

The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom

Second Edition

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Foreword by Maryellen Weimer



## Formal Writing Assignments

Part Two of this book focuses on the design of problem-based assignments to promote critical thinking and active engagement with course subject matter. The present chapter concerns the design of formal writing assignments, which call for finished prose. Formal writing usually requires multiple drafts and is thus distinguished from equally important informal, exploratory writing aimed at generating, developing, and extending thinking on a subject. (How to use informal exploratory writing in your courses is the subject of Chapter Seven.)

Formal writing can range in length from microthemes (one or two paragraphs) to substantial research projects. The chapter's initial focus is on thesis-governed academic writing, but the concluding section surveys other kinds of assignments that let students write in alternative genres, often with a more personal voice and style.

Let's begin by comparing the traditional method of assignment writing with alternative methods.

## **The Traditional Method**

In American universities, a traditional way to assign writing goes something like this: "There will be a term paper due at the end of the semester. The term paper can be on any aspect of the course that interests you, but I have to approve your topic in advance." About halfway through the term, students may be asked to submit proposals for topics—usually stated as a topic area rather than as a research question or tentative thesis. The instructor either approves the topic or advises that it be narrowed or otherwise refined. In many cases, there is no further contact between teacher and student. (Sometimes the professor may ask for an outline and make comments on it.) At the end of the term, the teacher collects and grades the papers. Some teachers mark the papers copiously; others make only cryptic end comments. Much to teachers' disappointment, many students never pick up their papers from the teacher's office.

## **Alternative Approaches to Assigning Writing**

Early in my career in writing across the curriculum, I witnessed the power of alternative approaches to assigning formal writing. A memorable example came from my colleague at Montana State University, finance professor Dean Drenk, who asked his students to write a series of short essays, each of which must support either the positive or the negative side of a thesis on a controversial question in finance (Drenk, 1986; Bean, Drenk, and Lee, 1986). Drenk constructed the theses, which he sequenced from easy to more difficult, to cover various key issues in the field, such as the following:

The market is/is not efficient in strong-form, random-walk terms.

Bonds are/are not more risky investments than stocks.

Random diversification is/is not more reliable than selective diversification.

Each thesis support assignment requires students to understand and use key course concepts while simultaneously practicing the methods of inquiry, research, and argumentation in finance. Students must use research skills to find relevant data on their assigned issues, analyze the data, develop reasoned positions, and produce empirically supported arguments. Students are required to meet minimal standards on each thesis support essay before progressing to the next, and they are encouraged to rewrite their essays for higher grades, a bonus that stimulates revision. To provide feedback, Drenk developed an evaluative rubric focusing on the quality of critical thinking, the clarity of writing, and the adequacy of empirical support.

# Traditional and Alternative Methods Compared

The first of these methods—the traditional research paper—can be excellent for skilled upper-division students who have already learned the conventions of inquiry and argumentation in a discipline. At some point in their undergraduate careers, we want to turn students loose and say, "Okay, now talk and write like a new member of this discipline. Go find your own topic and do something interesting with it." But even for advanced students in the major, this "term paper" assignment could be improved by clearer specification of genre, audience, purpose. (See Chapter Thirteen on teaching undergraduate research.)

But for many college writers, the freedom of an open-topic research paper is debilitating. Not yet at home with academic writing or with the discourse conventions of a new discipline, these students are apt to produce either wandering "all about" papers (see pages 26–27) rather than arguments, or quasi-plagiarized data dumps with long quotations and thinly disguised paraphrases. Even worse, students may resort to outright plagiarism. Because the traditional term paper assignment does not guide students toward formulating a problem, developing a thesis, or arguing within the conventions of a disciplinary genre, it often does not stimulate the complex thinking (and hence the need for multiple drafts) that teachers desire. In addition, traditional term papers often do little to enhance learning of course content. They supplement a course but do not focus students' mental energies on the most important or most difficult course concepts or issues.

