised course, or T114 (Appendix B), our new technical writing course.

I would like to present the two courses today so you can further see how we unified industries' ideas with our technical writing courses. I'd like to begin by describing Technical Writing T113 (Appendix A).

TECHNICAL WRITING

Business letters seemed to be the one constant in every advisory committee members' response, in fact, writing letters seemed to be the major type of writing needed in every area represented. The student, however, must write letters specific to his/her technology, so that a student in the crops curriculum must deal with letters of sales, complaint, inquiry, and so on, as they pertain to crop production. The students are asked to go to their technology coordinator for actual situations if they need suggestions. The time spent on letter writing is comparatively short in this course for although all industries indicated the need for business communications, some stressed other areas as well. The students who will now take this course are in curriculums where advisory people indicated need for some research and many types of reports. The syllabus indicates seven types of reports--the process report, the proposal, the progress report, the research paper, the technical definition, the summary, and the abstract. All these areas are covered in all sections of T113 but all students are not required to do all reports. A student in the Research curriculum, for instance, might be required to write a research paper and a progress report, for those are two types of reports commonly needed in that industry. Students in the animal curriculums might be required to write a process report, a progress report and/or a proposal as those three are needed in their fields. For example, a process report would be used for explaining how an animal is to be vaccinated or how artifical insemination is to be done, a progress report would be used to keep records on a particular animal or project on the farm, and a proposal might well be used to apply for a loan from a bank if an individual is expanding his or her farm operation. The major difficulty involved in this "unification" with industry occurs when our technical writing sections are multi-curriculum classes. This is indeed a more difficult but not impossible task for the instructor. The instructor must deal with students on an individual and small group basis. Appendix C indicates a syllabus used in one of my T113 Technical Writing courses.

BUSINESS COMMUNICATIONS

Our second course, T114 Business Communications (Appendix B), is a direct off-shoot of the advisory committee study. The needs of many of our students would still not be met with our initial course, even as revised. Business communication, an occupational communications course, is set up as a less traditional technical writing course. There is a much greater emphasis on letter writing in this course. Students in the Soil and Water program, for example, if employed by a Soil and Water Conservation District will spend a good deal of time corresponding. The section includes, as you can see, a far more detailed list of types of correspondence-informal as well as formal.

Several advisory committees indicated the need for filling out forms, as evidenced by the material received from the Ohio Grain, Feed and Fertilizer Association, Inc., to name just one. Forms suggested included order blanks and work schedules. Again, as the quarter begins, an instructor has to see what curriculums are represented and then organize for individualized instruction, working with the technical coordinators and collecting materials from industry. The section dealing with meetings arose from the call by some advisory committee members for the need to organize and take part in such organizations as Farm Bureau. Included in this area might be written announcements for meetings.

Still other responses, those from the horse curriculum, floriculture, turf and wood products just to name a few, called for brochure and newsletter publications as well as media ads and news articles. (A syllabus for T114, Winter 1981, is presented in Appendix D).

Most responses stressed the need for communications in general. One gentleman, a farmer, called to express his hope that writing, that speaking, that dealing with employers and employees be a major part of the English program. He was calling, he said, because he had few communciation skills, didn't feel qualified enough to write me a letter and had, indeed, been hampered by the lack of such skills. Such testimony, I might add, is invaluable in motivating students.

The final topic covered in the course is the report. Many advisory committees mentioned the need for progress reports and proposals, though not major research papers, process reports or summaries and abstracts. Horse students, turf students, soil and water curriculum students, to name a few, according to advisory committee responses, indicated the need for progress reports for animal progress or project progress; proposals were indicated as well for drainage construction on golf courses and farm land or for enlarging existing facilities. One report of this nature, then, is incorporated in this course. The two types are discussed and the students, depending on their technology, chose one. Therefore, in a class of 25, there may be two types of reports being written at the same time.

