Exam Writing: Displaying Knowledge

AIMS OF THE CHAPTER

This chapter develops the concept of writing to display knowledge. When you write on an exam, your aim is to show the evaluator that you are familiar with the material. You will be graded on how explicitly you present the ideas and details and on how well you connect them.

KEY POINTS

1. Although learning may be for yourself, you display that learning so teachers can evaluate what you know.
2. For purposes of evaluation, knowledge is displayed within tasks set by teachers and in the format that they request.
3. Essay exam questions give more opportunity to display one's understanding of a subject than do short-answer questions.
4. Some questions require you to rethink the material and reorganize it. For thematic questions and open-ended summary tasks, you find larger patterns in the separate topics, issues, and materials studied over the term. To respond to these questions, you step back from the details and think about them.

QUESTIONS TO THINK ABOUT

- Have you ever wondered why you are explaining things to teachers that they already know?
- Have teachers ever graded you down for not writing something on an exam even though you knew the material thoroughly?

- Have teachers ever graded you down for not answering the question or not giving the answer in the right form, even though you thought you showed that you knew all the facts and ideas you were expected to know?

Many assignments in college ask you to write on original subjects — to report on fresh materials from your experience or research, to present your own ideas, or to carry out analyses and arguments. In these assignments you have the chance to be evaluated for your special contribution. However, in many courses your task is simply to learn a well-defined body of information and ideas and to demonstrate your familiarity with that material. In taking exams for these courses, you simply display through writing what you have learned. Your task is not necessarily to add to the instructor's understanding, for the instructor probably has all the knowledge already. You are writing solely to show what you know.

Although learning for your own purposes and long-term knowledge is the goal of any course, your immediate reward is in the grades that evaluate your efforts. Good grades, of course, bring rewards in the job market or in admission to a professional school, and thus can be seen as an extrinsic or external reward. However, grades also have an intrinsic value because they signal how well you are doing. They indicate that you have been accomplishing the kind of learning and work your instructors consider valuable. Insofar as you value what they value, you may feel personally very good about a good grade. (The comparative value of extrinsic and intrinsic rewards is discussed on pages 172-173.)

To get high grades, you display your knowledge in the fashion determined by the instructor. During the opening class sessions and perhaps on a syllabus sheet, teachers often explicitly identify the requirements, the form in which you will have to show what you have learned, and the criteria by which these displays will be evaluated. It is worth paying close attention to these details, especially because they may not be repeated later. The specific requirements of the course identify specific goals for your learning, which can then help you set your personal goals for the term (see the discussion of goal-setting on page 125).

NEWS FROM THE FIELD

Goal-Setting Research

Teachers, motivators, and moralists have long believed that setting goals contributes to success in any enterprise. However, it is only within the last thirty years that the precise relationship between goal setting and increased productivity has been studied by psychologists, sociologists, and organizational behaviorists. The modern scientific study of goal setting began in 1966, when Edwin Locke, a psychologist at the University of Maryland, published a study in the *Journal of Applied Psychology* (5: 60–66) entitled "The Relationship of Intentions to Level of Performance."

In this ground-breaking study, Locke divided student volunteers into three randomly determined groups and assigned individuals within each group a specific task. Participants were given an adjective (e.g., *hot*) and told to list things that could be described by that adjective for one minute. The only difference between the three groups was that each group was given a different "standard of success" to beat. Students in the first group were told that a successful test required them to list at least five items. Students in the second group were told that they should list at least ten items. Students in the third group were given the almost unattainable goal of fifteen items as their standard for successful completion of the experiment.

The experiment showed a high degree of correlation between expectations and performance. Each group's average accomplishment was just below the goal set for it: after fifteen trials, those in the first group averaged slightly fewer than four items per test; those in the second group averaged nearly nine items; and those in the third group averaged slightly more than fourteen items. From these data, Locke concluded (1) that higher goals produce higher results — even when a task is so difficult that it can be completed successfully only 10 percent of the time; and (2) that specific, known goals are much more motivating than general instructions to "do your best" or "list as many as you can."

Since Locke's study, dozens of other researchers have duplicated his results in a number of different contexts. The theory of goal setting that has emerged from these studies identifies at least three reasons for the motivating power of specific, difficult goals:

1. Specific goals direct people's effort in specific directions. When people are given vague goals such as "do your best" or "be productive," they expend their energies in different directions. However, when presented with specific goals, people tend to focus their attention in a single direction.

2. Goals regulate energy expenditure. Most people tend to work hard in proportion to their perception of how much they feel they should work. This is not to say that people will always work as hard as they

are expected to, but that even underachievers will achieve more if they are working toward a more difficult goal.

3. Goals lead to more persistence. When people have specific goals to work toward, they usually try harder to meet those goals than they would otherwise.

The goal-setting research of Locke and others has dramatically changed the way that business managers look at production, but it also has important implications for students. Success in school, as in any other enterprise, requires specific, challenging goals, perhaps so challenging as to appear almost unattainable. Classroom instructors generally attempt to set these goals for students. Students respond to expectations and take an active part in working toward goals.

Short-Answer Examinations

Often you will be asked to display your memory of a course's material through a short-answer examination. This type of exam is common in subjects such as psychology or biology where you are expected to absorb much information. In these multiple-choice, sometimes machine-graded tests, all you need to do is select and note your choice. The format gives you few options for how to express your knowledge, and the questions usually provide little context to jog your memory. You just move from one question to the next, and at each question your mind must focus on some new aspect of the subject. Although sometimes a series of short-answer questions may be structured around a single problem or topic, usually the topics jump around — making it harder to recall the information.

