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## ABSTRACT

Designed for use by technical and vocational education teachers, this monograph describes techniques for combining writing across the curriculum strategies with reading and study skills approaches. The teaching and classroom techniques presented were developed as part of the Writing and Reading in the Technologies (WRIT) project undertaken by a consortium of four community colleges in New York. The seven chapters of the monograph contain a rationale for the individual strategy described, a discussion of the specific techniques involved, charts and lists for implementing the strategy, sample assignments, and a worksheet for use by the reader in applying the strategy to his or her own classroom. Following a brief introduction, chapter I discusses the use of student journals in which students express their personal reactions to the given subject through "expressive" writing. Chapter II discusses the development of other meaningful writing assignments, focussing in particular on the use of "microthemes," or short, focussed essays. Chapter III presents specific techniques for correcting, evaluating, and grading written assignments. Chapter IV provides recommendations to aid instructors in their selection of appropriate and understandable textbooks for their classes. Chapter V provides examples of good syllabi and stresses their importance in student comprehension. Chapter VI provides techniques for encouraging students to take effective notes from lectures and readings. The final chapter stresses the importance of well-constructed exams, and describes techniques for helping students become sophisticated test takers. A 61-item bibliography is included. (JMC)

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# ACTION and REACTION

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## Writing and Reading in the Technologies and other Vocational Curricula

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SECOND EDITION

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# Action and Reaction

## WRITING AND READING IN THE TECHNOLOGIES AND OTHER VOCATIONAL CURRICULA

SECOND EDITION

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A PROJECT TO INCREASE LEARNING THROUGH  
WRITING AND READING WITHIN  
A FOUR-CAMPUS CONSORTIUM  
FUNDED BY THE  
NEW YORK STATE EDUCATION DEPARTMENT  
UNDER THE  
VOCATIONAL EDUCATION ACT, 1982-85

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1986

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# Introduction

Increasingly, college instructors are finding their students passive in the classroom, often in the face of failure. They do not read their textbooks or comprehend what they do read, they do not take adequate course notes, they do not question what they do not understand, they cannot express in writing what they do know: they seem generally to occupy a seat, expecting a miracle to happen.

Faculty have often responded in one of two ways: either they have become discouraged and pessimistic about their students' abilities, or they have become the active partner in the enterprise, writing the lecture notes themselves on the board or as hand-outs, virtually compiling the lab report for the student, and spending countless hours in tutoring.

The thrust of the writing across the curriculum movement is that through writing about what they are learning, students are encouraged to resume an active role in the classroom. The WRIT (Writing and Reading in the Technologies) project, formed by the State of New York Vocational Education Administration on four community college campuses, has combined writing across the curriculum strategies with reading and study skills approaches in order to prod faculty and students into an equally active partnership in the learning enterprise.

Writing encourages students to summarize, analyze, synthesize, and evaluate material: these are the stuff of intellectual endeavor. The writing strategies presented here include the journal, which is termed in the writing profession "expressive" writing because it encourages the writer to express his own personal reactions to the subject. "Expressive" writing is the act of writing closest to the act of learning.

Journal writing is "free" or loose and random writing. Because the ability to present thoughts in a tighter, more structured mode is valued in the classroom and in the workplace, "transactional" writing, or writing to accomplish a specific purpose, is also addressed here. The lab report, the essay exam, the field trip report, the "microtheme," the nursing "care" plan, the research paper, the case study—all are types of transactional writing that the vocational student encounters in college or on the job. How the instructor (or employer) organizes and presents this type of writing assignment is vital to its success.

Evaluating writing need not take an inordinate amount of an instructor's time. Techniques are suggested here, such as holistic evaluation, primary trait scoring, and peer critiquing, that are time-efficient.

Faculty do not always appreciate that textbooks are not perfect—unless they are textbook writers themselves. Often, textbooks are written on too advanced a level for any college student, let alone a community college freshman. Just as often, texts do not include glossaries, definitions, effective layouts or other features that encourage the timid reader. Reviewing the text before selection and previewing it with students at the beginning of the semester will improve the odds that they will more actively grapple with their reading assignments. Finding ways to supplement text deficiencies is also a necessary instructional task.

Finally, students can be helped to take better notes, to make better use of the course outline, and even to perform better on tests and exams. An initial outlay of time and preparation will be an investment in the students' performance that every faculty member should be pleased to make.

The seven chapters in this book are on the journal, the writing assignment, the evaluation of writing, the textbook, the syllabus, note-taking, and the examination. Each chapter begins with a rationale for the strategy, continues with a discussion of the techniques involved, and includes charts and lists for implementing the strategy and a worksheet for use by the reader in applying the strategy to his or her own classroom.

# I

## The Journal: How to Use Writing for Learning

### Rationale

The journal is a most popular writing assignment among both faculty and students. Because a course journal is easy to assign and maintain, faculty have been willing to experiment with this writing-as-learning strategy. Because their experiments have produced immediate results in terms of students' involvement in their learning, faculty have adopted it as a staple of their curriculum. Students respond because writing in a journal is carried out in a nonthreatening environment where it will not be evaluated as a formal writing assignment; it provides a way of expressing questions, doubts, and opinions, and proves of benefit to their performance in class.

### Techniques

"Journal" is a term used to describe brief, regular writing assignments, done in class or at home, often for as little as 3-5 minutes. This writing is seldom graded, but is used rather to motivate students or give them an opportunity to review, reflect, focus attention, or uncover learning problems. For additional details on assigning a journal, see "Journal Strategies . . .," page 8.

For example, a history teacher might (while taking attendance) start a class with a 3-minute journal assignment, "What conditions led to Roosevelt's 'Hundred Days'?" based on the previous night's homework reading. She could then start class discussion by asking several students (perhaps volunteers) to read their journal entries. Although only three may read, all 30 have been writing and thinking.

A teacher of basic electronics might interrupt a lagging discussion by asking everyone to explain (in writing) the functions of a multimeter. Or he might begin the second class on that subject by asking students to review in their journals the first class on the meter.

A secretarial office procedures teacher might end a class (the last 4 or 5 minutes) by asking students to summarize the appropriate procedures for handling the telephone. She might then ask a few students immediately to read their journal entries, or she might wait until the beginning of the next class. Thus she has created a brief review. For other uses of the journal, see list of "Journal Assignments," page 9. For specific journal topics, see "Journal Topics I" and "Journal Topics II," pages 10, 11.

Journals can take on different purposes for different instructors, and for different students: some journals may be reading logs, as students respond to their assigned texts; others may be listening logs as students respond to class notes; still others may generate materials for lab reports and other formal writing assignments; others may contain sizeable chunks of personal material. Probably most journals will contain elements of all four purposes.

Generally, the instructor's response can take various forms: (1) no comment at all; (2) a general comment indicating the journal has been read both for content and as a piece of writing; (3) specific comments on content and form; (4) comments and a grade; (5) comments and an indication that the journal is a requirement for the course but is not to be graded.

Whatever particular use the instructor finds for the journal and whatever response the instructor makes, instructors assigning the journal will find that it shifts students from passive into active learners. The journal is effective because learning is inseparable from reading and writing. In fact, some teachers would say that a student hasn't learned the material if he can't write about it or discuss it.

## **Journal Strategies for the Classroom**

### **▶ Why should journals be used?**

- because learning and articulating are inseparable activities
- because journal writing shifts students from a passive to an active role

### **▶ Who should keep a journal?**

- Your students

### **▶ Where can journals be written?**

- in class, in the lab, at home

### **▶ When can journals be written?**

- at the beginning, middle, or end of class
- at home
- spontaneously

### **▶ How can journals be dealt with?**

- read/not read
- evaluated/not evaluated
- graded/not graded
- shared with classmates or kept private
- merely checked to be sure they've been done

### **▶ What should journals look like?**

- a separate notebook
- a page in the regular class notebook

### **▶ What kind of writing should be done in the journal?**

- free writing (completely without regard for form)
- informal but correct writing
- academic or professional writing

### **▶ What topics can be assigned?**

- free floating or specific
- review of or preparation for lecture, laboratory, or text assignments
- connections between course and previous experience
- personal experience

## Journal Assignments\*

1. *Starting class.*

Introduce a class with a five-minute journal write. Use the journal to bridge the gap between the student's former activity and his present one.

2. *Summarizing.*

End a class with a journal write. This exercise asks students to pull together, in summary fashion, information or ideas they have learned during class.

3. *Focusing.*

Interrupt a class lecture with a journal write. Listening is passive and note-taking often mechanical; even the best students drift into daydreams from time to time. Writing changes the pace of the class; it shifts the learners into a participant role.

4. *Problem-solving.*

Use journals as a vehicle for posing and solving problems.

5. *Homework.*

Assign journal writing for students to do outside of class. Suggest that students respond to questions or ideas that were highlighted in the day's class or ask questions which would prepare them better for the next class.

6. *Progress reports.*

Use journals to monitor student progress through the class.

7. *Class texts.*

Ask students to write to each other, informally, about concerns and questions raised in the class.

\*Excerpted from Toby Fulwiler, ed., *Language Connections*, NCTE, 1982 (see Bibliography)

## Journal Topics I

1. React to class activities—what did you think of a lab, a movie, a test, etc.? Was it valuable?
2. Describe yourself as a science, math, social science, etc. student.
3. Explain new concepts and ideas. How does new information fit in with what you already know?
4. Explain new concepts to another student. Identify various audiences—for example, a younger student, a student who has been absent.
5. Question the significance of what you've learned.
6. Question what you don't understand. Try to get material straight when you are confused.
7. Explain assignments in your own words.
8. Describe what has been said about the subject during class.
9. Explain why assignments are not done on time.
10. Evaluate the teacher and the course content.

From Mayher, John S., Nancy Lester, and Gordon Pradl. *Learning to Write—Writing to Learn*. Montclair, N.J., Boynton/Cook, 1983

## Journal Topics II

### *"Think" Writing for Chemistry*

The writing you'll do in your chemistry log will provide a way for you to think about what you're learning, to question what you don't understand, and to integrate new concepts and ideas with what you already know. This writing will be *thinking on paper*; therefore, don't worry about mechanical correctness or spelling. Deal with ideas and questions instead. "Think" writing means:

1. Summarizing what you've learned.
2. Integrating new ideas with ones you already understand.
3. Questioning the significance of what you learn.
4. Discovering questions about what you know.
5. Discovering questions about what you don't understand.

### *"Think" writing will help you:*

1. Understand new material.
2. Ask relevant questions.
3. Make new knowledge part of you.
4. Retain what you learn.
5. Improve your ability to write in all subjects.

### *When should you write? Write when:*

1. You're confused. (Write to discover what specific points you don't understand.)
2. New concepts are introduced in class.
3. You question the importance of an idea.
4. You're preparing for a test.
5. You're relaxed and in the mood to write.

In the beginning you most likely will have to force yourself to write. Try to write at least three times a week.

(From Mayher, Lester and Pradl. *Writing to Learn Across the Curriculum*.)

### ***Journal Topics for Nursing Students***

Make a journal entry after each clinical experience. Respond to the following questions:

1. What specific instances in your delivery of nursing care today made you feel good about yourself and your performance?
2. What areas of your performance were you unsatisfied with today? How will you rectify these deficiencies?