In contrast, Drenk's thesis support assignments focus directly on course concepts and teach thesis-governed argumentation in the discipline. In investigating a series of issues in finance, students see that knowledge in this discipline is not an assemblage of inert concepts and data but rather an arena for inquiry and argument. Moreover, because Drenk's thesis support essays are short (one to two pages), students can rework them through multiple revisions and transfer what they have learned from one essay to the next. Furthermore, Drenk's emphasis on standards, combined with his allowing of rewrites, often leads to a surprisingly high level of student work. "Although doubts always accompany teaching," Drenk says, "I know that I am successful as a teacher when students confess that they learned more through my writing assignments than through any other academic activity" (Drenk, 1986, p. 55).

### **EXHIBIT 6.1**

## Considering the Effects of Small Variations in Assignment Design

Suppose that you are a nursing professor with two goals for a research assignment: (1) you want to deepen students' thinking about controversies in alternative medicine and (2) you want to create a writing assignment that will help your students learn to read the professional literature with sophistication and to do the kind of critical thinking, inquiry, analysis, and problem-solving required of nurses. You decide to have your students investigate the controversy over therapeutic touch (TT), a form of alternative medicine in which the healer is said to effect therapeutic changes in the patient's energy field by moving his or her hands slightly above the patient's body. Consider the following five assignment options and the discussion questions that follow:

### **Assignment Option 1**

Write an eight- to ten-page research paper on therapeutic touch. Follow APA conventions for documentation.

### **Assignment Option 2**

You are a staff nurse at a large urban hospital. Recently the hospital became embroiled in a major controversy when several nurses were discovered to be practicing TT on patients without the permission or knowledge of their supervisors or of attending physicians. The hospital governing board reprimanded the nurses and issued a general statement forbidding the practice of TT, which they called "non-scientific quackery." Research the professional literature on TT, looking especially for evidence-based studies. Then write a four- to five-page argument, addressed to the hospital governing board, supporting or attacking the board's decision to forbid the practice of TT. Support your position with reasons and evidence based on the professional literature.

### **Assignment Option 3**

Assume that you and several colleagues seek grant funding to do a controlled research study on the efficacy of TT for reducing anxiety and pain in surgery patients. Research the current professional literature on TT and then write the "review of the literature" section of your grant proposal.

### **Assignment Option 4**

Do a literature search to find several empirical studies of TT. Choose one of these studies for this two- to three-page paper. Write a critical review of your selected article in which you (1) summarize the purpose, method, and results of the study (in your own words—don't copy the abstract) and (2) write a critical review of the article in which you analyze the extent to which it provides or doesn't provide a scientific basis for regarding TT as evidence-based medicine.

### **Assignment Option 5**

Should schools of nursing and major nursing organizations give their imprimatur to TT? In some quarters, nurses are being ridiculed for their attraction to "new age mysticism." In other quarters, nurses are praised for their openness to modalities of healing other than Western science. For this assignment write an eight- to ten-page exploratory research paper that describes chronologically your own search for a personal answer to this question. The paper should start with a reflection on where you stood on this issue before you began your research, and why. (Being confused or uncertain is OK.) Then write a first-person, reflective narrative of

your thinking process as you investigated your quest on by researching the professional literature, talking with classmates, and drawing on your own personal experiences, memories, and observations. Your narrative should include a summary of at least three professional articles, followed by your own intellectual wrestling with that article's ideas. By the end of your essay, sum up how your ideas evolved during your process of research and reflection. You will be rewarded for the quality of your exploration and thinking processes. In other words, your goal is not to take a stand on this issue, but to report on your process of wrestling with it.

### **Discussion Questions**

- 1. What differences in thinking processes are apt to be encouraged by each option?
- 2. What are the advantages and disadvantages of each option?
- 3. Which assignment or sequence of assignments would you choose were you the nursing professor?