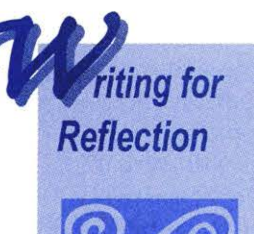
When you take a course in which your work is primarily to be evaluated by short-answer questions, the first challenge is to find a way to involve yourself with the material; if you think of the course material as separate facts to be memorized, you may have a hard time remembering a disjointed array of statements. In such courses, then, it is all the more important to construct your own framework of meaning throughout the term. When you are in a test situation, if the fact does not come back immediately, you can use the framework to reconstruct the relevant area of knowledge and so increase your chances of recall. Even if you can't remember, for example, all the characteristics of REM (rapid eye movement) sleep in a psychology exam, if you have put the details together into an overall sense of what REM sleep is like, you may be able to reconstruct what you need to know. The association of rapid eye movements with dreaming may lead you to remember that muscle twitches, varying heart rate and blood pressure, and various forms of bodily stimulation can occur in relation to the nervous stimulation of the dreams, and that people absorbed in dreams are hard to awaken.

The second challenge of such courses is that short-answer questions in-

vite only preset answers. With short fill-in questions, you must find either the exact words that the instructor is looking for or something close to them. Although this rigidity makes such tests efficient to grade, it gives you little opportunity either to explore your own interests in the material or to engage the instructor in your thinking about the coursework. So it is all the more important for you to find your own ways to increase your involvement in the course outside the limited classroom channels of communication, such as through personal journals or study groups.

One way to do this is to take closely related courses at the same time so that they feed back on each other. You may also discuss the subject with the instructor or the teaching assistant through office hours, discussion sections, or e-mail. When you study for short-answer tests or quizzes, it is helpful to read the material with the discussion, activities, issues, and problems of the class in mind rather than as a way to cram for a quiz. If you are engaged in the larger educational processes of the class and pay reasonable attention to your reading, more details are likely to stick with you.

Fortunately, short-answer exams and quizzes often are only part of a course's evaluation. They are often mixed with essay questions or complex problems, which give you opportunity for becoming engaged, displaying your understanding, and interacting with the instructor.



Describe a course you are taking that will test you through short-answer questions. Describe the materials you are working with, the quizzes and exams you will take, and the specific kinds of questions you may be asked. Then develop a plan for studying for this course.

Summary Questions

To allow you to display more of your understanding on homework and exams, teachers may ask you to summarize material. Answers may range from a sentence to several paragraphs in length. Such questions may not require reorganizing or rethinking the material from lectures or textbooks, but only repeating that information in a certain format. You identify what aspect of the material is appropriate to the question and find a compact way to reexpress it. To make a coherent statement rather than a disjointed list of facts, you need to develop an overall understanding of the material.

The following passage from a textbook on business communications is followed by a summary study question.

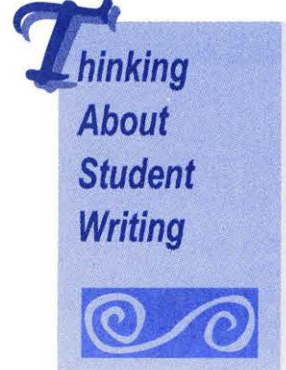
Excerpt removed for copyright reasons.

Source: From Dan O'Hair and Gustav Friedrich, *Strategic Communication* (Boston: Houghton Mifflin, 1992) 349–50. Copyright © 1992 by Houghton Mifflin Company. Used by permission.

Like most study questions, this one strings several related questions together and asks you to comment on both a selected fact and a possible implication.

To answer the question, you pare down the passage to its essential parts. The wording of the question encourages you to do this by directing you toward those concepts in the passage that the authors consider most vital: (1) a definition of "argumentativeness"; (2) a definition of "verbal aggressiveness"; and (3) an explanation of how each functions in a workplace environment. Using these three points as a basic organizational framework, one student wrote the following summary:

> **Argumentativeness is the ability to argue and attack ideas, positions, and evidence. Verbal aggressiveness, on the other hand, is the tendency to attack and insult individual people instead of, or along with, their ideas. Argumentativeness is usually a positive trait in the workplace, since people feel comfortable working for someone who communicates and argues effectively. Verbal aggressiveness, on the other hand, leads to personal attacks, poor communication, and bad feelings.**
>
> **From O'Hair and Friedrich, 349-50.**



1. Which specific points did the summary keep from the original? Which ones did it delete? Why?
2. What overall points tie the summary together? How does this focus compare with the focus of the original?
3. How well does the summary respond to the study question?

Writing Summaries for Others

Preparing a formal summary for others to read requires more careful work than preparing a summary for your own use, as was discussed in Chapter 5 on "Writing to Remember." In addition to the guidelines on summary writing presented in the previous chapter (see page 107), you can also consider the following steps in writing a summary for a class:

1. *Follow directions.* Note the instructor's specific directions and requirements.
2. *Understand.* Before beginning work, make sure you understand what the passage says in all its details. Look up any unknown words, and

work through the meaning of any phrase or sentence that remains unclear.

3. *Select.* Choose the material you think important enough to appear in the summary. You may do this by underlining or otherwise identifying important words and phrases, crossing out or eliminating less important passages, or writing sentences or notes that capture the central idea of each paragraph or unit.
4. *Organize.* Sort the material you have selected, following the general pattern of the original. Combine material from several sentences in the original in a single sentence of the summary to show how the pieces connect.
5. *Provide an overview.* State the main point in the first sentence.
6. *Use transitions.* Use connecting words and phrases to tie the parts together and to show the relationship among the many ideas.
7. *Review.* Read over the final version to make sure the various parts are connected and that the whole summary provides a coherent picture.
8. *Identify the source.* Tell your reader the exact source of the original passage that you are summarizing through a title or a tag line (see example at end of summary, page 129).