### ***Journal Topic for Dietetic Students***

Evaluate the patient's diet history with particular regard to the four basic food groups. Discuss the patient's nutritional problems and make recommendations.

## Worksheet on Implementing the Journal in Vocational Classroom

<b>What different uses can I put the journal to in my classroom? (Use those suggested or others you may devise.)</b>	<b>What specific topics can I assign?</b>	<b>What type of response can I give to what my students write?</b>

## II

# Other Writing Strategies: How to Design Meaningful Assignments

### Rationale

Students need to write in virtually all their classes in order to master the complex task of writing well. Writing is a mental exercise that sharpens and clarifies understanding. A good writing assignment calls for analysis, synthesis, and/or evaluation, primary intellectual activities. The more carefully the instructor constructs a writing assignment, the more it will aid thinking and bolster learning. Well-designed writing assignments will make the endeavor easier for both student and teacher.

### Techniques

Productive writing assignments do not appear with the wave of a magic pen. They require careful construction, clear presentation, and consistent integration with the purposes of the course. (For help in planning an effective writing assignment, see "Guidelines and Worksheet for Assigning Writing," page 15. For sample writing assignments, see "Sample Writing Assignments," page 17.)

Instructors must be aware of the different kinds of writing and their purposes. For example, one assignment may ask students to *summarize* (find main idea and key details) material; another may ask them to *explain* (define and illustrate) a principle or idea; a third may ask them to *trace the development* of a phenomenon; a fourth may require students to *describe* (point out the features of) a place or a piece of equipment, or *compare* or *contrast* (find similarities or differences) between two items. Regardless of the specific task, students should be encouraged to synthesize what they are learning with past experience, both in and out of the classroom, if the writing assignment is to fulfill its potential for stimulating learning. See "Questions that Can be Used . . ." (page 18) for sample writing topics.

Instructors should also consider the audience for student writing. While the teacher is usually the only one who evaluates student papers, the writing can be directed to many and varied audiences: another student, some portion of the public, an employer on an imaginary job, a potential customer, etc. Giving the student a clearly defined audience will focus the writing and make it much more interesting for both student and teacher.

To be fair to students, teachers should also indicate format, length, possibilities of revision, and standards of evaluation. The instructor may wish to distribute to students "Commonly Accepted Standards . . ." (page 16), so that students will know the criteria that will be used to evaluate their writing.

## Guidelines and Worksheet for Assigning Writing

1. What are the objectives for this assignment: check familiarity with facts, aid students in discovery of "new" facts, aid students in discovery of relationships, check ability to make relationships, check ability to use classroom skills in new setting?

---
2. What thought process is the assignment teaching— expressing own point of view? informing? persuading?

---
3. What problem does the topic pose for the student to solve? (State the assignment.)

---
4. For whom is the paper written? What are the knowledge, attitudes, biases of that person?

---
5. How clearly is the assignment worded? Revise, if necessary.

---
6. What methods can the student use to generate ideas for the assignment?

---
7. How can the teacher stimulate personal involvement between the student and the assignment?

---
8. What aspects of the assignment can/should be discussed in class?

---
9. When is the assignment due? Is there time for multiple (2) drafts, the first of which will be read by the teacher or by the student's peers?

---
10. How can student models be used?

---
11. What form is required for this assignment? Letter? Essay? Outline? Report?

---

## Commonly Accepted Standards for Clear, Readable Writing\*

- WORDS**
1. Should be accurately used.
  2. Should be direct and precise.
  3. Should follow conventional spelling.

- SENTENCES**
1. Should be clear and direct.
  2. Should follow conventional structure, grammar, and punctuation.

- PARAGRAPHS**
1. Should show unity and coherence in the development of one primary idea.
  2. Should show adequate development.
  3. Should relate directly to preceding and succeeding paragraphs.

- ESSAYS**
1. Should focus on a central idea.
  2. Should develop the central idea adequately.
  3. Should be organized and unified.
  4. Should fulfill the specific assignment.

\*Standards developed by The English Department of Prince George's Community College, Maryland, and described in *English in the Two-Year College*, Vol. XV, No. 1, Fall, 1982.

## Sample Writing Assignments\*

### *From a middle school social studies class:*

On the basis of class discussion of consumer rights and young people's important role as consumers, identify a specific consumer complaint you have and write a letter to the organization against which you have a complaint. Your letter must explain the complaint clearly and reasonably and describe a course of action that would solve the problem you are complaining about.

Read the attached excerpts from a diary in which a soldier in the American Revolution describes the hardships of life in the Continental Army. Using his diaries as evidence, write a letter in which you persuade the Continental Congress to provide benefits to veterans after the war with England is won.

### *From a university anthropology class:*

On the basis of our discussions and readings about communication among non-human primates, explain your answer to this question: Could Washoe (a chimpanzee who had learned some elements of human language) "think" a poem?

\*From *Forum*, Vol. 1, No. 2

### *From a high school chemistry class:*

Assume you have removed the following pieces of chemistry equipment from your lab table. (The list included 20 diverse items such as bunsen burner, asbestos gauze, evaporating dish.) You have three drawers in your lab table and each piece of equipment must be logically placed in one of the three drawers. Label the drawers and write a one-page paper in which you describe your system for storing the equipment, and persuade your classmates that your system is efficient and logical.

Explain by means of analogy or model system any topic in chemistry we have discussed this year. Your audience will be students who are taking the course next year and who are having trouble understanding the topic you are explaining. Your paper (if good) will be retained in the teacher's file and used as supplementary material for those students who are confused about a given concept.

Attend a religious ritual and analyze it (following procedures discussed in class) as a symbolic statement of essential characteristics of the social groups involved.

*The Age of Innocence* and *Tom Sawyer* deal at great length with the theme of socialization in American life of the nineteenth century. Using an analytic approach demonstrated in class, analyze a character of your choice from each novel as he or she reaches a "compromise" with society.

**Questions that Can be Used in  
Phrasing Writing Assignments for the Lab Report  
and for Other Writing Assignments**

***Questions Calling for Analysis***

1. Define what is meant by the term . . . ? (*Definition*)
2. What process is involved in . . . ? (*Process Analysis*)
3. Compare X with Y. (*Comparison/Contrast*)
4. Why is X used rather than Y? (*Comparison/Contrast*)
5. What analogy can you draw about the lab? (*Comparison/Contrast*)
6. What is the effect of . . . ? (*Cause/Effect*)
7. What are the sources of error? (*Cause/Effect*)
8. Why is this result obtained? (*Cause/Effect*)
9. What happens to . . . ? (*Cause/Effect*)
10. Do your results confirm . . . ? Explain. (*Reasons why*)
11. Does your data confirm . . . ? Explain. (*Reasons why*)
12. Why must this procedure be followed? (*Reasons why*)
13. Why is this referred to as . . . ? (*Reasons why*)

***Questions Calling for Synthesis***

14. Identify the problem and devise a solution. (*Problem/Solution*)
15. What conclusions can you draw? (*Generalization*)
16. Can you relate this lab to any theory raised in class? (*Generalization*)
17. What is the purpose of . . . ? (*Generalization*)

***Evaluation***

18. Evaluate the data. (*Evaluation*)

## Assigning the Microtheme

### *What is a microtheme?*

"The microtheme, a short, highly structured essay, can be graded fairly easily . . . Microthemes support instruction in any discipline. They require students to figure out in writing a problem posed by the instructor. The problem is designed to assess students' ability to apply a fundamental concept or to use a particular cognitive skill, such as drawing conclusions from data. Students write their responses on a 5 x 8 index card . . . While you're not after mechanics or spelling here, there is a premium on clarity and brevity, challenging students to think clearly."\*

\*From Joanne Kurfiss. "Do Students Really Learn from Writing?" *Writing Across the Curriculum*, III, 1 (December 1985), 3.

## **Microtheme Applications and Topics\***

### ***The Summary-Writing Microtheme***

#### *Description:*

Asks a student to summarize a reading assignment

#### *General Goals:*

For students to comprehend readings

For students to synthesize information

#### *Sample topics: All disciplines*

Summarize article "X"

Put the main ideas of article "X" into your own words

Explain writer X's position regarding . . .

### ***The Thesis-Support Microtheme***

#### *Description:*

Asks student to argue for or against a particular theory or issue

#### *General Goals:*

For students to comprehend readings (if a course reading is a part of the microtheme topic)

For students to analyze information (in forming an opinion)

For students to synthesize information (in forming an opinion)

For students to evaluate a position (if alternative arguments are possible)

#### *Sample Topics: All disciplines*

Explain why you agree or disagree with statement "X"

Statement "X" (is/is not) true (where both positions might be argued)

\*For a complete analysis of microtheme strategies and for the text from which this schema is derived, see Bean, John C. et al. "Microtheme Strategies for Developing Cognitive Skills." In *New Directions for Teaching and Learning: Teaching Writing in All Disciplines*, No. 12, C. W. Griffin, ed., pp. 27-38. San Francisco, Jossey-Bass, December 1982.

Bean's article also contains specific microtheme assignments that might serve as models for all disciplines.

***The Data-Provided Microtheme***

***Description:***

Asks a student to make inferences from data

***General Goals:***

For students to understand principles of data and analysis

For students to analyze data

For students to apply principles of data and analysis

For students to synthesize information (parts from whole)

For students to evaluate data (where data must support a given hypothesis)

***Sample Topics: Primarily Biology, Nursing, Business,***

***Electrical and Computer Technology***

Given the following data, how is hypothesis "X" confirmed or rejected?

What hypothesis regarding event "X" might be formulated from an analysis of the following data?

Here is data recorded immediately before and after event "X."

From your examination of the data, discuss event "X."

### ***The Quandary-Posing Microtheme***

#### ***Description:***

Asks students to apply abstract thinking and to develop logic

#### ***General Goals:***

For students to apply knowledge

For students to analyze information

For students to synthesize information

For students to evaluate information

In view of the above goals: For students to think creatively about hypothetical situations and to propose carefully thought out solutions for new problems.

#### ***Sample Topics: All disciplines***

What would happen if . . .

What conditions would be needed for "X" to occur?

## **A Step by-Step Procedure for Assigning the Microtheme**

1. Determine three major goals for your course—that is, concepts or procedures that you want students to learn during the semester.
2. Create a microtheme topic for each goal. Rather than merely testing what students have learned, as in an essay exam, devise imaginative topics that will elicit new learning as well, drawing on students' own experience in doing so. Writing a microtheme should be an enjoyable experience because the student is not only learning but also getting pleasure out of doing so. (Refer to the article by Bean et al. "Microtheme Strategies for Developing Cognitive Skills" where types of microtheme topics are presented.)

### *Example 1 (quandary-posing microtheme):*

The following dilemma was written to Dear Abby:

Dear Abby,

My wife and I have been under great stress which I fear may lead to divorce. Our problem is this: On September 12 my wife gave birth to a 7 lb., 8 oz. boy. His blood type is O-positive. My blood type is A-negative, and my wife's blood type is B-positive. I was never a good science student and would like to know if I could be the father. Please ask your experts and let me know as soon as possible.

Confused

Your task is to write an answer to Confused about the genetics of the ABO blood groups and RH factor. Using all combinations possible, explain whether he could be the biological father of the O-positive baby.