# Thinking Rhetorically: Five Variations on the Same Assignment

When designing formal writing assignments, instructors should consider how variations in the rhetorical context—purpose, audience, genre—can create significant differences in students' writing and thinking processes as well as in their final products. As an illustration, consider the small group task I sometimes present at writing-across-the-curriculum workshops (Exhibit 6.1).

When I give this task, I often find surprising consensus among participants about the strengths and limitations of each assignment. Almost universally, faculty reject the first option—the "research paper"—which they see as a pseudo-academic or "school" genre that invites "all about" reports rather than higher-order critical thinking. Because it provides no guidance about purpose, audience, or genre, students are led simply to gather and report information. In contrast, option 2 (the civic argument) and option 3 (the literature review) are important real-world genres, the first aimed at public policy making and the second at producing academic scholarship. Both require a high level of critical thinking. Participants also recognize that option 5 (the exploratory paper), while not a typical academic genre, links academic subject matter to the genre of the "personal essay," drawing on the values of open-form expressive writing that is "close to the self." (See Chapters Three and Four.)

The assignments also differ in the kinds of critical thinking they are apt to evoke. Whereas option 2 demands an argumentative thesis, option 5 rewards uncertainty and inquiry. Option 3 seems to invite both inquiry and argument. It invites inquiry in that its goal is to find gaps or remaining unknowns in the literature and to establish a new research question worthy

of funding; it requires argument in that it must show why the new research question is both problematic (no one else has solved it) and significant (it is worth solving). This assignment, faculty tend to agree, is the most difficult of all the options.

Option 4 also stimulates interesting discussion. Everyone agrees that it is the most basic of the assignments, teaching the skills of summary and critical analysis needed for any of the more difficult options. Participants often suggest that this assignment could become a preliminary skill-building or "scaffolding" assignment given early in the term. After students have produced an option 4 paper and received feedback from the instructor, they would be better able to complete the research and do the critical thinking needed to produce options 2, 3, or 5.

So which option would participants choose for their own classrooms? Participants are usually divided in about the same proportions as those revealed in Thaiss and Zawacki's (2006) research on faculty preference for academic versus alternative forms (see Chapter Four, page 54). Many participants are attracted to option 2, which requires closed-form, thesisgoverned writing in a civic rather than academic context. They argue that nurses should be encouraged to join public debates about health care and develop strong leadership voices in the civic arena. Others are attracted to the personal reflective writing evoked by option 5, which gives students space to connect their professional training to their personal lives and to wrestle with the philosophic issues that underlie controversies about Western medicine. Still others value the literature review because it is so central to mainstream academic writing. Some, however, believe that option 3 as written is too difficult for undergraduates—that doing grant proposal literature reviews would be more appropriate for graduate school. (These faculty want to develop an assignment more extended than option 4 but less difficult than a professional literature review.) Others argue that undergraduates can do quite sophisticated research that engages the professional literature, and they welcome the challenge of teaching students to do a literature review.

My point in doing this exercise is to show instructors that they have a range of options in designing formal assignments and that the rhetorical context they build into their assignments influences the thinking and writing processes of their students. When planning assignments, therefore, teachers need to consider not only their conceptual learning goals but also the thinking and writing processes that they want their assignments to encourage.

The remaining sections of this chapter focus on issues of planning, designing, and giving formal writing assignments.

# Articulation of Learning Goals as Preparation for Designing Assignments

Teachers can build more learning power into their writing assignments and other critical thinking tasks if they focus first on their learning goals for students. Prior to designing assignments, teachers can develop their learning goals by considering answers to the following questions:

- 1. What are the main units or modules in my course? (For example, two weeks on X, four days on Y, and another two weeks on Z.)
- 2. What are my main learning objectives for each of these modules and for the whole course? What are the chief concepts and principles that I want students to learn in each unit or module?
- 3. What thinking skills am I trying to develop within each unit or module and throughout the whole course? (Such skills include ways of observing, habits of mind, questioning strategies, use of evidence—whatever thinking processes are important in your course or discipline. To put it another way, what ways of thinking characterize a historian, an accountant, a chemist, a nurse, and so forth?) Teachers often consolidate their highest level conceptual and disciplinary thinking goals into five or six key learning outcome goals for the course.
- 4. Based on previous students' experience, what are the most difficult aspects of my course for students? When have students most struggled? When have I been most unhappy with student performance? What concepts or ways of thinking are most challenging?
- 5. If I could change my students' study habits, what would I most like to change?
- 6. What difference do I want my course to make in my students' lives—in their sense of self, their values, their ways of thinking? What is my unique stamp on this course? Ten years later, what do I want them to remember most about my course?

Of course, it is impossible to design assignments that have an impact on every facet of a course. But teachers can put together a combination of formal and informal writing assignments and other kinds of critical thinking tasks that will help students achieve many of the course's learning goals. (For a more detailed approach to articulating course goals, see "The Teaching Goals Inventory" in Angelo and Cross, 1993, pp. 13–23.) In designing formal assignments, teachers have numerous options. Before looking specifically at these options, first we'll discuss

the principle of "backward design" or "reverse engineering" of a course or curriculum.

# Planning Your Course Backward by Designing the Last Assignment First

The final writing assignment in a course can build on the skills of thinking, seeing, analyzing, and arguing that students have been developing through the whole course. It encourages students to synthesize earlier work and to focus on problems more complex than those encountered earlier in the course. If teachers design this last assignment first, they can analyze its level of difficulty, determine the kinds of problems students are apt to encounter, and then design earlier assignments that help students build the skills needed for the final assignment. (These earlier assignments are often called "scaffolding" assignments based on the metaphor of platforms that workers can climb to reach higher levels of a wall.) Suppose the nursing professor discussed earlier wanted to use option 2 in Exhibit 6.1 for the final assignment for the course (the civic argument for or against allowing nurses to offer TT to patients). By designing the course backward, the teacher might assign option 4 (a critical review of one article) and perhaps option 5 (the exploratory paper) early in the term as scaffolding assignments aimed at promoting deeper thinking and delaying closure.

Of course, a professor might prefer not to sequence assignments in this way. Rather than having a series of scaffolding tasks that lead to a final major paper, a teacher might prefer two or three shorter assignments of equal weight focusing on different course goals. But even in such cases it is possible to apply backward design to each short assignment. What inclass or out-of-class exploratory tasks could help students generate ideas for this assignment? What small group exercises or in-class debates would give students the kind of analyzing or arguing practice demanded in the assignment? What kinds of assignments in lower-level courses would prepare students to write more complex disciplinary papers when they are seniors? (I'll return to the principle of backward design in Chapter Thirteen, which considers the backward design of a department's whole curriculum for majors. For more on the concept of backward design, see Wiggins and McTighe, 2005, and Fink, 2003.)

## **Best Practices in Assignment Design**

Scholarship in teaching and learning has led to considerable consensus on the design of effective writing assignments.

## The NSSE/WPA Research on Writing and Deep Learning

Particularly important is research from the Consortium for the Study of Writing in College—a joint project of the Council of Writing Program Administrators (WPA) and the National Survey of Student Engagement (NSSE) headquartered at the University of Indiana. Using extensive data compiled from NSSE surveys at a variety of institutions, the researchers conclude that the use of writing to promote deep learning depends less on the amount of writing assigned in a course than on the design of the writing assignments themselves (Anderson, Anson, Gonyea, and Paine, 2009). Effective assignments, this study concludes, have the following three features:

- o Interactive components: An assignment's "interactive components" give students opportunities to brainstorm ideas prior to drafting, to get feedback on drafts from the instructor or peers, to visit a campus writing center, or otherwise to see writing as an interactive exchange between writers and readers. Interactive activities situate writing as a process of inquiry and discovery, promote productive talk about the writer's emerging ideas, and encourage multiple drafts and global revision. For assignments early in the term, allowing students to rewrite an assignment for a new grade can particularly motivate deep learning about both subject matter and writing as a process.
- o A meaning-constructing task: A "meaning-constructing" task asks students to bring their own critical thinking to bear on problems that matter to both the writer and the intended audience. A meaning-constructing task typically presents students with a disciplinary problem, asks students to formulate their own problems, or otherwise engages them in active critical thinking. Meaning-constructing tasks discourage the kind of alienation we examined in Chapter Two, in which students resort to "all about" reports, data dumps, or cut-and-paste collages from the Web.
- Clear explanations of writing expectations: Often an assignment that seems clear to the instructor can be confusing to students. Effective assignments clearly present the instructor's expectations for a successful performance. Ideally the assignment prompt also explains the purpose of the assignment in terms of the course's learning goals and presents the instructor's grading criteria, often in the form of a rubric.

The NSSE/WPA research accords well with theoretical thinking about assignment design in the WAC literature; I refer to it regularly throughout this chapter and elsewhere in the book.

### **EXHIBIT 6.2**

## The Two Dimensions of a "Meaning-Constructing" Task

GIVE YOUR STUDENTS A "RAFT" ... AND A "TIP"

COLUMN

Role (or purpose) Audience Format (or genre) Task Task as Intriguing Problem\*

\*The instructor can set the problem or ask students to formulate their own problem.

## RAFT and TIP: Further Explanation of "Meaning-Constructing" Tasks

An effective meaning-constructing task has two dimensions: (1) it presents students with an authentic problem requiring their own critical thinking or invites them to pose their own problem, and (2) it presents the problem within a rhetorical context that gives students a role or purpose, a targeted audience, and a genre. To make these dual dimensions "sticky," I like to refer to the mnemonic shown in Exhibit 6.2.

This mnemonic stresses both the subject matter dimension of a good assignment (the TIP) and the rhetorical dimension (the RAFT). Some teachers might object to the apparent constraints of RAFT and TIP in that they may seem to limit students' freedom and creativity. Teachers often resist formulating the problem for students or specifying a genre and audience, on the premise that students need to be free to choose their own topics or find their own way into a subject. These are important objections. Giving students more open-ended assignments can work beautifully so long as the teacher guides students toward formulating a problem (rather than writing about a topic) and encourages them to write to a targeted audience for some purpose within some genre. I'll return to the problem of assigned problems versus student freedom later in this chapter.

## **Designing an Effective Assignment Handout**

Following the NSSE/WPA criteria and the RAFT/TIP dimensions of a meaning-making assignment, a formal writing assignment handout typically has the following features:

### Task

The task itself sets forth the subject matter dimension of the assignment. For thesis-driven essays requiring disciplinary ways of thinking and arguing, tasks are best presented as disciplinary problems that the student must address, unless the teacher wants students to formulate their own problems. An alternative is to imply the disciplinary problem by providing a contestable thesis for the student to support or attack, a data set that might lead to competing interpretations, or a genre that requires a disciplinary way of thinking. (Suggestions for alternative kinds of tasks—including reflections, exploratory papers, or expressive or creative writing tasks—are listed later in this chapter.)

### **Role or Purpose**

As part of the rhetorical context, the "role" or "purpose" helps students understand the kind of change they hope to bring about in their audience's view of the subject matter. Are they supposed to bring new information to the reader (informative purpose)? Clarify something that puzzles the reader (analytical purpose)? Change the reader's stance on an issue (persuasive purpose)? Deepen a reader's sense of an issue's complexity (reflective or exploratory purpose)? The writer's role or purpose is closely connected to the audience's opening stance on the writer's subject, as shown in the next section.