CONCLUSION

William F. Funderbunk, in a paper delivered at the Conference on Technical Writing, 1978 at Southern Illinois University, in Carbondale, said, "Educators can better prepare their students for jobs in industry if they actually seek the advice and counsel of people from industry. Working together, they can study the needs of industry and plan courses and programs that help to meet these needs."

Our two courses are not perfectly divided. Some students who will take T113 will miss out on some material they might need that is covered in T114, and visa versa. But certainly since I undertook the study, I feel ATI has moved forward, as Mr. Funderbunk suggested. With the revision of our original course and the introduction of a new one, we at ATI are better meeting the needs of our students for their future employment in their industries.

APPENDIX A
COURSE DESCRIPTION
COMMUNICATIONS SKILLS T113

I. COURSE ORGANIZATION
   A.   Title: Technical Reporting
   B.   Credit: 3 hours
   C.   Periods Per Week: 3 cl
   D.   Prerequisites: Old T101, New T101 and T102 or T111
                         Not open to students with T103 credit

II. COURSE DESCRIPTION
    Training and practical writing for industry, business, and research with
    emphasis on special requirements and techniques for the technical report.

III. COURSE OBJECTIVES
     The student should be able to:
     1.   demonstrate in writing a working knowledge of the English language;
     2.   demonstrate the ability to write tactful, effective business letters
          in conventional formats;
     3.   graphically represent the information contained in technical reports
          and papers;
     4.   demonstrate a knowledge of how to find information in the library, how
          to pre-write reports, how to evaluate information, and how to present
          information in conventional report formats.

IV. COURSE CONTENT
    A.   Reporting Information
         1.   Importance of communication
         2.   Definition and role of technical writing
         3.   Audience analysis
    B.   Effective Business Communication
         1.   Types of Business Communication
              a.   Letters
              b.   Reports
         2.   Business Letters
              a.   Inquiry
              b.   Claim, Adjustment
              c.   Sales
              d.   Order
    C.   Gathering Information
         1.   Sources
              a.   Library
              b.   Meetings, interviews, etc.
         2.   Notetaking
         3.   Evaluating and organizing information
              a.   Logical analysis
              b.   Outlining

D. Presenting Technical Information
1. Types of reports
   a. Process report
   b. Proposal report
   c. Progress report
   d. Research paper
   e. Definitions/Summaries/Abstracts
2. Techniques of Exposition
   a. Mechanical elements
   b. Stylistic elements
3. Illustrating Technical Reports
   a. Usefulness of visual aids
   b. Occasion for use
   c. Types of visual aids
      1. Charts
      2. Diagrams
      3. Tables

V. SUGGESTED TEXT

Pickett, Nell Ann and Ann Laster, Technical English, 3rd Ed., San Francisco: Harper & Row, 1980.

VI. REFERENCES

Andrews, Deborah C. and Margaret D. Blickle, Technical Writing: Principles & Forms, New York: Macmillan Publishing Co. Inc., 1978.

Dagher, Joseph P., Technical Communication: A Practical Guide, Englewood Cliffs, N.J.: Prentice Hall, Inc., 1978.

Eisenberg, Anne, Reading Technical Books, Englewood Cliffs, N.J.: Prentice Hall, Inc., 1978.

Houp, Kenneth W. and Thomas E. Pearsall, Reporting Technical Information, 3rd Ed., California: Glencoe Press, 1977.

Leonard, Donald J., Shurter's Communication in Business, 4th Ed., New York: McGraw Hill, 1979.

VII. EVALUATION PROCEDURES

Writing Assignments including letters and formal and informal reports = 80%
Exams = 20%

APPENDIX B
COMMUNICATION SKILLS TECHNOLOGY T114
COURSE DESCRIPTION

I. COURSE ORGANIZATION
    A.   Title: Business Communication
    B.   Credits: 3 hours
    C.   Distribution of class time: 3 cl
    D.   Prerequisite: T111 or T101 and T102

II. COURSE DESCRIPTION
Training and practical skills for business writing with an emphasis on specific requirements and techniques for all occupational communications.