### *Example 2 (thesis-support microtheme):*

Prove to a nonbeliever that a voltage can exist across an open circuit.

### *Example 3 (quandary-posing microtheme):*

Two math students are walking in the countryside and are admiring a mountain in the distance. Tom says it looks like a parabola, whereas Susan says it looks like a semi-circle. The two continue to debate until a heated argument results. If you were to meet them, how would you settle their argument through observations of the mountain?

3. Assign the microtheme topic far enough in advance so that students have sufficient time to generate ideas for writing about it. In order to help students focus, you might give study questions to send students back to their notes for answers. In their journal entries, students should ask themselves what they know about, feel about, or what experience they have had with all aspects of the microtheme subject.
4. Assign several microthemes each semester so that students have a chance to practice and also improve, either on their own initiative or through help in the Writing Center.

## Microtheme Topics for General Biology I

### *Goal 1:*

To understand the laboratory on the microscope and cells.

### *Microtheme Topic:*

Using your laboratory observations as support, what is the structural and functional unit of life?

### *Topics for study and/or writing about in the journal:*

Describe (record) in your laboratory notebook your microscopic observation of various types of cells that will be seen in lab today. Make a chart as shown below or invent your own method of recording observations.

Animal cells	Plant cells
1. Amoeba -	1. Elodea -
2. Paramecium -	2. Onion epidermis -
3. Cheek cell -	

### *Goal 2:*

To understand the laboratory on the enzyme catalase.

### *Microtheme Topic (data-supplied microtheme):*

Your assignment is two-fold:

1. Using the data supplied, graph the results of the three different experiments using a different symbol for each. Provide the reader with a key and calculate the rate for each trial.
2. Write a paragraph discussing the experimental results. Include answers to the following questions: What conclusions can you make about pH and enzyme activity? Why does pH have an effect on enzyme activity? What is the optimum pH of this enzyme? Where would you expect this enzyme to function in your body?

### *Topics for study and/or writing about in the journal:*

Record the cc's of O<sub>2</sub> produced by the enzyme catalase with three different pH levels. Use the tables in your laboratory manual for recording the data.

**Goal 3:**

To understand the lecture on blood types.

**Microtheme Topic (quandary-posing):**

Dear Abby,

My wife and I have been under great stress which I fear may lead to divorce. Our problem is this: on September 12, my wife gave birth to a 7 lb., 8 oz. boy. His blood type is O-positive. My blood type is A-negative, and my wife's blood type is B-positive. I was never a good science student and would like to know if I could be the father? Please ask your experts, and let me know as soon as possible.

Confused

Your task is to write an answer to Confused about the genetics of the ABO blood groups and RH factor. Using all combinations possible, explain whether he could be the biological father of the O-positive baby.

*Topics for study and/or writing about in the journal:*

*Can two people with type A blood have a baby with O blood type?*

*Can two people with type O blood have a baby with A blood type?*

*Can two people with type B blood have a baby with O blood type?*

## **Microtheme Topic for Microbiology**

### *Goal:*

That students make the connection between the idea of sexual conjugation and the passing along of resistance factor—the Gram negative organism.

### *Microtheme Topic:*

Gram negative (G-) bacteria present the greatest problem today in nosocomial infections (infections acquired in the hospital). How would you explain this?

### *Topics for study and/or thinking about in the journal:*

1. Many G- bacteria live in the intestine.
2. A number of G- bacteria are capable of causing disease.
3. Antibiotic resistant bacteria are believed to have been selected for survival as a result of overprescription of antibiotics by physicians and the use of antibiotics in farm animals.
4. Gram- bacteria have the ability to transfer antibiotic resistance among themselves via conjugation.

## **Microtheme Topics for Business Organization and Management**

### *Goal 1:*

To compare and contrast the American and Soviet economic systems

### *Microtheme Topic:*

In what ways do you think you would be better off living under the economic system of the Soviet Union?

### *Topics for study and/or writing about in the journal:*

Is there free enterprise economics in the Soviet Union?

Do "poor" people exist in the Soviet Union?

### *Goal 2:*

To understand Maslow's "Hierarchy of Needs"

### *Microtheme Topic:*

Describe the factors that would help you achieve "self-actualization" according to Maslow.

### *Topics for study and/or writing about in the journal:*

List the needs in Maslow's "Hierarchy of Needs"

Should managers be required to study Maslow? Why or why not?

### *Goal 3:*

To understand the effect of labor unions

### *Microtheme Topic:*

What effect do labor unions have on the price of products?

### *Topics for study and/or writing about in the journal:*

Do labor unions encourage productivity? Explain.

What effect does a strike have on the quality of a product?

Do labor unions provide incentives for their members? Explain.

## **Microtheme Topics for Statistics**

### *Goal 1:*

To enable students to understand the concept of central tendency

### *Microtheme Topic:*

Why might the mean be a poor measure of central tendency?

### *Topics for study and/or writing about in the journal:*

Explain when a manager might use measures of central tendency to solve problems that arise in the workplace.

Explain the median and show how it is estimated for grouped data.

### *Goal 2:*

To understand and apply the "t" test

### *Microtheme Topic:*

Under what circumstances might a difference be no difference at all?

### *Topics for study and/or writing about in the journal:*

Explain the "t" test and show how it is used.

### *Goal 3:*

To understand the relationship between variables

### *Microtheme Topic:*

How can secondary data be used to predict future business activity?

### *Topics for study and/or writing about in the journal:*

Explain the difference between a dependent and an independent variable.

Define correlation.

Explain the equation for linear regression:  $y = a + bx$ .

## **Microtheme Topics for Electric Circuit Analysis I**

### *Goal 1:*

To learn and understand Ohm's Law

### *Microtheme Topic:*

Given several sets of data, discuss the relationship among them (data follow).

### *Topics for study and/or writing about in the journal:*

What is voltage?

What is current?

What is resistance?

Describe how one would experimentally obtain data to illustrate Ohm's Law.

Describe the graphical representation of Ohm's Law.

### *Goal 2:*

To learn and understand Kirchhoff's Voltage Law

### *Microtheme Topic:*

Prove to a nonbeliever that a voltage can exist across an open circuit. (Hint: Use Kirchhoff's Voltage Law)

### *Topics for study and/or writing about in the journal:*

Current direction

Voltage polarity

Ohm's Law

Concept of a path in a circuit

Kirchhoff's Voltage Law

### *Goal 3:*

To learn and understand maximum power transfer.

### *Microtheme Topic:*

Explain the effect that load size has on the power that can be transmitted to a load.

### *Topics for study and/or writing about in the journal:*

Source conversions

Thevenin's Theorem

Norton's Theorem

Source resistance

Calculation of maximum power (including a plot of power vs. load)

### Three Microthemes for Technical Mathematics A

Three general goals for Math A might be:

1. To be able to recognize the math principles "behind" the technical symbolism and in the "verbal problems" (applications).
2. To be able to recognize types of functions from their basic characteristics, graphs, and equations.
3. To be able to summarize the purpose and main ideas of a given topic.

The three microthemes below and their supporting journal entries were designed on the basis of the above three goals. The journal assignments should help the student gather and organize information to write the microtheme.

#### *Microtheme I (Quandary-Posing):*

Congratulations! You just won the Superduper Lottery! You have a choice of Prize A or Prize B. Prize A is  $\frac{1}{2}$  million dollars a day for 30 days and you collect your total prize at the end of 30 days. Prize B starts out with 2 cents the first day, 4 cents the second day, 8 cents the third day, 16 cents the fourth day, and so on for 30 days. At the end of 30 days you collect the sum total of the 30 days' earnings. Which prize would you choose and why?

#### *Some Supporting Journal Assignments*

1. Provide a list of function values for  $y = 2^x$  for say  $-10 < x < 10$ . *Journal Question:* Describe any pattern you might see in this list.
2. Show the graph of  $y = 2^x$ . *Journal Question:* What does the graph tell you about the function?
- 3-4. Ask the same questions as in 1-2 above for the function  $y = 2x$ .
5. Describe how the graphs in 2 and 4 are different. similar.
6. How does your answer to question 5 help to explain the differences between the two functions  $y = 2^x$  and  $y = 2x$ ?

#### *Microtheme II (Thesis-Support and/or Data-Provided):*

Niagara Falls has frozen over and you want to see for yourself. You hop into your 450 mph jet with your best friend to fly directly to the Falls, which is about 450 miles and  $10^\circ$  NW of NYC. There is a 125 mph wind from the east. Explain to your friend that you are not really heading east to go west! [This is almost a fantasy (the Falls did freeze at least once in recent memory) so the numbers don't have to be the real values?!]

*Some Supporting Journal Entries*

1. Describe two mathematical characteristics of a velocity.
2. Describe a way to represent geometrically a velocity's characteristics described in 1 above.
3. Describe how two velocity vectors may be added geometrically.
4. Explain what the result of adding two velocity vectors means.

*Microtheme III (Summary-Writing):*

Give three possible results you might get when solving a simultaneous system of two linear equations by determinants. Explain how you would interpret these results both algebraically and geometrically.

*Some Possible Supporting Journal Entries*

1. Exhibit the solution (unique) of a system of equations and ask students to explain how they can tell the solution is unique.
2. Repeat 1 above for a no solution example.
3. Repeat 1 above for an infinite solution.
- 4-6. Ask students what would happen if they graphed the system of equations in 1-3 above.

## **Goals, Microthemes, and Journal Entry Topics for Human Growth and Development**

### *Goals:*

The following are selected possible goals for a Human Growth and Development course.

### *Microthemes:*

These are examples of the "thesis-support microtheme: the problem of focused argumentation."

### *Journal Topics:*

Each entry is designed to help support a position and organize the writing of the microtheme.

### *Goal 1:*

To determine the advantages and disadvantages of various research techniques in developmental psychology.

### *Microtheme:*

An experiment (is/is not) a better research design than an observation for collecting data with children.

### *Journal Entry Topics:*

1. Compare cross-sectional and longitudinal research designs.
2. Describe the "clinical method" of data collection.
3. What are some problems with "objective observation?"
4. Why is it important to take "extraneous variables" into account?
5. What are the disadvantages of collecting data by "introspective techniques?"

### *Goal 2:*

To be able to compare social-learning theory with cognitive-developmental theory.

### *Microtheme:*

Piaget's emphasis on equilibration (is/is not) more effective than Skinner's reliance on reinforcement.

### *Journal Entry Topics:*

1. How does Piaget define the term "equilibration?"
2. Why is it important to have a good "cognitive match?"
3. What is a "structural theory?"
4. Explain "learning-through-external-reinforcement."
5. Explain "equilibration-through-internal-cognitive-conflict."

*Goal 3:*

To comprehend the interaction of heredity and environment in psychological development.

*Microtheme:*

Heredity (is/is not) a more important influence than environment on the development of intelligence.

*Journal Entry Topics:*

1. How would you define intelligence?
2. How do psychologists define intelligence?
3. What happens to your intelligence as you grow older?
4. Why do psychologists find IQ differences in males and females?
5. What are some of the factors that help IQ scores go up?

## **Worksheet On Assigning the Microtheme**

### ***Microtheme 1:***

List one major goal for your course:

Devise a microtheme topic for this goal. (State the topic as specifically and clearly as possible. While writing a microtheme is an exercise in compression, the student should not be presented with a topic that is too broad or that is vague.)