USEFUL CONCEPTS FROM RHETORIC

Sentence Combining

One of the best ways to increase the amount of information as well as to show the relationship among various pieces of information is to combine several different ideas into one sentence. Instead of presenting only one assertion, description, or fact, a single sentence can tie several facts, details, and ideas into a coherent statement.

Although the following techniques may be very familiar, they can be reconsidered as strategic tools to increase the communicative power of your summaries:

1. *Coordination.* Coordination uses conjunctions such as *and, but,* and *or* to link different ideas together in an equal relationship: one event happens *and* then another. You may coordinate whole clauses or smaller sentence parts. The following material on social control from an introductory sociology course reads like a list of short assertions:

> Social control may be exerted through schools. Families also serve to define appropriate behavior for youths. Community organizations such as churches and athletic clubs also attempt to influence the youngster to behave according to certain standards. This social control can be achieved through rewards and positive experiences. Social control also can be expressed through demands. The leaders of the organizations may feel they have the

best interest of the young at heart. Youth may experience these demands as a social pressure to conform.

This summary can be made more efficient and meaningful through coordination, as in the following revision:

> Schools, families, *and* community organizations may all exert social control on youths. They may try to influence youth by rewards *and* positive experiences, *or* they may demand certain standards of behavior. The leaders of the organizations may feel they have the best interest of the young at heart, *but* youths may experience these demands as a social pressure to conform.

2. *Subordination.* Subordination puts clauses into an unequal relationship, making one statement the main one and the other supporting: one event happens *because* of another or *before* another or *if* another. Subordination uses conjunctions such as *before, after, since, because, while, when, as, although, so, so that, in order that,* or *if.* The following paragraph suffers because it does not use subordination:

> Some youths respond well to social pressure to succeed in school. Many others fail to meet the academic expectations that their families and educators place on them. Young people don't always measure up to the demands placed on them by various social groups. This often causes them to feel guilty and inadequate.

With effective use of subordination, we can cut the number of sentences in half and strengthen the relationships among the statements:

> *Whereas* some youths respond well to social pressures to succeed in school, many others fail to meet the academic expectations that their families and educators place on them. *When* young people don't measure up to the demands placed on them by various social groups, they often feel guilty and inadequate.

3. *Apposition.* An appositive renames or restates a noun or pronoun, as in "Miguel Cervantes, the author of *Don Quixote.*" Very often, a sentence that does nothing more than define or describe something can be turned into an appositive in another sentence. Consider another excerpt on social control:

> The goal of most educators is to meet each student's individual needs. This goal cannot ever be fully realized in a competitive classroom. One of society's main goals is to train students for a competitive business environment by fostering competition in schools. Because of this social goal, teachers often cannot create the kinds of grade-free, cooperative environment that many sociologists feel would meet the needs of many students.

By using appositives, we can combine the sentences to read:

> The goal of most educators, to meet each student's individual needs, can never be fully realized in a competitive classroom. One of the main goals of society — to train students for a competitive business environment through school competition — prevents teachers from creating grade-free, cooperative environments that many sociologists feel would meet the needs of many students.

4. *Embedding.* Sentences frequently present only a single key point. That key point can often be expressed in a phrase that can be embedded into another sentence. In this way the important information from a number of sentences can be combined smoothly and coherently into a single sentence. Consider the following four sentences:

> Teachers are first and foremost employees of a society. Society always has social control mechanisms that it wants teachers to enforce. Teachers must act as agents of society in regards to these social control mechanisms. If they don't, they risk losing their jobs.

We can combine the important information in all four sentences into one solid statement:

> Teachers, employed by society, must act as agents for that society's social control mechanisms or risk losing their jobs.

5. *Superordination.* Superordination is the technique of combining similar or related words by using one inclusive term. By using superordination, you can eliminate confusion and combine several lists into one sentence. The following paragraph has several lists that could be usefully combined under single terms:

> Pressure to succeed in a competitive academic environment comes not only from teachers, principles, school administrators, and guidance counsellors. Students also face pressures from their mothers and fathers and from their brothers and sisters. In addition to these factors, there are also groups of students in school, church, and community groups who put pressure on each other to succeed.

Each of the lists can be reduced to a single term, making sentence combination simple:

> Pressure to succeed in a competitive academic environment comes, not only from *educators,* but also from *family* and *peer groups.*

6. *Economical prose.* When one is combining sentences, every word should have a purpose. In particular, the main subject, verb, and objects of each sentence should contain the most important words. The sentence subject should be a specific noun; the main verb should be an active, con-

crete verb. With this strong subject and strong verb, the main clause will let you know exactly what is going on. The rest of the sentence should avoid empty phrases and wordy expressions. One solid, informational sentence is always better than three inflated ones. Consider the following inflated conclusion to the summary of social control mechanisms:

> It can be seen that the employment of various social control mechanisms by those who have been entrusted with students' education contributes to a feeling of failure and inadequacy among students who don't perform well in a competitive environment. However, as much as students would like to blame their teachers for making school miserable, it must be ultimately perceived that social forces, rather than individual teachers, are to blame for creating an environment in which competitive attributes are rewarded and failure is heavily punished.

By eliminating unnecessary words and combining the major ideas, we can rewrite this summary as a single, direct, easy-to-understand sentence.

> Teachers who use socially mandated control mechanisms often make their students feel like failures, but society creates this competitive environment.

Sentences, by their very nature, must contain related ideas. The trick to combining sentences, then, is to create relationships among ideas that would otherwise require separate sentences. By coordinating, subordinating, embedding, and combining phrases and clauses, you evaluate the importance of various ideas and determine how they relate to one another. In this case, as in so many others, good writing does more than reflect good thinking: Good writing encourages good thinking.

EXERCISE: SENTENCE COMBINING

1. Rewrite the following passage using the sentence-combining techniques described on pages 130-133. Bring out the relationship of various facts while eliminating unnecessary phrasing.