III. COURSE OBJECTIVES
The student should be able to:
1. demonstrate in writing and speaking a working knowledge of the English language;
2. demonstrate an ability to research, evaluate, organize and present material for various types of written and oral communications (aside from letters) needed in an occupational setting;
3. effectively write various types of personal and business letters using English and conventional formats;
4. prepare visual materials found in occupational communications.

IV. COURSE CONTENT
    A.   Importance of Occupational Communications
    B.   Effective Occupational Communications for Public Relations
        1.   Usage
        2.   Appearance
        3.   Accuracy
        4.   Efficiency
        5.   Clarity
        6.   Tone
    C.   Business Letter Writing
        1.   Formats
            a.   Parts of a letter
            b.   Layouts
            c.   Envelopes
        2.   Types of Business Letters
            a.   Inquiries/Requests
            b.   Informational
                (1) explanations
                (2) instructions
            c.   Sales letters
            d.   Credit letters
            e.   Collection letters
            f.   Goodwill letters
            g.   Personal letters
            h.   Form letters
            i.   Order letters
            j.   Remittance letters

3.   Informal messages
             a.   Memos
             b.   Forms
             c.   Applications
    D.   Interpersonal Occupational Communications
        1.   Meetings
             a.   Organizing/calling
             b.   Minutes
        2.   Newsletters
        3.   Brochures
        4.   Media ads - news articles
        5.   Telephone Use
        6.   Evaluative Reports
             a.   Employee
             b.   Employer
        7.   Interviews
        8.   Communication among workers
             a.   Upward (supervisors)
             b.   Downward (subordinates)
             c.   Horizontal
    E.   Visuals for Occupational Communications
    F.   Informational Reports
        1.   Progress Report
        2.   Proposal

V. RECOMMENDED TEXT

Akrey, Isabell and Bernadette V. Metzler, Principles and Techniques of
Effective Business Communication: A Text-Workbook, New York: Harcourt
Brace Jovanovich, 1976.

VI. REFERENCES

American Association of Agricultural College Editors, Communications
Handbook, 3rd Edition, Danville, IL: Interstate Printers and Publishers,
Inc., 1976.

Dawe, Jess Amon and William Jackson Lord, Jr., Functional Business
Communication, Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974.

Eggland, Steven and John W. Williams, Human Relations in Business,
Cincinnati: South-Western Publishing Co., 1977.

Leonard, Donald J., Shurter's Communication in Business, New York:
McGraw-Hill, 1979.

LeVel, Dale A., Jr., and William P. Galle, Jr., Business Communications:
Theory & Practice, Dallas: Business Publications, Inc., 1980.

Michullia, Jean H., Let's Talk Business, Cincinnati: South-Western
Publishing Company, 1978.

Robertson, Mary, and W. E. Perkins, Practical Correspondences for Colleges,
4th Ed., Cincinnati: South-Western Publishing Co., 1974.

Wiener, Solomon, Mastering Business Letter Writing, New York: Simon and Schuster, 1978.

Williams, John W., and Steve A. Eggland, Communicating At Work, Cincinnati: South-Western Publishing Co.

Wolf, Morris Philip, Dale F. Keyser and Robert R. Aurner, Effective Communication in Business, 7th Ed., Cincinnati: South-Western Publishing Co., 1979.

VII. EVALUATION

Written Assignments and Classwork = 70%
Exams = 30%

Summer, 1980
Linda Houston
Home Phone: 264-9918
Office: 144B
Office Hours: MWF, 9-10, 12-1
Class Meeting: MWF, 11 a.m., Room 212

Course Description:

This course is designed to help you achieve more confidence in extracting,
evaluating, and synthesizing information; you will need to have a working
knowledge of materials in the library (ATI, OARDC, OSU interlibrary loan
facilities, Wayne County Public Library, the College of Wooster, etc.). The
course is a course in the processes of writing specific types of papers,
many of which you may be called upon to complete for other courses at ATI as
well as in the years to come; the emphasis will be upon clear, concise,
accurate, conventional, appropriate materials on a worthwhile subject of
interest OR technical field as specified in the assignment. Technical writ-
ing is written communication using specific vocabulary (language) for a
specific audience on a particular occasion.