What aspects of the topic might you suggest to the student for study or for journal rumination?

### ***Microtheme 2:***

Suggest a second major goal for your course:

Devise a microtheme topic for this goal:

What aspects of the subject should the student study or contemplate in his or her journal?

### ***Microtheme 3:***

Suggest a third major goal for your course:

Devise a microtheme topic for this goal:

What aspects of this subject should students study or write about in their journals?

# III

## Evaluation of Writing: How to Respond to Student Writing

### Rationale

Instructors all agree that students should be writing more, but they also dread grading the rambling, incoherent, badly spelled essays that too many students submit. Writing assignments will be easier to handle if instructors use holistic reading and grading techniques that permit them to read papers rapidly and assign grades according to previously established standards set by the teacher and shared with students.

### Techniques for Holistic Grading

Planning the process the first time is the hardest part. Instructors may wish to use some of our material in this chapter to shorten the task. Basically, effective holistic grading involves five steps:

1. Initially, an evaluation scale must be created. This is the time-consuming aspect of the process but the time spent is a good investment in time-saving evaluations in the future.

The instructor may develop the scale working alone or with colleagues. The scale may be created in one of two ways: describing from memory the characteristics of papers receiving each grade to be assigned or dividing an actual set of papers into piles according to grades to be assigned and describing the features of each pile (grade).

Examples of evaluation scales are the "Evaluation Scale for the CUNY Writing Skills Assessment Test," which is the most widely-used scale for placement of college freshmen into writing courses (page 38), and the "Writing Evaluation Scale" (page 40), which is a four-point variation developed specifically for technology students.

2. The scale should be shared with students either at the beginning of the semester or each time a writing assignment is due.
3. Each time a set of papers is to be evaluated, the instructor should review the scale. Faculty may also find it useful to maintain a file of papers that appear to clearly represent writing typical of each grade on the scale. If several faculty in a department agree that these papers are models, then the department can achieve uniform standards. These papers may also be distributed to students as examples.

4. Once the scale is read and model "rangefinder" essays reviewed, the papers can then be evaluated holistically; i.e., each paper should be read rapidly and completely for an impression of its level on the scale. The corresponding grade is then assigned. If evaluation is done by several faculty, each paper should be read twice. Where both readers agree, the grade is conclusive; where there is disagreement, a third reader will settle the matter. Agreement between two readers is usually considerable, however, and this rate of agreement has contributed to the success of the approach.

5. Follow-through with students may take the following paths:

When students receive their graded papers, they will know why they have received their grades since they have a copy of the evaluation scale.

Unsatisfactory papers can be handled in several ways:

- a. The student receives a failing or near-failing grade.
- b. The student receives a failing grade but is asked to rewrite the paper for a possibly higher grade if her writing improves.
- c. The student receives no grade and is required to rewrite and resubmit.

The instructor may also wish to suggest or require rewriting of satisfactory papers, perhaps for higher grades.

Instructors will be delighted at how quickly grading can be done once the holistic pattern is developed.

### **Primary Trait Scoring**

Another effective evaluating procedure is Primary Trait Scoring. Primary Trait Scoring asks readers to determine whether a piece of writing has certain characteristics (that is, "primary traits") essential to a given assignment. Although this method takes a little more time than holistic grading, it directs itself to factors that are crucial to the success of a given writing task and thus focuses students' attention immediately on areas for improvement. The virtue of this method, especially for technology classes, is that it is a task- and discipline-specific procedure.

First, the instructor identifies for the students the essential elements of a particular writing task. For example, in an argument paper, the instructor may note: "a position must be taken and defended with three elaborated examples." The teacher then designs, or designs along with the students, a scale which assigns numerical values to poor/fair/good strategies for achieving the desired product. The scale encourages very detailed consideration of a particular writing problem. The scale, too, can provide direction for revision. (See "Sample Position Paper" for further details.) Once this scale is es-

tablished for each characteristic, complex issues can be graded rapidly, as is done in holistic grading for the entire paper. Also, the number of points earned on the scale can be correlated with a letter grade. (See "Sample Position Paper for Nursing Ethics Course," page 45.)

The disadvantages of this evaluation system are that it takes time, initially, to establish the scale; it can be impersonal if not combined with comments; it can be overly narrow in its "primary" concerns and ignore other skills that are badly mishandled or fail to reward other characteristics that are successfully treated.

### **Four Techniques for Helping Students Improve Their Writing**

How can faculty across the curriculum help to ensure that revisions that students do in fact give evidence of better writing? How can students improve from assignment to assignment? The following approaches have proven useful:

1. **Peer Evaluation.** Students can be astute judges of each other's writing! Peer evaluation can be used before the instructor reads the paper or after if the paper needs revision.

The instructor should first develop a brief list of questions that students can answer as they read each other's papers. (See "Peer Evaluation Guides 1 and 2" for sample questions, pages 41-42.) Then, the class should be divided into small groups of from 3-5 members. Group members take turns reading their papers aloud, or simply pass their papers among themselves. Writers will thus become the readers of other students' writing, answering the questions as they read. The writers then gather the answers and use them as a guide to rewriting.

2. **Quick Reading.** A second method of improving student writing is to read the students' papers quickly before they revise. If there are problems of focus, coherence, or development, the instructor can make a comment to that effect (see "Quick Reading," page 43).
3. **Three-level Response.** Every paper that receives a grade should include praise for what the student does well, an indication of the problems the paper has, and suggestions for improvement. (For a detailed explanation of this technique, see "Three-Level Response," page 43.)
4. **Writing Center and Other Support Services.** Failing writers can be sent to the Writing Center, to their English teachers, or to a more successful student for help. The key factor in improving student writing is faculty concern. If writing matters to the instructor, it will soon matter to his students.

**The City University of New York  
Freshman Skills Assessment Program**

**Writing Skills Assessment Test Evaluation Scale**  
(refined 1983)

*(These students are ready for regular freshman English, according to CUNY standards.)*

- 6 The essay provides a well-organized response to the topic and maintains a central focus. The ideas are expressed in appropriate language. A sense of pattern of development is present from beginning to end. The writer supports assertions with explanation or illustration, and the vocabulary is well suited to the context. Sentences reflect a command of syntax within the ordinary range of standard written English. Grammar, punctuation, and spelling are almost always correct.
- 5 The essay provides an organized response to the topic. The ideas are expressed in clear language most of the time. The writer develops ideas and generally signals relationships within and between paragraphs. The writer uses vocabulary that is appropriate for the essay topic and avoids oversimplifications or distortions. Sentences generally are correct grammatically, although some errors may be present when sentence structure is particularly complex. With few exceptions, grammar, punctuation, and spelling are correct.
- 4 The essay shows a basic understanding of the demands of essay organization, although there might be occasional digressions. The development of ideas is sometimes incomplete or rudimentary, but a basic logical structure can be discerned. Vocabulary generally is appropriate for the essay topic but at times is oversimplified. Sentences reflect a sufficient command of standard written English to ensure reasonable clarity of expression. Common forms of agreement and grammatical inflection are usually, although not always, correct. The writer generally demonstrates through punctuation an understanding of the boundaries of the sentence. The writer spells common words, except perhaps so-called "demons," with a reasonable degree of accuracy.

*(These students need remediation, according to CUNY standards.)*

- 3 The essay provides a response to the topic but generally has no overall pattern of organization. Ideas are often repeated or undeveloped, although occasionally a paragraph within the essay does have some structure. The writer uses informal language occasionally and records conversational speech when appropriate written prose is needed. Vocabulary often is limited. The writer generally does not signal relationships within and between paragraphs. Syntax is often rudimentary and lacking in variety. The essay has recurrent grammatical problems, or because of an extremely narrow range of syntactical choices, only occasional grammatical problems appear. The writer does not demonstrate a firm understanding of the boundaries of the sentence. The writer occasionally misspells common words of the language.
- 2 The essay begins with a response to the topic but does not develop that response. Ideas are repeated frequently, or are presented randomly, or both. The writer uses informal language frequently and does little more than record conversational speech. Words are often misused, and vocabulary is limited. Syntax is often tangled and is not sufficiently stable to ensure reasonable clarity of expression. Errors in grammar, punctuation, and spelling occur often.
- 1 The essay suffers from general incoherence and has no discernible pattern of organization. It displays a high frequency of error in the regular features of standard written English. Lapses in punctuation, spelling, and grammar often frustrate the reader. *Or*, the essay is so brief that any reasonably accurate judgment of the writer's competence is impossible.

## Writing Evaluation Scale

### *Acceptable*

#### 4 *Excellent*

The answer provides a well-organized response to the question. The ideas are expressed in appropriate, specific language. The writer clearly takes a position and supports it with explanations or illustrations, and the vocabulary is well suited to the context. The writer uses complex sentence structure rather than repetitious, simple sentences. Grammar, punctuation, and spelling are almost always correct.

#### 3 *Competent*

The answer shows a basic understanding of the question. The ideas are generally expressed in clear and appropriate language. The writer clearly takes a position, but does not provide thorough support. The vocabulary is usually well suited to the context. With few exceptions, the writer uses simple sentences. Grammar, punctuation, and spelling are generally correct.

### *Unacceptable:*

2 The answer provides a response but lacks sufficient support, or no single appropriate answer is given. The writer uses generally inappropriate and vague language. The writer generally uses simple sentences and occasionally fails to follow standard English sentence structure. The writer often makes errors in grammar, punctuation, and spelling.

1 The answer suffers from a general incoherence and does not respond appropriately to the question. The writer uses vague, inappropriate language. The writer does not use standard English sentence structure and makes frequent errors in grammar, punctuation, and spelling. Or, the answer is too brief to demonstrate the writer's understanding of the topic.

## Peer Evaluation Guide 1

Writer \_\_\_\_\_

Reader \_\_\_\_\_

## Audience Response Guide

1. What do you think the writer wanted to say in this paper? What is his or her purpose in writing? What does he or she want the paper to mean?
2. How does the paper affect the reader for whom it was intended?
3. How effective has the writer been in conveying his or her purpose and meaning? What are the strengths of the paper? What are the weaknesses?
4. How should the paper be revised to better fulfill its purpose and meaning?

Taken from Linda Stanley, David Shmkin, Allen Lanner. *Ways to Writing: Purpose, Task, and Process*. New York: Macmillan. 1985.

## Peer Evaluation Guide 2

Please put a straight line alongside passages and underneath phrases that you like or that work for *you* as a reader; and a wiggly line alongside and underneath phrases that annoy or don't work for you.

Please write a brief comment here about the one matter that most affected your reading.

For the *intended audience*, which section(s) or aspect(s) of this piece do you think will work or be most successful? Why?

What do you think will fail or backfire on the intended audience? Why?

Here are some aspects of my writing that I especially want feedback on:

	<i>strong</i>	<i>adequate</i>	<i>weak</i>
● paragraphing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● convincing argument	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● convincing evidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● liveliness of language or humanness of tone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
● punctuation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is the quickest simplest change I could make that would create the biggest improvement?

What one thing do you think I should try to work on or think about in my next piece of writing?

Taken from Peter Elbow. *Writing With Power*. New York: Oxford, 1981.