> In 1993, the Nobel Prize for Literature went to Toni Morrison. Toni Morrison is an African-American writer. She is also a woman. She has written six novels. Most of her novels deal with African-American women. All of these novels have been praised by readers and critics alike. The most famous of her novels is *Beloved*. *Beloved* was awarded the Pulitzer Prize in 1988. *Beloved* is the story of a woman who kills her two-year-old child in order to save her from slavery. It is a tragic story. It is also a profound story. It dramatizes the suffering of slavery. It also illustrates the anguish of women who tried to raise their children as slaves.

Toni Morrison (b. 1931), Nobel Prize–winning novelist.

Image removed for copyright reasons.

This book is already considered a classic of contemporary literature. It secures Toni Morrison's place beside the greatest writers of our time.

2. Take several paragraphs you have written recently for this or another course and rewrite them using the sentence-combining techniques described on pages 130-133. Bring out the relationship of various ideas and statements while eliminating unnecessary phrasing.

Questions Requiring Reorganization

Some questions require more than a direct summary of the sources: They also ask you to select and reorganize material around certain issues or problems.

Students sometimes mistake these as standard summary questions, but they are actually asking for more of a response. They ask you to think about the material.

To succeed at questions that ask for more than a summary, you connect what you know with the question asked. The teacher needs to see how you use the material you have been learning to think about issues posed in the questions. The more sense you have made of that material in your studying, the more flexible you can be in responding to the questions.

If you do not focus on the question and make a clear connection between the question and your answer, your instructor may make a very harsh judgment. One of the most common complaints of instructors is that students don't respond to questions asked on exams and assignments; they often comment that this lack of responsiveness indicates that students don't know how to read or think. This very common criticism shows how much weight instructors put on being able to speak directly to the question.

No matter how long the question statement is, usually the question is focused in a direct sentence or two. Sometimes it is preceded by an introduction of a few sentences to a page reminding you of certain issues or presenting a particular situation, problem, or argument to consider. This introductory statement is then usually followed by specific instructions, such as what issues you need to cover and how long your response should be. Sometimes the instructor might offer some suggestions on how you might proceed with your answer. The crucial part in all this material is the core question. You might even underline it to help you keep attention focused on it.

After identifying the core question, you analyze exactly what it asks for. Frequently the core question (for both exams and essays) consists of three parts: the general subject, the specific focus, and the task. The *subject* is the general topic area; it is usually indicated by a familiar word or phrase that has been emphasized in the course. The *focus* is the specific aspect of the subject on which you need to elaborate; it is often contained in qualifying phrases around the subject. The *task* defines exactly what you need to do in an answer; it is often signaled by a key question word (see pages 137–139). For example, in the following questions from a biology exam, even if you do not know the specific details the question asks for, a careful reading of the questions can give you a good idea of what sort of answer is needed.

1. Identify the chemical processes by which the liver produces bile.
2. Explain how the liver aids the digestive process.
3. Explain how the liver interacts with the rest of the digestive system.
4. Evaluate the fragility of the liver in relation to the other organ systems that contribute to the digestive process.

The subject of all these questions is the liver. You would likely find all the material to answer the questions in the chapter or section on the liver. However, each question also has a different focus. The first question focuses on the production of bile, and even more specifically on the chemical processes by which this occurs. The second and third both focus on the liver's activity

within the digestive system, but the second asks only for what the liver contributes to the system, whereas the third asks you to consider the total interaction. The fourth focuses on the fragility of the organ within the context of the secondary subject of the fragility of other organ systems. Questions with a comparative or relational task usually have two or more subjects that need to be considered together.

These four questions also have specificity of task. The first asks for a specific identification of the chemical processes. This would require naming the chemicals and processes, placing them in sequence, and showing how one leads to another; including specific chemical equations and transformations would further strengthen the answer. The second and third "explain how" questions call for more general answers on the impact of the liver on the digestive processes. For the second you would need to describe the digestive process at the point where bile is placed within it and how that fluid carries the digestive process along. For the third, you would describe how the digestive process signals and regulates the liver so it can make its contribution. The fourth question turns you in the entirely different direction of what can go wrong and how easily — including malfunctions, imbalances, overloads, and diseases — and then asks you to compare the susceptibility of the liver to other organs of the digestive process.

Obviously, although all these seem at first glance to be on the same subject, each requires a distinctly different answer. If you just repeat everything you remember from the liver chapter, you are likely to answer none of the questions accurately.

A careful reading of the question will help you start recalling the information you need to develop your answer. Then identifying what kinds of things you need for an appropriate answer should start bringing the relevant details to mind. If the specific details you need still haven't already occurred to you, you can begin a more systematic search of your memory, knowing exactly what kind of details you are looking for.

USEFUL CONCEPTS FROM RHETORIC

Key Question Words

The following list of key question words defines and gives examples of the different tasks you may be asked to carry out on an essay examination.

Agree, Disagree, Comment on, Criticize, Evaluate

Give your opinion about a book, quotation, statement, or concept and then present the reasons for your opinion. If the question says agree or disagree, you express either a positive or a negative opinion. If the question says

comment on, criticize, or evaluate, your answer can include both positive and negative points.

> "Our society has a zero-sum economy in which every economic gain by one person necessitates an equal loss by someone else. Agree or disagree."

Analyze

Break down a topic into all its parts. Be sure to include all the parts and to tell what makes each part different from the others.

> "Analyze the role of religion in the English Succession Crisis of 1681."

Compare

Show how two subjects are both alike and different. Be sure to discuss each subject and give both likenesses and differences.

> "Compare the prescribed treatment of women in two early legal systems: the Code of Hammurabi and the Law of Moses."