Course Objectives:

To successfully complete the course a student should be able to do the fol-
lowing: 1) show through his/her work an acceptable knowledge of the English
language; 2) demonstrate the ability to write specific types of letters
using conventional style and form; 3) demonstrate an ability to prepare,
research, and write technical reports in a logical, well-thought-out manner;
and 4) show the ability to use and interpret graphic elements in technical
reports.

Texts: Technical English, 3rd Edition, Pickett & Laster, 1980.
         Dictionary (paperback will do)

Materials: Folder(s) for papers
           8½ x 11" non-spiralled paper

Notes:

1.   You are expected to prepare and present your own materials and to acknowl-
     edge your indebtedness to others. Plagiarists (cheaters) face an E grade
     in the course, possible dismissal from the University, and/or a note on the
     permanent record.
2.   As a general rule, exams may not be made up. Arrange to complete work be-
     fore absence. In any event, see the instructor before the next class
     period.
3.   You do not need to type your papers. However, legibility and neatness are
     essential for a passing grade. Please use pen for all major assignments.

4. Attendance is expected. Field trips are excusable, but _you_ are responsible for all work covered in and out of class. A paper will receive a 5 point penalty for _each_ day late; it may not be turned in later than 5 days after its due date.

5. Exams will be based on textbook readings and lecture notes; lectures may cover extra material than what is found in the text; text material will not always be covered in the lecture; thus, you are required to read the textbook.

6. A report may be written simultaneously for this course and for another course, but previously done work is not acceptable.

7. This course (T113, Summer, 1980) has been set up in conjunction with Dr. Borton's Animal Tech 225, Livestock Disease Prevention. If you are not taking that course, another report may be substituted for the research paper.

8. All papers will be collected on the last day of the quarter.

9. This course is set up for lectures and work sessions. There will be many work days for individualized help. I will announce those ahead of time. The important point is to keep the lines of communication open. Ask questions, come to my office, see me in class--but don't assume--check it out!

Grading Scale:

90-100 = A	74-76 = C
87- 89 = B+	70-73 = C-
84- 86 = B	67-69 = D+
80- 83 = B-	60-66 = D
77- 79 = C+	59-below = E

Tentative Grade Weights:

Letters	20%	(200 points)
Definition	10%	(100 points)
Summary	10%	(100 points)
Choose One ⎧ Process/Device ⎨ Progress ⎩ Proposal	20%	(200 points)
Research/Disease	10%	(100 points)
Exams	30%	(300 points)
Total	100%	(1000 points)

Tentative Schedule:

Week	Text	Subject	Assignment
June 23,	Part III	Introduction to Technical Writing	Text - Ch. 9
25,27	Ch. 9	Principles of essay writing	Research disease paper
		Obstacles to good technical writing	
		Factual vs. personal writing	
		Library Orientation	
June 30	Ch. 9	Research paper techniques	Work on research paper,
July 2,4			Due July 11
			Plan Sheet #1 (p. 387)
			Plan Sheet #2 (p. 389)
			Plan Sheet #3 (p. 391)
			Plan Sheet #4 (p. 393)

Week	Text	Subject	Assignment
July 7, 9,11	Ch. 7 Ch. 8	Business Letters Proposals & Progress Reports	Letters – Due July 25 Health plan outline Due August 1
July 21, 23,25	Ch. 3	Definition Catch-up Return Exam	Written definition in class – Due July 23 Letters Due July 25
July 28, 30 Aug. 1	Ch. 11 Ch. 8 Ch. 6	Visuals Reports Summaries	Outline – Health Plan Due August 1
Aug. 4 6,8	Ch. 1 Ch. 2	Process/device papers	Summary in class, Aug. 4 Work on Health Plan
Aug. 11, 13,15	Ch. 1 Ch. 2	Visuals	Work on Health Plan paper Due August 25 Prepare visual for process/device report
Aug. 18, 20,22			EXAM II Work on Health Plan
Aug. 25			Final Paper Due