## **Quick Reading**

*(A Third Method of Evaluation That is Not Time-Consuming)*

If instructors are reading drafts of essays that students can revise, they may wish to do a quick preliminary reading:

1. Read the first and last paragraph of the essay. Are they related? Does the focus change?
2. Read the first sentence of each paragraph. Do these sentences seem to relate to the topic and focus?
3. Look at the length of paragraphs. A series of brief, sketchy paragraphs may indicate that points are not sufficiently developed.

If this quick reading raises questions about the focus, coherence, or extent of development of an essay, the teacher might make a few written or oral comments to students and return the essays for further revision.

Taken from Karen LeFevre and Mary Jane Dickerson *Until I See What I Say: Teaching Writing in all Disciplines*. Burlington, VT: IDC Pub., 1981

## **Three-Level Response**

*(To Be Used With or as an Alternative to Holistic Evaluation)*

1. *Praise the student for what s/he does well.* Give positive feedback on specific features in the writing and/or summarize it.

*Example:*

Jack, you do well to begin with a clear statement of the purpose of the article. Next, you seem to outline first the *choices* for each experiment and then the results of each.

*Example:*

I like your preview sentence.

*Example:*

It appears that there are 3 main factors that you want to discuss (size, activity, weight) and then want to compare. Am I correct?

2. *Identify the problems in the writing.*

*Example:*

But the whole section is not clear as I read it:

1. What is . . .
2. Do you mean . . .
3. Why did he say . . .

*Example:*

What's at stake? What possible combinations could or could not have resulted?

*Example:*

Watch your spelling, misused word, etc.

1. aparent, p. 2.
2. herein, p. 1.

*Example:*

Watch your grammar—"If one of the . . . were" (p. 3).

*Example:*

Your final sentence rightly presents the results and their significance, but it is clumsy because too many words separate subject from verb.

3. *Offer specific remedies or suggestions for improvement.*

*Example:*

Can you explain this article using your own words, not the book's?

*Example: Suggestions:*

a. Stick rigidly to a plan that gives *choices* for each experiment, then *results* for each as you do now

*or*

treat all info on exp. 1 together, then all on exp. 2, then exp. 3. Choose whichever you think would be clearer to the reader.

b. For each exp., give all essential information. Ask yourself, "What does the reader need to know? And when?" For example, one of my questions was, "In exp. 1 and 2, were both live prey equally active?"

Taken from Barbara E. Fassler Walvoord *Helping Students Write Well: A Guide for Teachers in All Disciplines* New York: MLA, 1982

## Sample Position Paper for Nursing Ethics Course

### *Directions:*

Some people believe that all unwed mothers should be given information and advice on birth control. Others do not. Take ONE side of the issue. Write an essay in which you state your position and defend it.

### *Discourse aim:*

Explanatory and persuasive writing in which the writer takes a position, elaborates upon his/her reasons, and employs persuasive appeals, both advancing and refuting.

### **Primary Trait Scoring Guide:**

#### *Position and Reasons*

- 0 No response.
- 1 Does not take a clear position, or takes a position but gives no reasons.  
Position given, then abandoned.  
Position confused, or not defined at all.  
Position given, no reasons for it.  
*Note:* Taking a "middle of the road" position is acceptable.
- 2 Takes a position and gives one unelaborated reason.
- 3 Takes a position and gives one elaborated reason, one elaborated plus one unelaborated reason, or two or three unelaborated reasons.
- 4 Takes a position and gives two or more elaborated reasons, one elaborated plus two or more unelaborated reasons, or four or more unelaborated reasons.

#### *Appeals*

##### *Conventional Wisdom*

- 0 Does not contain this type of appeal.
- 1 Contains this type of appeal: "Everyone knows a woman was created to have children."

##### *Personal Experience*

- 0 Does not contain this type of appeal.
- 1 Contains this type of appeal: "I have known of unwed teenagers who have had multiple pregnancies and are having difficulty managing."

### *Authority*

- 0 Does not contain this type of appeal.
- 1 Contains this type of appeal: "The bible implies birth control is unnatural."

### *Analogy or Figurative Language*

- 0 Does not contain this type of appeal.
- 1 Contains this type of appeal: "Such advice should never be given because it would be like big brother dictating the way people should live and love."

### *History*

- 0 Does not contain this type of appeal.
- 1 Contains this type of appeal: "History has shown that children of unwed mothers are scorned by society. Even Lord Byron had his problems."

### *Legal Rights*

- 0 Does not contain this type of appeal.
- 1 Contains this type of appeal: "Each human being has the right to do what he or she wants to do."

### *Purpose of Appeals*

- 0 No appeals given.
- 1 Appeals advanced in own cause.
- 2 Appeals to refute opposing position.
- 3 Appeals both advancing and refuting.

Scoring guide developed by Richard Lloyd-Jones et al National Assessment of Educational Progress (NAEP), 1974, with adaptations

# IV

## The Textbook: How to Choose and Supplement a Text

### Rationale

One of the most frequently heard faculty complaints is that today's students do not (or cannot) read their textbooks. Although it is true that many students do have severe reading problems, often students' reluctance to read textbooks may be attributed to two other factors. One of these factors may be the choice of an inappropriate or difficult textbook. The second problem is that students may need help in learning that the approach to reading a textbook should be different from reading recreational material. Therefore, faculty often need not only to carefully evaluate textbooks before making a selection but also to realize that even the best textbook will require previewing with the students and supplementary materials as well.

### Techniques

To choose the most appropriate textbook, a careful evaluation of possible choices should be conducted both through subjective and objective techniques. The subjective technique involves comparison and contrast of the basic features of the textbook, such as chapter introductions; presentation of vocabulary and definitions; visual presentation of the material; clarity of print and diagrams; end matter in chapters, such as summaries, questions, and glossaries. Three forms for textbook evaluation have been included: "Recommendations for Evaluating Textbooks" on page 48 is merely a checklist of questions a teacher might ask himself before choosing a textbook. "Textbook Examination" on page 49 and "Textbook Preview" on page 50 are worksheets that an instructor, or preferably a group of instructors, might use to evaluate and compare evaluations of a text.

Texts may be evaluated more objectively through readability indices, such as the Fry and Fog formulas. The Fry formula (page 51) uses a mathematical calculation with a graph to determine the reading grade level of a textbook. The Fog Index (page 52) uses a strict mathematical calculation to determine the grade level. However, these formulas only provide a number and, therefore, do not provide the wealth of information gleaned from a thorough examination of a text. Consequently, these formulas are best used as a confirmation of a thorough textbook evaluation, rather than as a sole indicator of whether or not to choose a textbook.

Even when the best possible textbook has been chosen, students often need supplementary aid in using the textbook. Faculty need to show their students study techniques that are unique to reading a textbook, since most students approach reading a textbook as they would any other printed material. For example, faculty might supplement a textbook by teaching students how to preview a chapter or how to change subheadings into questions to guide their reading, or by providing study aids such as glossaries or chapter objectives. A more detailed list of strategies to compensate for a textbook's deficiencies is included (see page 53).

Finally, at the end of the semester it may be helpful to have students evaluate the textbook. They may have perceptions different from those of their instructors.

### **Recommendations for Evaluating Textbooks**

1. Is the overall appearance of the textbook visually appealing?
2. Are there adequate study aids?
  - a. a detailed Table of Contents
  - b. a clearly stated Introduction
  - c. bold print or colored print in headings and subheadings
  - d. italics used to highlight key terms
  - e. visual aids placed near the textual presentation of the concepts
  - f. a summary at the end of each chapter
  - g. appropriate questions at the end of each chapter to direct a student's learning
  - h. glossary (either a separate one for each chapter or a cumulative one at the end of the book)
  - i. an index
3. Is the print used in the text of adequate size and properly spaced?
4. Are examples used to clarify difficult concepts?
5. Does the author avoid excessive use of figurative language?
6. Does the textbook explanation provide necessary background to understand the concepts?

## Textbook Examination

Name of Text \_\_\_\_\_

Discipline \_\_\_\_\_

Reading Level (Scale of 8-14th grade) \_\_\_\_\_  
(Take an educated guess or use Fog or Fry scales)

Times text used before \_\_\_\_\_

What made you choose this text if it was not departmentally required?

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What weak points do you feel the text has?

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What way, if any, have you found to compensate for these weaknesses?

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## Textbook Preview

Text	Beginning Material	Explanations	Text Layout	End Matter

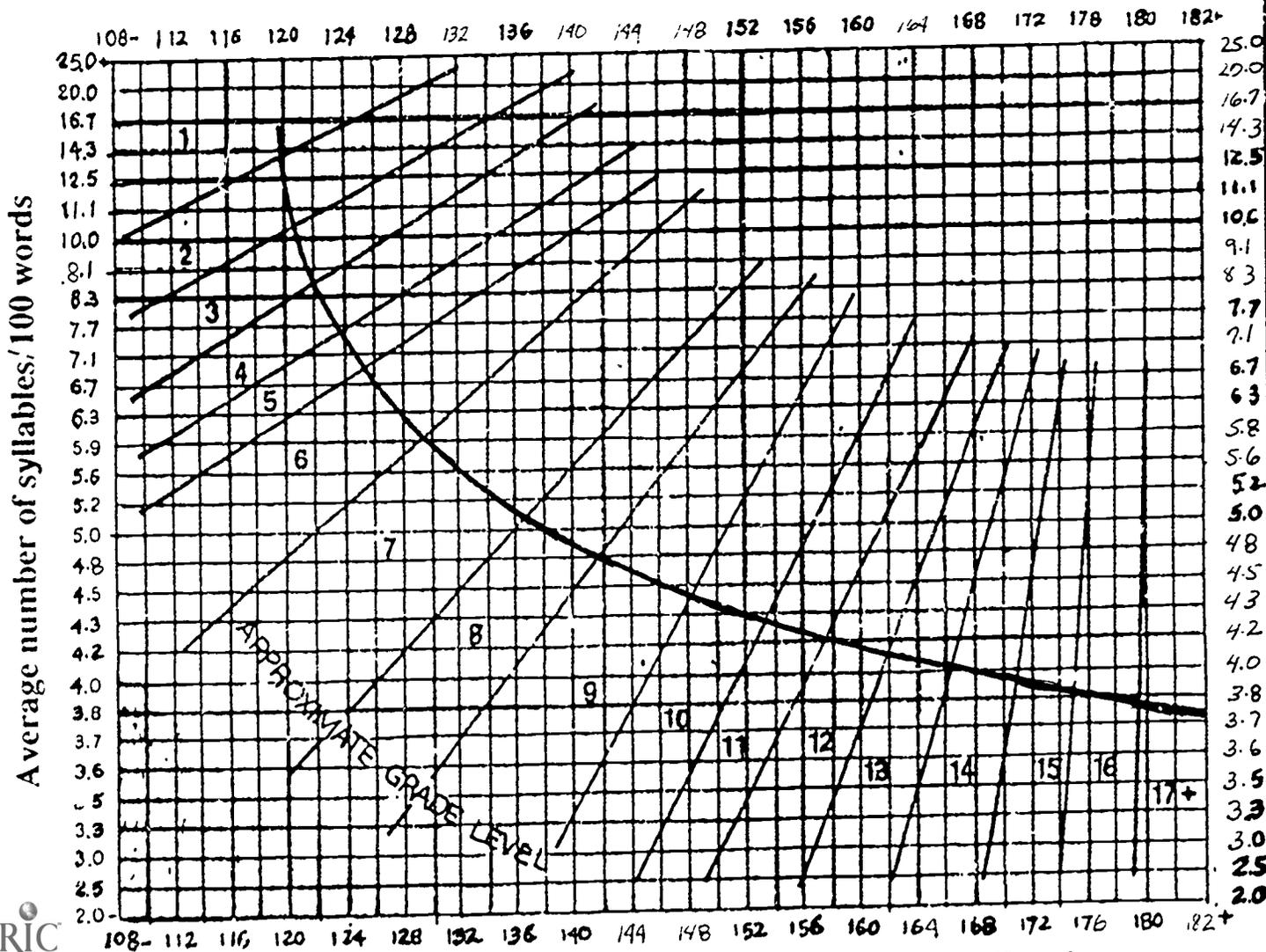
See Graph.