Contrast

Show only the differences between two subjects. Be sure to talk about each one.

> "Contrast the reproductive systems of birds with the reproductive systems of reptiles."

Define

Give the exact meaning of a word, phrase, or concept. Show how what you are defining is different from everything else of its type. Cite examples.

> "Define the concept of 'dialectical materialism' as it was used by Marx and Engels."

Explain Why

Give the main reasons why an event happened or happens.

> "Explain why a star becomes a white dwarf after its energy has been expended."

Describe, Discuss

Tell what happened, what a subject looks like, or what a subject is.

> "Describe the process of photosynthesis and discuss its role in the ecosystem."

Illustrate

Give one or more examples to support a general statement.

> "Illustrate the relationship between financial reward and worker productivity by citing examples from major studies in the area."

Interpret

Explain the meaning of the facts that are given. The question may ask you to use a specific method of interpretation. Be sure to go beyond just repeating facts.

> "Interpret the results of Abraham Lincoln's election in 1860 in light of Anthony Esler's theory of generational change."

Justify, Prove

Give reasons to show why a statement is true.

> "Using what we have learned about the revolutions in France, Spain, and Russia, justify Thomas Hobbes's famous statement that life in the absence of a strong civil government is 'solitary, poor, nasty, brutish, and short.'"

List, State

Itemize important points. Be sure to list all the items asked for in the question. Do not give examples unless they are requested.

> "List Freud's five stages of psychosexual development and briefly describe each one."

Outline, Review, Summarize

Give all the main points of a quotation, book, or theory. You do not have to include minor points.

> "Review the major Civil Rights campaigns by the Southern Christian Leadership Conference between 1957 and 1961."

Relate

Show how one object has an effect on another. Be sure to identify the connection between them.

> "Relate the rise of computer literacy to the steady decline of blue-collar jobs in the American economy."

Trace, List the Steps or Stages

List a series of important events, leading up to a final item or point. Be sure not to leave any item out or include more than the question asks for. This type of question may refer to historical events, recall a process, or ask for detailed directions.

> "Trace the important political, military, and religious developments that culminated in the 'fall' of the Western Roman Empire in the fifth century A.D."

Responding to Essay Exam Questions: A Review

1. *Read the question.* Identify the topic, focus, and task.
2. *Think about the question.* What does the question call for? What kind of answer would adequately address the task? What kind of answer might display a deeper understanding?
3. *Think about the course and course materials.* Ask yourself: How does the question relate overall to the course materials and goals of the course? What materials from the course would be relevant to the answer? What ideas that the teacher emphasized might be relevant? What specific details from the course might provide useful examples or evidence?
4. *Decide on your general answer to the question.* Figure out in blunt and direct terms the major point you want to make in answering the question. Think of this as the 25-words-or-less version. Make sure this speaks directly to the question and provides a clear-cut answer. Are you answering yes or no? What are the specific causes you are identifying? How many stages are you including in the process you are asked to describe?
5. *Outline your answer informally.* A few notes on the direction of the answer and the key points you want to make should be enough to focus your answer and keep you on track.
6. *Write an opening.* Make sure your opening statement responds directly to the question, giving your general answer and identifying the specific ways in which the remainder of the question will flesh out the answer. You may want to use parts of your 25-words-or-less version. The opening sentence is important both because it sets your answer in the right direction and because it announces to whoever is grading the question that you are addressing exactly what the question asks you to address.
7. *Write the body of the answer.* Include all the material the question requires. Do not ignore any parts of the question as asked. Make sure that all parts of your answer do indeed relate to and follow through on the question and that you explain that connection.
8. *Write a conclusion that ties the points you make back to the focus and task raised in the question.* This is your last chance to make sure that your answer is not just a loose connection of statements on the general subject of the question, but is rather a precise response to the specific issues the teacher was asking about. It is also your last chance to show the teacher how well you have addressed the question and understood the material.

To anticipate the kinds of questions the instructor is likely to ask on an exam, pay attention throughout the term to the questions asked in class and in homework assignments. You may even wish to keep a list of such questions and use them to help organize your work, either by yourself or as part of a group. In study groups you can also use the instructor's questions as models to make up more questions to ask each other (see pages 116-117). If the teacher is likely to ask a variety of questions that go beyond rote sum-

mary, you cannot follow a preset organization of the textbook or lectures; in these cases, you find ways to reorganize the material around different issues, ideas, or problems. What are the underlying kinds of thinking your teacher wants you to do with the material? Then organize your studying around those issues and tasks.

ASKING AND ANSWERING QUESTIONS

1. Read the following excerpts from the Supreme Court decision in a recent controversial case concerning freedom of religion. Then briefly answer (in a paragraph or so) each of the questions that follow. In class discuss how the different questions require different sorts of answers.

   The case concerns the right to sacrifice animals in religious services. In 1987, the city of Hialeah, Florida, passed a series of ordinances designed to prevent members of the Santeria religion — a Cuban-based fusion of traditional African religion and Roman Catholicism — from practicing animal sacrifices. The city asserted that such sacrifices violated the moral values of the community. The church members petitioned the federal courts to overturn the ordinances, arguing that the animal sacrifice was vital to the practice of their religion. The right to practice their religion with its animal sacrifice was protected, they claimed, under the First Amendment to the U.S. Constitution (the free speech amendment), and particularly by the clause that guarantees the "free exercise" of religion.

   In 1993, the Supreme Court ruled unanimously that the city's ordinances were in violation of the free exercise of religion clause of the First Amendment. The decision, authored by Associate Justice Anthony Kennedy, has become an important reference point in cases where individual freedoms are pitted against community standards. Here are several excerpts from that opinion:

   Church of the Lukumi Babalu Aye, Inc., and Ernesto Pichardo v. *City of Hialeah.* Decided June 11, 1993.