T114 Business Communication Syllabus
Winter, 1981
Linda Houston
Home Phone: 264-9918
Office: 144B
Office Hours: M-W-F By appointment; T-R 9-12, 1-2:30
Class Meeting: M-W-F 12, room 075

Course Description:

   This course is designed for training in practical skills for business writ-
   ing with emphasis on specific requirements and techniques for all occupa-
   tional communications including letters and memos, business meetings,
   advertising, employee-employer evaluative reports and informational reports.

Course Objectives:
   The student should be able to:
   1.   demonstrate in writing and speaking a working knowledge of the English
        language;
   2.   demonstrate an ability to research, evaluate, organize and present
        material for various types of written and oral communications needed
        in an occupational setting;
   3.   effectively write various types of personal and business letters using
        standard English and conventional format;
   4.   prepare visual materials found in occupational communications.

Text: Principles and Techniques of Effective Business Communication,
         Krey and Retzler Paperback Dictionary

Materials: Folder(s) for papers; Theme paper

Notes:

1.   You are expected to prepare and present your own materials and to acknowl-
     edge your indebtedness to others. Plagiarists (cheaters) face an E grade
     in the course, possible dismissal from the University, and/or a note on the
     permanent record.

2.   As a general rule, exams may not be made up. Arrange to complete work
     before absence. In any event, see the instructor before the next class
     period.

3.   You do not need to type your papers. However, legibility and neatness are
     essential for a passing grade. Please use pen for all major assignments.

4.   Attendance is expected. Field trips are excusable, but you are responsible
     for all work covered in and out of class. A paper will receive a 5 point
     penalty for each day late; it may not be turned in later than 5 days after
     its due date. If you know ahead of time an assignment will be late, see
     the instructor before the due date.

5. Exams will be based on textbook readings and lecture notes; lectures may cover extra material than what is found in the text; text material will not always be covered in the lecture; thus, you are required to read the textbook.

6. A report may be written simultaneously for this course and for another course, but previously done work is not acceptable.

7. All papers will be collected on the last day of the quarter.

8. This course is set up for lectures and work sessions. There will be many work days for individualized help. I will announce those ahead of time. The important point is to keep the lines of communication open. Ask questions, come to my office, see me in class--but don't assume--check it out!!

Grading Scale:

90-100	A	74-76	C
87-89	B+	70-73	C-
84-86	B	67-69	D+
80-83	B-	60-66	D
77-79	C+	59-below	= E

Tentative Grade Weights:

Letters	20%
Newsletter/Brochure/Ad	10%
Employee/Employer Assignment	10%
Report/Proposal	15%
Oral Assignments, Classwork	15%
Exams (Including final)	30%

Tentative Schedule:

Jan. 5	Introduction to Course Purposes of Business Writing Appearance Clarity/Tone Language	Ch. 1, 2, 3, 4
Jan. 12	Letters	Ch. 5, 6, 7, 10, 11, 12, 13
Jan. 19	Letters	Same as above
Jan. 26	Letters Memos (Due Feb. 4) EXAM I - January 30	Ch. 9
Feb. 2	Introduction of Proposal/ Progress Reports (Due Mar. 6) Visuals	Ch. 14

Feb. 9   Meetings
          Telephone Communication
          Interviews

Feb. 16   Newsletters/Brochures/Ads (Due Feb. 27)

Feb. 23   Newsletters
          Brochures
          Ads

Mar. 2   Work on Proposal/Progress
          Employer/Employee
                  Communication – evaluative reports
                  (upward, downward, horizontal)

Mar. 9   Employer/Employee Communications
                  (Due Mar. 11)
          EXAM II – Mar. 9