1. Randomly select three (3) sample passages and count out exactly 100 words each, beginning with the beginning of a sentence. Do not count proper nouns, initializations, and numerals.
2. Count the number of sentences in the hundred words, estimating length of the fraction of the last sentence to the nearest one-tenth.
3. Count the total number of syllables in the 100-word passage. If you don't have a hand counter, an easy way is to simply put a mark above every syllable over one in each word, then when you get to the end of the passage, count the number of marks and add 100. Small calculators can also be used as counters by pushing numeral 1, then push the + sign for each word or syllable when counting.
4. Enter graph with *average* number of sentences and *average* number of syllables; plot dot where the two lines intersect. Area where dot is plotted will give you the approximate grade level.
5. If a great deal of variability is found in syllable count or sentence count, putting more samples into the average is desirable.
6. A word is defined as a group of symbols with a space on either side; thus, *Joe*, *IRA*, *1945*, and *&* are each one word.
7. A syllable is defined as a phonetic syllable. Generally, there are as many syllables as vowel sounds. For example, *stopped* is one syllable and *wanted* is two syllables. When counting syllables for numerals and initializations, count one syllable for each symbol. For example, *1945* is four syllables, *IRA* is three syllables, and *&* is one syllable.

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Note. This "extended graph" does not outmode or render the earlier (1968) version inoperative or inaccurate; it is an extension (REPRODUCTION PERMITTED--NO COPYRIGHT)

# Graph for Estimating Readability



Expanded Directions for Working Readability Graph

## FOG INDEX OF A PASSAGE

Robert Gunning\*

*One:* Jot down the number of words in successive sentencings. If the piece is long, you may wish to take several samples of 100 words, spaced evenly through it. If you do, stop the sentence count with the sentence which ends nearest the 100-word total. Divide the total number of words in the passage by the number of sentences. This gives the average sentence length of the passage.

*Two:* Count the number of words of three syllables or more per 100 words. Don't count the words (1) that are capitalized, (2) that are combinations of short, easy words (like "bookkeeper" and "butterfly"), (3) that are verb forms made three syllables by adding *-ed* or *-es* (like "created" or "trespasses"). This gives you the percentage of hard words in the passage.

*Three:* To get the Fog Index, total the two factors just counted and multiply by .4.

*The "Fog Index" for Finding the Grade Level of Reading Material:*

Here is an easy "formula" to help you determine grade level of reading materials:

1. Count a sample of 100 words.
2. Count the number of sentences in the sample (the last sentence started before the 100th word is counted if more than half of it occurs before the 100th word.) Get the *average* number of words per sentence, by dividing the number of sentences into 100.
3. Count the "difficult words" in the sample. By definition, the difficult words are those with three or more syllables.
4. Add the average number of words per sentence to the number of hard words.
5. Multiply the sum by the constant .4.

### Summary of the Gunning Formula:

Average number of words per sentence. \_\_\_\_\_

Plus number of different hard words: \_\_\_\_\_

Total. \_\_\_\_\_

Multiplied by the constant .4 \_\_\_\_\_

This number is approximate grade level of the reading matter in sample no. 1: \_\_\_\_\_

Sample No. 2	Sample No. 3	Averaging Levels
Av. w.p.s.: _____	Av. w.p.s.: _____	
+ hard words _____	+ hard words _____	No. 1: _____
Total: _____	Total: _____	No. 2: _____
Multiply by. <u>4</u>	Multiply by. <u>4</u>	No. 3: _____
Approx. grade level in No. 2: _____	Approx. grade level in No. 3: _____	Total: _____

\*Robert Gunning is president of Robert Gunning Associates (counselors in clear writing), Blacklick, Ohio 43004. The Fog Index is reprinted from *The Technique of Clear Writing* (McGraw-Hill) with written permission of Robert Gunning, the copyright owner.

## **Suggestions for Strategies to Compensate for a Textbook's Deficiencies**

1. Provide students with a glossary of key vocabulary words for each chapter before the chapter is read.
2. Provide students with an outline and/or summary of each chapter before the chapter is read.
3. Provide students with questions that will guide their reading of the chapter.
4. Provide students with objectives for each chapter before the chapter is read.
5. Provide students with questions to check their comprehension of the chapter after they have read the chapter.
6. Provide supplementary sample problems with diagrams.
7. Have students highlight key principles and formulas.
8. Point out the definitions of formulas that appear next to each formula.
9. Point out any glossary in the text and refer to it during the lecture.
10. Preview the chapter with the class.
11. Make students aware of summaries at the end of chapters.
12. Discuss any sketchy sections of the text with the class.

# V

## The Syllabus

### **Rationale**

The syllabus is the road map supplied by the teacher; it is the guide, the supplement to class instruction. Prepared carefully and used wisely, the syllabus can help the student make her way through unfamiliar territory.

### **Techniques**

No one formula exists for constructing a useful syllabus. However, all syllabi should contain the name of the course, the instructor's name, the semester, and the year at the top of the first page. Most good syllabi contain the objectives of the course, methods of evaluation, criteria for grading, due dates, reading assignments, writing tasks, supplementary work, test dates, and any special policies of the teacher (attendance, form of papers, etc.). Some syllabi include a glossary of abbreviations commonly used; others contain a correlation of lecture titles with titles used in the table of contents of the text. Some syllabi are arranged as weekly outlines; others use columns. See "Guidelines for Developing a Syllabus" for suggestions, and see "Detailed Syllabus Outline" (pages 55-56) for fully developed guidelines.

As a rule, the syllabus should speak to the average "C" student, the one who is easily frustrated by difficult coursework. When such a student is faced with ambiguity, inconsistency, inadequate information, or unclear directions, he either skips the assignment, or muddles it. Even a well-constructed syllabus will not be used by students to best advantage unless it is introduced and explained to them at the start of the semester.

Finally, all syllabi should be clear, easy to read, and as attractive as possible. For samples of good syllabi, see pages 59-66.

## **Guidelines for Developing a Syllabus**

1. Provide a heading including instructor, title of course, credits, semester and year, text, and equipment.
2. List course objectives.
3. List instructional materials.
4. List course requirements: what must the student do to get a passing grade? Include major exams and topics to be covered on each.
5. List major assignments and due dates. Describe lab topics fully.
6. Describe grading practices.
7. Include rules concerning absences and latenesses.
8. If you wish, include a weekly outline of topics to be covered.
9. If you wish, include audio-visual materials to be used.
10. If you wish, provide a glossary.

## Detailed Syllabus Outline for any Course

Instructor \_\_\_\_\_

Division \_\_\_\_\_ Department \_\_\_\_\_

Course Reference No. \_\_\_\_\_ Course Title \_\_\_\_\_

Semester \_\_\_\_\_ Year \_\_\_\_\_

### *Objective of the Course*

List your objectives—1, 2, 3, etc. Avoid generalities such as to fulfill degree requirements, to achieve the goals of a liberal education, etc. State your objectives in such a way that student achievement of them can be measured; in other words, when you write an objective, keep in mind what it is that a student will be doing when he is demonstrating that he has achieved the stated objective.

### *Procedure for Accomplishing These Objectives*

List the instructional procedures or teaching methods through which you plan to achieve the objectives of the course. Examples—lectures, class discussions, analytical questions, projects, research papers, use of visual aids, oral reports, field trips, visiting lecturers, etc.

### *Student Requirements for Completion of the Course*

List the specific work which students are expected to complete in order to receive credit for the course. Avoid generalizations such as "read the textbook" or "pass the final exam." Think out what you want the students to do in order to demonstrate accomplishment of the course, and spell it out for them.

### *Examples*

- a. Read assigned chapters in textbook.
- b. Submit a research paper of at least . . . words (or pages) typewritten (if necessary), using appropriate bibliography and footnotes (if you desire), to be handed in no later than . . . . . (date), on a topic approved by the instructor (or chosen from a list appended to Outline, or whatever arrangement you wish).
- c. Give an oral report on a topic and date to be assigned by the instructor.
- d. Two book reports of . . . words (pages), typewritten, chosen from the List of Supplementary Readings (below, or from books on reserve in Library, etc.).

- e. Periodic quizzes—state frequency, whether announced in advance or unannounced, style of questions (essay or short answer).
- f. Mid-term Examination (covering . . . topics).
- g. Final Examination (covering . . . . topics).
- h. Other items.

**Grading Practices**

State clearly how the student's performance of the above requirements will be graded including the weighing of relative importance of each item.

*Example:*

Four scheduled quizzes (@ 10%	40%
Two book reports (@ 10%	20%
Term paper (@ 20%	20%
Final Examination	20%
	100%

**Rules Concerning Student Absence and Lateness**

State your expectations regarding student attendance and punctuality. They should conform with College policy as set forth in the College Catalog and Faculty Handbook.

**Textbook**

List the author, title, edition, publisher, and date of publication of any required textbook, laboratory manual, etc.

**Weekly Outline of Topics to be Covered**

This list should enable another individual (such as a substitute teacher) to ascertain which topics have already been covered, and which topics are scheduled to be treated in a particular week. Another example—a student who is absent for several class periods because of an accident—should be able to read the textbook and keep up with class assignments while recuperating.

It is suggested that the outline be on a weekly rather than daily basis to keep it brief, permit some flexibility, and avoid scheduling complications arising from holidays or the fact that an instructor teaches one section of the course on MW and another section on TTh.

The outline includes dates of tests and scheduled quizzes, due dates for research papers and reports, chapter numbers relating to each topic, and any similar date which will assist students to plan their studies and to understand the requirements for completing the course.

### **Audio-Visual Material to be Used**

List any audio-visual materials which will be used during the course, including those utilized by the instructor as part of his lecture presentation and those which students will use on their own (e.g., listening to music tapes in the Library).

Here is an area where innovation is possible; creative use of new materials and techniques may prove successful in stimulating student interest and reinforcing learning.

### **List of Supplementary Reading**

List those books and/or periodical articles which students should read in addition to the textbook. Clearly indicate whether they are required or simply recommended reading, whether a report of some kind must be submitted on them, and whether questions concerning them will be included on texts or examinations.

When preparing your list, consult with the Library staff about the availability of items which are in the collection.

Consider whether certain Library materials should be placed on reserve; if so, this should be done before the beginning of the semester, to ensure that they are available.