   Our review confirms that the laws in question were enacted by officials who did not understand, failed to perceive, or chose to ignore the fact that their official actions violated the Nation's essential commitment to religious freedom. The challenged laws had an impermissible object; and in all events the principle of general applicability was violated because the secular ends asserted in defense of the laws were pursued only with respect to conduct motivated by religious beliefs. . . .

The Free Exercise Clause of the First Amendment, which has been applied to the States through the Fourteenth Amendment . . . provides that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof. . . ." The city does not argue that Santeria is not a "religion" within the meaning of the First Amendment. Nor could it. Although the practice of animal sacrifice may seem abhorrent to some, "religious beliefs need not be acceptable, logical, consistent, or comprehensible to others in order to merit First Amendment protection." (Thomas v. Review Board of Indiana Employment Security Division . . . 1981). . . . Neither the city nor the courts below, moreover, have questioned the sincerity of petitioners' professed desire to conduct animal sacrifices for religious reasons. We must consider petitioners' First Amendment claim.

In addressing the constitutional protection for free exercise of religion, our cases establish the general proposition that a law that is neutral and of general applicability need not be justified by a compelling governmental interest even if the law has the incidental effect of burdening a particular religious practice. . . . Neutrality and general applicability are interrelated and, as becomes apparent in this case, failure to satisfy one requirement is a likely indication that the other has not been satisfied. A law failing to satisfy these requirements must be justified by a compelling governmental interest. These ordinances fail to satisfy [these] requirements. We begin by discussing neutrality. . . .

Ordinance 87-40 incorporates the Florida animal cruelty statute, Fla Stat 828.12 (1987). Its prohibition is broad on its face, punishing "whoever . . . unnecessarily . . . kills any animal." The city claims that this ordinance is the epitome of a neutral prohibition. . . . The problem, however, is the interpretation given to the ordinance by respondent and the Florida attorney general. Killings for religious reasons are deemed unnecessary, whereas most other killings fall outside the prohibition. The city . . . deems hunting, slaughter of animals for food, eradication of insects and pests, and euthanasia as necessary. . . . There is no indication in the record that the respondent has concluded that hunting or fishing for sport is unnecessary. Indeed, one of the few reported Florida cases decided under 828.12 concludes that the use of live rabbits to train greyhounds is not unnecessary. . . . Respondent's application of the ordinance's test of necessity devalues religious reasons for killing by judging them to be of lesser import than nonreligious reasons. Thus, religious practice is being singled out for discriminatory treatment. . . .

In sum, the neutrality inquiry leads to one conclusion: The ordinances had as their object the suppression of religion. The pat-

tern we have recited discloses animosity to Santeria adherents and their religious practices; the ordinances by their own terms target this religious exercise; the texts of the ordinances were gerrymandered [written to have unequal effect] with care to proscribe religious killings of animals but to exclude almost all secular [nonreligious] killings; and the ordinances suppress much more religious conduct than is necessary in order to achieve the legitimate ends asserted in their defense. These ordinances are not neutral, and the court below committed clear error in failing to reach this conclusion. . . .

The Free Exercise Clause commits government itself to religious tolerance, and upon even slight suspicion that proposals for state intervention stem from animosity to religion or distrust of its practices, all officials must pause to remember their own high duty to the Constitution and to the rights it secures. Those in office must be resolute in resisting importunate [overly persistent] demands and must ensure that the sole reasons for imposing the burden of law and regulation are secular. Legislators may not devise mechanisms, overt or disguised, designed to persecute or oppress a religion or its practices. The laws here in question were enacted contrary to these constitutional principles, and they are void.

Questions

a. Describe the issues in the case *Lukumi* v. *Hialeah.*

b. Define the term *neutrality* as used by Justice Kennedy in this decision.

c. Analyze the reasoning behind the Supreme Court's decision that the Florida law in question is unconstitutional.

d. In this decision, Justice Kennedy reasons that religious freedom should take precedence over community values unless there is a compelling state interest to restrict religious activity. Do you agree or disagree?

e. Explain the significance of the Supreme Court's decision in terms of individual freedoms versus community standards.

f. Compare the ethical issues involved with killing animals for secular reasons (food, sport, pest control) with the same issues involved in killing animals as part of a religious ordinance.

2. Consider the following excerpt from the Supreme Court decision in *Brown* v. *Board of Education* (1954), the decision that outlawed segregated schools throughout America. The unanimous (9 to 0) decision was written by Chief Justice Earl Warren. The *Brown* v. *Board* decision

overturned the earlier decision, *Plessy* v. *Ferguson* (1869), in which the Court ruled that "separate but equal" schools did not violate the Fourteenth Amendment to the Constitution.

Read the passage carefully and think of five questions about it that require answers going beyond mere summary. Write the questions down and then answer them using the strategies reviewed on pages 139–140.

Brown v. *Board of Education of Topeka.* Decided May 1954.

The plaintiffs contend that segregated public schools are not "equal," and cannot be made "equal," and that hence they are deprived of the equal protection of the laws. Because of the obvious importance of the question presented, the Court took jurisdiction. Argument was heard in the 1952 Term, and reargument was heard this Term on certain questions propounded by the Court. . . .

In approaching this problem, we cannot turn the clock back to 1868 when the [Fourteenth] Amendment was adopted, or even to 1896 when *Plessy* v. *Ferguson* was written. We must consider public education in the light of its full development and its present place in American life throughout the Nation. Only in this way can it be determined if segregation in public schools deprives these plaintiffs of the equal protection of the laws.

Today, education is perhaps the most important function of the state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may be reasonably expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.

We come then to the question presented: Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other "tangible" factors may be equal, deprive the children of the minority group of equal opportunities? We believe that it does. . . .