### **Miscellaneous Information**

Here you might wish to include any additional information about your presentation of the course which will help those reading the outline—especially your students—to understand what you hope to achieve in the course, and how you plan to achieve it.

**Westchester Community College  
Department of Human Services**

**STANDARD SYLLABUS FORM**

*Course Title:*           Methods of the Helping Process (Seminar II)  
                                  Course No. 240231

*Credits:*                 3

*Prerequisites:*        Introduction to Human Services                   240111  
                                  Systems in the Helping Process  
  (Human Services Seminar I)                   240221  
                                  Human Services Field Experience I           240222

*Corequisite:*         Human Services Field Experience II           240232

*Number of Hours:*    3 class hours per week

**Objectives:**

1. The student will gain a conceptual framework for understanding human behavior and interpersonal relationships.
2. The student will know the concepts of working with people in a helping relationship.
3. The student will gain increased helping skills and behavior patterns necessary for success in the human services.
4. The student will be oriented toward recognition of signs of physical and mental distress.
5. The student will examine real life situations as they affect individuals and communities in day-to-day living.
6. The student will analyze the utility and limitation of the tools of the Human Service field.

**Methods of Instruction:**

Lectures, discussions, role playing, videotaping, critiquing, film, use of student logs.

**Required Texts:**

Schram, Barbara and Mandell, Betty. *Human Services: Strategies of Intervention*. New York: John Wiley & Sons, 1983.

Brill, Naomi. *Working with People. The Helping Process*. 2nd ed. New York: J. B. Lippincott Co., 1978.

Towle, Charlotte. *Common Human Needs*, New York: N.A.S.W., 1965.

**Supplementary Readings:**

Okun. *Effective Interviewing and Counseling Techniques*. North Scituate, MA: Duxbery Press, 1976.

Garrett, Annette. *Interviewing: Its Principles and Methods*. New York: Family Service Association of America, 1972.

Evans, Hearn et al. *Essential Interviewing: A Programmed Approach to Effective Communication*. Monterey, CA: Brooks/Cole, 1979.

**Course Requirements:**

In addition to the required readings, written assignments include maintaining a log of field work experience, a unit paper, a quiz, and a final examination. Students should also continue to build their Resource File.

**Major Goal:**

Methods in the Helping Profession will provide the learning of general attitudes and skills necessary to carry out the tasks Human Services workers are expected to perform and the application of these skills in the field work experience.

**UNIT GOALS**

**Unit I**     *The human condition: the student approaches his/her field placement and clients.*

*Readings:*

- Brill, chapter 1 (Understanding Ourselves)
- 2 (Understanding the Human Condition)
- 3 (Social Functioning)
- 11 (Vulnerable People)
- 12 (Dealing with Dependency)

*Learning Outcome:*

In a 300-word essay, the student will demonstrate the ability to integrate personality development theory with his/her own life experience by discussing a specific developmental stress or life crisis. In addition to describing that situation and feelings (then and now), the student should include support systems to deal with the stress, and should assess whether those systems were effective in resolving the stress. If a friend or potential client were confronted with a similar crisis, what would the student recommend as potential resources?

**Unit II**     *The helping relationship: assessing problems*

*Readings:*

Brill, chapter 5 (Helping Relationship)

13 (Being Accountable)

14 (Integrating Personal and Professional Self)

Schram/Mandell, chapter 1 (Worker Relationship)

2 (Exercising Influence)

5 (Assessing Problems)

*Learning Outcome:*

The student will display in class discussion an understanding of his/her role and function as a human service worker in a specific field placement agency, and as a member of the larger professional community.

**Unit III**     *Methods: selecting a theoretical approach: intake*

*Readings:*

Brill, chapter 6 (Systems Theory)

4 (Communication)

Schram/Mandell, chapter 3 (Psycho-Social Assessment)

3 (Collecting Data)

3 (Recording)

*Learning Outcome:*

The student will examine the experiences of fellow students in a variety of settings. They will analyze the settings for their use of basic helping skills and behavior concepts, based on the clients served. This assignment will be done in classroom discussion, focusing on the students' own placements, and will continue through Unit IV. In addition, each student should be prepared to discuss the type of intake procedure used at the time of placement, how clients are accepted or screened out, and the limits of services available in that setting. Agency brochures, application forms, etc. should be brought to class.

**Unit IV**     *Skills and techniques utilized in the human services field*

*Readings:*

Brill, chapter 9 (Skills, Techniques, and Tools)

Schram/Mandell, chapter 3 (Initial Contacts)

4 (Negotiating Contracts)

*Learning Outcome:*

The student will learn the basic skills and techniques of the helping process, and will be able to demonstrate understanding of these concepts in discussion of case materials and films, and in role-playing situations from the students' field placements. Seminar II students are occasionally involved in community outreach projects which help develop and utilize interviewing skills. The timing of these projects may replace specific assignments within this Unit, or change the Unit's placement in the course outline.

**Unit V**     *Termination of service: the social systems approach*

*Readings:*

Schram/Mandell, pp. 83-85 (Termination)

Brill, pp. 74-76 (Termination)

*Review:* Brill, chapter 6; Schram/Mandell, chapters 3 and 4

*Readings:*

Schram/Mandell, chapter 10 (Keeping the Spark Alive)

*Learning Outcome:*

The student will be able to demonstrate understanding of the social systems approach by participating in class analysis of case materials.

**Unit VI**     *Final examination.*

The student will demonstrate integration of the basic concepts and skills of the helping relationship, by responding to a written test.

*FIELD EXPERIENCE LOGS*

*Assignment and Purpose*

Each student is expected to prepare twice-monthly logs based upon field work. These logs are an opportunity to examine the student's own human service role, express questions and feel-

ings (negative as well as positive), and evaluate the setting's services and limitations. Students' field experiences will be used as a springboard for classroom discussion about agency settings, services, and practice problems.

#### *Format*

A log folder or notebook is to be maintained and submitted to the instructor. It will be returned with comments, suggestions, or questions for further consideration. These logs will be used for relevant classroom discussion. Generally 1½-2 double-spaced pages or their equivalent in legible handwriting should suffice.

#### *Content:*

*The Initial Log:* Review Towle, chapter 12 on Supervision, pp 104-112. A brief description of the agency's client group, services, and staff background must be included. If the placement is new this semester, begin the log with the initial interview and orientation to the agency. It should include the student's reactions to the setting, staff, and specific work assignment. If the placement is a continuation from last semester, consider feelings about returning and expectations for increased responsibility or effectiveness. Compare your feelings now to what they were when you first attended the agency.

*Subsequent Logs* should focus on one or a few significant experiences (not a day-to-day summary). The student should describe field experiences which he/she feels are particularly interesting, or illustrate a problem in dealing with or providing service to clients. These may be client-, peer worker-, or supervisor-focused. It is particularly important that the student include personal feelings about the experience, and ideas about further services or interaction.

#### *Grading*

Will be based primarily on the quality of content as outlined above. Consideration will also be given to following the format, and to punctuality in turning in the logs, since adherence to the "paperwork" requirements of an agency is a part of good human services practice. The log grading is considered in both the Seminar II and Field Experience grades.

**Westchester Community College**

**Valhalla, NY 10595**

**STANDARD SYLLABUS FORM**

*Name of Course:* Word Processing

*Number of Credits:* 2

*Number of Contact Hours Per Week:* 4

*Prerequisites or Entry Level Skills:* Typing 1 or equivalent, minimum typing speed of 30 wpm

*Corequisites:* None required, Typing 2 recommended

*Course Objectives (Minimum of 3):*

- A. To develop an understanding of the technological changes taking place in today's office and the effect of these changes on the role of the secretary.
- B. To develop an understanding of basic word processing, data processing, and telecommunications functions available on state of the art office equipment and develop skills necessary to perform job responsibilities in the automated office.
- C. To provide instruction and hands-on experience in the operation of an integrated office system.
- D. To provide opportunities for students to evaluate their strengths and weaknesses in light of the requirements and careers available in today's job market.

*Course Competencies (Minimum of 5):*

- A. Students should be able to trace the evolution of word processing from its origins in the 1960s to the present, noting general changes in technology, office systems, and organizational structure as part of an information system
- B. Students should be able to create, format, input, store, recall, revise, and print single and multiple page documents on an integrated office system, both on-line and on disc.
- C. Students should understand the concept of electronic mail and demonstrate the ability to send and retrieve documents, speed memos, and messages on an integrated office system.
- D. Students should be able to perform basic math functions on the IOS.
- E. Students should be able to make, revise, and delete calendar entries on the IOS.

- F. Students should be able to use the special functions of the IOS to create line and box drawings and to sort alphabetic and numeric data.
- G. Students should understand the concept of electronic filing and be able to create, maintain, and manipulate files.
- H. Students should be able to proofread and evaluate their own work for typographical and formatting errors, make all necessary revisions and corrections, and code and log documents.

#### *Instructional Methods*

Lecture, demonstration, teacher-directed practice, applications exercises, individual assistance.

#### *Supplemental Learning Options*

Open lab practice time, secretarial club activities including field trips to major corporations, and guest speakers.

#### *Minimum Methods of Assessment*

Minimum of 22 applications assignments, 4 written assignments, 3 tests and final exam.

All assignments must be completed to receive a grade. Missed sessions can be made up during open lab time.

Since learning is cumulative, greater weight is given to later assignments. Class-work = 50% / Tests = 30% / Final exam = 20%.

#### **Topic Outline**

<b>Week</b>	<b>Topic</b>
1	Introduction to course. Discussion of technological changes in the office today and their effects on the role of the secretary.
2-3	Introduction to state of the art automated office equipment. System terminology, keyboard, signing on a system, interacting with menus on a user friendly program, creating and formatting a document, entering text using word wrap, inserting, deleting text. Teacher directed exercises.
4	Review proofreaders' marks and document formats. Work measurement, document coding, and logging procedures. Printing Applications practice
5-6	Working on a disk—prep disk, create files, text formatting, entering note lines, required indented tabs, adding and deleting emphasis, fixed or required spaces, move text. Teacher directed exercises and applications practice

- 7 Evaluation of applications exercises, work measurement, and revisions. Test 1.
- 8 Creating tables using tabs and decimal tabs, and format changes to insert tables in the body of a document. Teacher directed exercises and applications documents.
- 9-10 Creating multiple page documents. Functions: format changes, required indented tabs, search and replace, move text, save and recall text, superscript, page end instructions, hyphenation and repagination. Teacher directed exercises and creation of a multiple page report with footnotes.
- 11 Summary of all word processing functions. Revision of multiple page documents. Reading on input and output systems and media handling and storage. Demonstration of other types of word processing hardware, e.g., Mag Card 2, IBM Memory Typewriter, IBM System 5, and Exxon QYX. Test 2.
- 12 Using special functions of the IOS text and desk calculators. Creating line and box drawings—e.g., organization charts and room arrangements. Electronic mail functions; sending and retrieving documents, speed memos, and messages.
- 13 Making, revising, and deleting calendar entries. Using direct commands to bypass menus on a system. Typing a resume.
- 14 Evaluating personal strengths and weaknesses, writing a resume—creating and printing a personal resume.
- 15 Summary, review of terminology, adapting to a different manufacturer's word processing hardware and software. Test 3.

### *Supplementary Reading*

#### Teacher handouts

#### Appendix I Required Text:

Dolecheck-Murphy. *Applied Word Processing*.

Cincinnati: Southwestern Publishing, 1983.

8-inch disk, folder, stapler

Appendix II To develop an understanding of basic word processing, data processing, and telecommunications functions available on state of the art office equipment and to develop skills necessary to perform job responsibilities in the automated office.

## Syllabus Worksheet: Reshaping the Syllabus

Week	Topic	Text Chap.	Pages (R)	Homework: R = Read Q = Quest., P = Prob. W = Write	Supplementary Material or Laboratory	Test Date

# VI

## Taking Notes: How to Encourage Effective Note-taking, Both Text and Lecture

### Rationale

Students are often under the mistaken impression that taking notes while listening will interfere with their memory. Or, students may mistakenly believe that studying a textbook simply means reading or rereading the text until it is rotely memorized. Faculty must, therefore, often convince students of the importance of taking both text and lecture notes, for the ability to listen, understand, and absorb lecture material and the ability to read, understand, and absorb course textbooks are two of the major elements for success in a college course.

It is imperative that students take effective lecture notes so that they have a permanent record of the class lectures from which they can study. Similarly, it is important that students understand the importance of taking notes from textbooks, so that they need not reread the entire chapter (or chapters) before an exam. Although the major requirement for effective lecture notes is efficient listening and the major requirement for taking effective text notes is efficient reading, both note-taking skills depend on the student's ability to distinguish between major topics and supporting details and to record this information in a format from which studying is easy.

### Techniques for Encouraging Lecture Note-taking

To encourage students to take lecture notes, faculty should discuss the importance of note-taking with students, and then discuss good note-taking procedures with them. For example, instructors might discuss with students the importance of distinguishing major topics from less important details, as well as other note-taking tips, such as using an organized format, writing concise sentences, using abbreviations, and revising notes. Faculty could distribute to students a list of guidelines for taking lecture notes (see "Guidelines for Taking Lecture Notes," page 69).

Faculty might further convince students of the importance of taking lecture notes by occasionally inspecting notebooks or by distributing a model of the notes for one lecture which students can compare to their own notes. "Ways to Encourage Students to Take Notes" (page 71) summarizes this procedure. Another idea is to give students a quiz during the first or second

week of the semester that they can take by referring to their notes. Students who have difficulty with the quiz will soon see the importance of good note-taking. Finally, faculty might distribute sample lecture notes worksheets to students. The "Lecture Notes Worksheet" (page 72) presents one format for efficient note-taking.

In addition, the instructor can facilitate note-taking for students by preparing well-structured lectures, by clearly distinguishing between main ideas and supporting details, by inserting clear, cohesive ties that signify the basic relationships among thoughts (e.g., additive—*and*, adversative—*however*, causal—*consequently*, temporal—*before*, continuative—*of course*), and by using the blackboard when possible. While the blackboard should be utilized and handouts distributed, neither technique should be used to the extent that students fail to develop the ability to listen well.

### **Techniques for Encouraging Note-taking from Textbooks**

Before encouraging students to take notes in and from textbooks, instructors should explain to students the difference between reading and studying a textbook and reading recreational material. Then, instructors can begin to encourage textbook marking by showing students how textbooks are organized and by previewing a chapter with them. That is, students should be directed to read the chapter introduction, subtitles, summaries, questions, glossaries, illustrations, etc. The "Guidelines for Noting Information in Textbooks" (page 71) presents suggestions for taking notes from the course text. The instructor may wish to distribute this to students. Next, faculty should discuss with students textbook note-taking techniques, such as highlighting major ideas and underlining facts that support major ideas. As with lecture note-taking, faculty might convince students of the importance of noting information from texts by occasionally examining students' notes or by distributing a model.

## **Guidelines for Taking Lecture Notes**

1. Be aware that the instructor usually identifies the major topic for discussion at the start of the lecture.
2. Date and put a topic heading on notes.
3. Place major topics in left-margin of the page and place notes at the right.
4. Write legibly and use an organized format.
5. Write concise sentences (but make sure thoughts are complete).
6. Be sure to label all diagrams.
7. Be sure to include definitions.
8. Be sure to include not only what your instructor places on the board, but also what your instructor talks about.
9. Listen carefully for key words and phrases.
10. Use a new line for each new thought.
11. Skip lines between topics.
12. Use abbreviations to save time for listening and writing.
13. After the lecture, list on the 3rd page of your lecture worksheet all terms and definitions that you will want to study.
14. After the lecture, read your notes to be certain that they are clear, correct, and complete. If you are missing any information, or, if you are unsure of something you've written, read the corresponding information in the text and fill in the missing information.

## Ways to Encourage Students to Take Notes

First class: students take notes  
the instructor gives out model  
students compare two sets of notes  
students take notes on 2nd section  
give students note-taking guideline

Provide lecture note worksheet.

Inspect notes (in book, in outline, from lecture) periodically.

## Guidelines for Noting Information in Textbooks

1. Preview the section—before reading for content.
  - a. Read the introduction
  - b. Read the summary
  - c. Read the questions
  - d. Read the subtitles
  - e. Glance at formulae
  - f. Glance at italicized and bold-faced phrases
2. Read the section for content.
  - a. Mark all major ideas by highlighting them.
  - b. Underline all facts that support the major ideas; only underline key phrases.
  - c. Highlight formulae.
  - d. Be sure you understand how the numerical examples illustrate the principle being discussed.
  - e. Highlight definitions throughout the text in a second color.

# Lecture Notes Worksheet

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Title of Lecture: \_\_\_\_\_

Date: \_\_\_\_\_

**TOPICS**

**NOTES: DIAGRAMS, EXPLANATIONS,  
DEFINITIONS AND EXAMPLES**

**TOPICS:**

**NOTES:**

**TERMS:**

**DEFINITIONS:**

**ASSIGNMENT:**

# VII

## The Examination: How to Design an Effective Test

### **Rationale**

Although the anxiety and fear caused by taking tests is widely recognized, faculty have yet to discover a satisfactory alternative to evaluating a student's mastery of course material. However, most faculty realize that a student's success or failure on an exam is often due to factors such as the test construction or the degree of the student's sophistication in test-taking techniques. Therefore, it is important that faculty design well-constructed exams and that they help their students to become sophisticated test takers.

### **Techniques**

To design an effective exam, faculty should evaluate previous exams. While doing this, faculty should keep in mind factors such as the overall objective of the exam as well as the purpose of individual questions, the clarity of directions and of individual questions, and the visual appearance of the exam. A more complete list of factors to be considered in designing effective exams follows on page 76.

Faculty can also help students do well on exams by understanding the difficulties they have with them. For example, students often select true-false answers that are only partially correct; they do not read all choices and instead select the first answer; they do not read an answer fully and, therefore, select an answer based on only part of the question; they do not follow directional signal words; and they do not follow directions carefully. By sharing this understanding with their students, both orally and through handouts, faculty can help their students to become more sophisticated test-takers. The "Testing Problem" handout (page 76) describes the problems students have with multiple-choice, true-false, matching, and fill-in tests, as well as general problems with specific determiners. The "Directional Words" handout (page 78) lists common directional words and phrases that appear on many essay tests. Faculty should hand out and review these sheets with students so that students can overcome these problems and learn these definitions.

## **Factors to be Considered in Designing Effective Exams**

1. Determine type of exam (for example: essay, short answer, multiple choice, etc.).
2. Tell students how much each question is worth, so that students can pace themselves.
3. Write clearly worded directions.
4. Have a clear and visually appealing format.
5. Write clear, well-worded questions.
6. Do not use terminology or abbreviations that have not been previously used in class.
7. Do not use double negatives in questions.
8. Organize exams so that all questions of one type are together (i.e., all true-false in section one; all multiple choice in section two, etc.)
9. Include both objective and subjective type questions, so that students with particular learning problems will have an equal chance.

## **Testing Problems**

- A. Problems with multiple-choice items:
  1. Students select the first seemingly-correct response without reading all the responses.
  2. Students do not sense that an answer may be part of a more complete answer.
  3. Students are unaware of the need to eliminate extreme or absurd choices.
  4. Students spend too much time on difficult items and do not finish the tests; they leave answers blank.
  5. Either students do not understand, or they misread directional words and specific determiners (see D below).
- B. Problems with True-False items:
  1. Students mark an answer True when only part of the answer is true.
  2. Students mark an answer True when the statement may have exceptions to it.
  3. Students answer questions from their own experiences rather than from course information.
  4. Either students do not understand, or they misread directional words and specific determiners (see D below).

- C. Problems with Matching and Fill-in items:
1. Students do not apply the definitions of terms from the text or lecture.
  2. Students do not understand directional words (see D below).
  3. Students do not recognize symbols and abbreviations.

D. Problems with Specific Determiners:

1. Specific determiners are words or phrases that control the type of answer required.

- a. Some specific determiners set up an all-or-none situation and leave no alternatives. Therefore, in a true-false question, these words will usually make the answer false. In a multiple choice question, these words will usually eliminate one of the choices.

*Examples:* all          none          never          completely  
                          every          always          absolutely

- b. Some specific determiners set up *no* absolute rules. Therefore, in a true-false question, these words will usually make the answer true. In a multiple choice question, these words will often point out the correct answer.

*Examples:* many          generally          some          most          rarely  
                          few          frequently          usually          often

2. *Directional Words and Phrases* give the students a specific instruction regarding the way they should answer the question.

- a. *Directions of Quantity and Quality Examples.*

except	most	largest	after	majority	first
not	least	smallest	before	biggest	last
				fewest	

best	poorest
worst	strongest

- b. *Directions for writing and completing problems:*

1. Words and phrases that require a listing of facts or a list of ideas developed in a paragraph:

discuss	list	illustrate
explain	name	recite
describe	summarize	identify
relate	define	what are the characteristic functions
explain terms	indicate	sketch

2. Words and phrases that require a listing of steps or a paragraph developed sequentially:

develop	calculate	determine
trace	perform calculations	explain method
describe by graphic representation	sketch	
steps	plot	
	compute	

3. Words and phrases that require a paragraph developed with differences and/or similarities:

compare	distinguish
contrast	compare different parameters
similarities	
differences	

4. Words and phrases that require a list of causes and/or effects, or a paragraph developed with causes and/or effects:

discuss	analyze
effect	evaluate the effect
what affects	
give the reasons for	
what are the results	

5. General terms that should be defined:

complement	relative	equal	assume that
reference	same	halved	would-will-is

### Directional Words

All essay questions contain key words that direct or guide the test-taker. These directional words are an aid in helping you to organize your essay. Some directional words are:

<i>cite</i>	to refer to, to mention, to bring up as an example
<i>compare</i>	to point out how things are alike and how they are different
<i>contrast</i>	to place side by side to show differences
<i>criticize</i>	to make a judgment or to evaluate the worth of something
<i>define</i>	to state or explain the meaning of
<i>describe</i>	to tell about or write or give a detailed account of
<i>discuss</i>	to talk over or consider from various points of view
<i>explain</i>	to make plain or clear or to interpret
<i>illustrate</i>	to make clear or explain by stories, comparisons, examples, etc.
<i>justify</i>	to give a good reason for
<i>list</i>	to write in the form of a series of names, numbers, words, or phrases

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