We conclude that in the field of public education the doctrine of "separate but equal" has no place. Separate educational

Image removed for copyright reasons.

facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment.

3. For a chapter in a textbook you are currently studying in another course, ask five questions, each using a different key question word (see pages 136–138), and then answer as you might on an exam.

4. Bring in questions from recent assignments, quizzes, or exams in other courses and discuss with the class how you might go about answering each.

REVIEWING WRITING PROCESSES

Proofreading

Before you turn in any assignment to an instructor, even a quickly written answer to a quiz question or a homework summary of the night's reading, proofread it to eliminate misspellings, mechanical errors, and typing mistakes. Careless mistakes can detract from even the best writing, and teachers will often subtract points for mistakes that you could have corrected easily with a little extra effort. Here are some proofreading suggestions:

1. *Allow yourself plenty of time to correct errors and, if appropriate, to reprint your document.* If you proofread right before the paper is due, or you are writing in class, you will have to make corrections with a pen or pencil. Although it is generally better to pencil in a correction than to ignore an error altogether, it is always much better to reprint the page (if you are using a computer) or to make the correction on a typewriter. Instructors expect papers prepared before class to look neat and professional, but all teachers prefer neatly inserted corrections to no corrections. Here are some useful symbols for making handwritten corrections:

Symbol	Meaning	Example
∧	insert	I left out ∧ word. this
∾	transpose	My hands slipped when was I typing.
≡	use a capital	State names like ohio should be capitalized.
/	use lower case	Subject names like Mathematics and History don't need capitals.
⁀	close up space	I le ft a space.
¶	start a new paragraph	. . . the last sentence. ¶ I begin a new paragraph.

2. *If the situation allows, read your paper out loud.* When you read silently, your mind often compensates for missing words, extra words, wrong words, or misplaced punctuation. When you read your paper out loud, you catch things that you would miss otherwise.
3. *Ask someone else to read your paper over for mistakes.* Sometimes you can be too close to your writing to recognize all of the errors. It is always a good idea to have a friend, family member, or roommate read over your paper to find mistakes that you might have missed. Of course, don't try this in an exam.

4. *Don't assume that, just because a document has been checked on a computer, it does not contain errors.* Computer spell-checkers and grammar checkers are useful tools for catching some kinds of errors, but they do not catch everything. If you are using a computer checker, you should still look carefully for wrong words, similar words with different spellings, missing words, extra words, and mechanical problems that the computer is not programmed to identify.

Questions for At-Home Essays

For at-home essays you have more time to think about the question assigned, to organize your thoughts, to write carefully, to expand on your discussion, and to revise. You also have access to notes and books, and even additional sources you might want to bring in from related books or the library. This means that you need to take advantage of the increased time and access to material to produce a well-thought-out, clearly presented, detailed response.

In these assignments, not only are you likely to have better conditions for writing, but your instructor will likely have better conditions for reading, and so will have time to notice subtlety of thought, organization, and supporting details. This is in contrast to exam essays, which are typically read rapidly to get the grades in on time. There the grader looks for clearly displayed and direct points in response to the question. Any indirection or complication may lead the grader to miss the relevance of the answer as he or she goes on to the next paper in the stack. This pattern of reading is only reinforced by graders' knowledge of the rushed conditions under which students write in exams. They suspect that anything that does not go directly to the target must be off the mark. On the other hand, in grading at-home essays, instructors generally have more time and are also aware that students may have spent substantial time and work on the project. For these reasons, they are likely to read more carefully, trying to construct the student's line of reasoning and seeing how far the student can take the idea. Thus you get more leeway to give something other than the most obvious answer.

Since at-home knowledge-display assignments generally move toward the kinds of essay assignments described in the following chapters, they are not discussed here. Instead we will discuss two types of questions that are close to the summary but require substantial thinking: the large overview question and the open-ended summary question. These kinds of questions ask you to find big patterns in the material you are studying — showing that you are making sense of both the meaning of each part and the connections among the parts.

The *large overview question* points you to some underlying theme and asks you to pull the material together around that theme. The following are

examples of the kinds of large thematic questions that might help you tie together the different work you have done over the term in various kinds of classes:

1. *History.* How did the concept of a popular revolution change and develop in the years between the French Revolution in 1789 and the Russian Revolution of 1917?
2. *Political Science.* In what ways does the tension between individual rights and social cohesion shape current approaches to public policy?
3. *Philosophy.* In what ways have philosophers attempted to deal with the apparent contradiction between a God who is perfectly good and a world that is experienced as evil?
4. *Literature.* How might the shift in twentieth-century poetry away from rhymed, metered verses toward free verse and experimental forms point to underlying changes in the philosophies, values, or attitudes of poets?
5. *Anthropology.* What are some of the primary differences in the way that preindustrial and postindustrial societies perceive nature?

These questions usually give a strong hint about the kind of pattern the instructor is looking for, as well as some criteria for determining whether your answer will address the teacher's expectations.

The *open-ended summary question* is less directive, giving you an opportunity to tell what you know in the way you want to tell it. This is more difficult because it is up to you to identify a significant *pattern* around which to organize the material and then to connect substantial amounts of material to that pattern.

In answering such complex questions, you need to step back from the details you have been learning to develop overviews of the subject. Thought representation devices such as concept networks, matrixes, or diagrams are most useful (see pages 104–107). If you are working on an at-home essay, you can try some freewriting or a journal. With the big question in mind, it is also helpful to review your notes, the table of contents of your textbooks, or the course syllabus to remind yourself of the material that might be relevant to the question. The more constructive preliminary work you put into figuring out the underlying patterns, the more focused and powerful your final answer is likely to be.

Once you have identified the underlying pattern in the material you want to describe, you then find the most direct and easily understandable way you can of expressing that pattern precisely. You may see a set of connections, but if you cannot express those connections clearly, the instructor will not know what it is you are seeing, and may assume you only have some loose and poorly conceived associations rather than a strong pattern you are trying to demonstrate. In finding a way to describe the pattern clearly and forcefully, you are likely to refine your idea further. As you heighten the outlines of the pattern for others, you will also do it for yourself.

The statement of the pattern can then form the core of your opening paragraph and become the basis for the outline of details to follow. You plan

the outline to elaborate the pattern in a section-by-section manner, showing each part in greater detail but always connecting it to the larger pattern.

Beyond Classroom Learning

In this and the previous chapter we have been considering a process whereby you can become more involved in the ideas and information that are presented to you in books and lectures. Rather than superficially memorizing a few words and phrases by rote just long enough to reproduce them on an exam, you can make the material part of your thinking by learning to talk and write about it in various ways. These facts and concepts become part of statements you yourself make and patterns of knowledge you yourself have seen and articulated. You have made your learning part of yourself, part of the understanding of the world you have with you at all times, because it is knowledge you have not only overheard, but knowledge you have remade by stating it in your way, reflecting how you have placed that knowledge in your mind. Moreover, by restating that knowledge in ways that can be recognized as valid and thoughtful by others, even the distant people who may grade your examination, you have confirmed the validity and strength of your perception of the subject. You have found a way of putting your knowledge on the line, and putting yourself behind that knowledge.

Nonetheless, there are limitations to the kind of involvement created by the knowledge building discussed in the last two chapters. We have been discussing knowledge contained within the four walls of the classroom, accepted on the authority of the textbook and instructor; it is not necessarily integrated with your previous beliefs and experiences, nor necessarily directed toward the ways you might want to use it once you are no longer a student. You have developed yourself by participating in this specialized classroom communication activity of receiving, remembering, rearticulating, and displaying knowledge, but it is only a classroom self that has been developed.

Some instructors may create opportunities to help you think about how your learning relates to what you have seen or heard or done previously in school or out, or to the opinions common in your community. Teachers may even give you some opportunity to critically evaluate what you are learning and to determine how much you agree with the propositions presented or how much you appreciate the literature or art you are studying. Obviously there is more room for such personal judgment in courses like philosophy, literature, and art appreciation than in physics, mathematics, or biology. Instructors may also help you look beyond the classroom to see how your learning relates to problems and issues current in society or research. Through discussion, case studies, and real-world problems, instructors can help you start to make a link between what you study in the classroom and professional tasks and problems you will confront later in your career.

These kinds of connections expand and make more complex the communication system of the classroom, and they are the subjects of other chapters in the book. Some courses are totally engaged in these extensions, whereas others make only small gestures in those directions. In those cases, you need to make those connections on your own, even if all the classes you take are narrowly bound to the small communication circuit of knowledge reception and display, because it is those connections beyond the classroom that will deepen your commitment, understanding, and involvement in the subject matter, making it more than just a matter of classroom learning.

GOALS AND SUMMARY WRITING

1. Make a list of academic goals for the remainder of the current term. Make the goals specific and challenging. Instead of saying "work harder on psychology course," commit yourself to "prepare reading notes on reading assignments before class and go over lecture after each class to identify main themes and points." Be detailed about what things you wish to accomplish and what you need to do to accomplish them. Write the goals down and post them in a conspicuous place where you will see them every day.
2. Reread all the course information provided by your instructors this term and make a list of the goals they have set for their classes. Compare these goals with the goals that you have set for yourself.
3. Read the following paragraph and combine as many sentences together as you can while still preserving the meaning and continuity of the passage.

   Alfred Binet developed a test for intelligence. He was a French psychologist. He developed the test in 1904. It is a famous test. It is still used by psychologists today. It is called the Stanford-Binet test. It asks questions about common knowledge. It measures a person's mental age. Psychologists divide this mental age by the person's chronological age. They then multiply the number by 100. This number is called the IQ. IQ stands for "intelligence quotient." There are many problems with measuring intelligence this way. It is difficult to define "intelligence." It is difficult to define "common knowledge." These factors affect the value of IQ tests. They cannot be considered completely reliable. They may predict achievement in some areas and not others. Their predictions may be culturally biased. Mental age is itself a culturally defined concept. It is not clear exactly what the tests measure. There may be

kinds of intelligence that do not correlate with the test. They may give an inaccurate idea of intelligence. Intelligence may not be a separable personal attribute. Intelligence may be a set of responses to situations. Intelligence may be developed through experience. Intelligence may not be just how you work alone. Intelligence may have to do with what you can do with others. IQ scores make intelligence appear like an inborn fixed horsepower.

4. Design a final exam for a course you are taking this quarter. Decide how much of the exam should consist of objective questions (multiple-choice, true-false, etc.), how much should consist of short-answer or short essay questions, and how much should consist of longer overview or summary essays. Write all of the questions in the way that you think your instructor would write them and then take your own final as a practice for the real thing.
5. Imagine that you have been commissioned to write a formal summary of a movie for publication in a newspaper. You have been allocated 250 words and will be expected to provide a thorough, professional synopsis of important plot, character, and thematic elements. Select a movie that you have seen recently and summarize it as completely as possible in the assigned length.
6. Select a course that you have taken recently or are currently taking and write down three important themes that have recurred throughout this course. Write a general overview question about each of these recurring themes, and then answer one of the three.

1. Find out if any courses on campus use electronic exams. If so, find out about their formats and how they are used in the courses. Write a few paragraphs describing what you have found.
2. Investigate the spell-checker, grammar checker, and other proofreading tools available on the word processor you use or available at your college computer lab. Try out these tools that are designed to improve the final appearance of your writing. Write a few paragraphs describing how these programs work and how useful they are.