### **Audience**

Specifying an audience further sets the rhetorical context. When specifying an audience, the instructor needs to help students visualize the audience's initial stance toward the writer's subject. The instructor's goal is to move students toward a thesis with tension—what Graff and Birkenstein (2009) summarize as the "They say/I say" move: "Many people think X, but I am going to argue Y" or "Before reading my paper, my reader will think X. After reading my paper, my reader will think Y." The writer's goal is to change in some way the reader's initial stance or view. The implied stances of audiences can be presented in ways such as these:

- Several classmates who missed last week's lectures are confused about X. Write them a letter that . . .
- You are a research assistant to Senator Smith, who needs to decide X. Write a policy brief that . . .
- Scholars are divided about X. Write a formal academic paper presenting your position on this disciplinary problem. Imagine presenting the

paper at an undergraduate research conference where listeners are apt to be skeptical of your thesis.

Audiences such as these allow students to write either from a position of power (to audiences who know less about the topic than the writer) or of equality (to audiences whose views on the topic differ from the writer's).

### **Format or Genre**

By specifying a genre (academic paper, op-ed piece, memo, proposal, experimental report), the assignment helps students transfer earlier genre knowledge to the current task and make decisions about document design, organization, and style. Here the instructor can also specify expectations about length, manuscript form, documentation style, and so forth.

### **Interactive Components**

By building into the assignment a time schedule for completion of drafts, peer review workshops, revisions, and so forth, the instructor encourages writing as a process of discovery and clarification. Instructors might also consider asking students to save all doodles, notes, outlines, and drafts and to submit these along with the final essay. (This requirement rewards students for following the recommended process and effectively discourages plagiarism.) Providing opportunities for students to brainstorm ideas before drafting or for getting feedback on drafts from the instructor particularly promotes deep learning. (See Chapter Fifteen for strategies on coaching the writing process.)

### **Evaluation Criteria**

This section explains how the instructor will grade students' work. Attaching a rubric is particularly helpful (see Chapter Fourteen on developing grading criteria and designing rubrics).

# **Examples of an Effective Assignment Handout**

In this section, I provide an example of an assignment handout that follows the NSSE/WPA criteria and the RAFT and TIP guidelines. I also analyze some of the issues the professor faced in designing his course and creating the assignment. The example handout (shown in Exhibit 6.3) comes from my colleague at Seattle University, historian Marc McLeod, who designed the assignment for a first-year seminar in Latin American history. His discussion of "interactive components"—particularly the invitation to get

(Continued)

#### **EXHIBIT 6.3**

## McLeod's Assignment Handout for First-Year Seminar

One of the most prominent topics in the historiography of colonial Latin America has been the nature of the encounter between Amerindians and Europeans beginning in 1492. According to a recent review essay by historian Steve J. Stern, one of the three main paradigms or frameworks for interpreting the conquest has been that of the conquest as an "overwhelming avalanche of destruction," characterized by the military defeat and demographic collapse of indigenous populations, the brutal treatment and ruthless economic exploitation of surviving natives by rapacious conquistadors, and the forced disappearance of pre-Columbian cultural, political, and social ways. Based on your reading of Inga Clendinnen, Ambivalent Conquests: Maya and Spaniard in Yucatán, 1517–1570, would you agree with this view of the conquest as one of extreme destruction and trauma? If so, why? If not, what is the best way to describe the nature of the encounter between Spaniards and Amerindians in colonial Latin America?

Using Clendinnen, Ambivalent Conquests, as well as the other readings, lectures, and discussions we have had in this course, write a 4–6 page (typed, double-spaced, stapled) essay answering the above question. The assignment is due October 10. Assume that you are writing an academic paper for an undergraduate conference on Latin America. Also assume that your audience has NOT read this assignment and will attend your conference session because your title hooked their interest. Your introduction should explain the problem-at-issue before presenting your thesis. Because this is an academic paper in history, follow the manuscript form of the Chicago Manual of Style and Kate L. Turabian, A Manual for Writers of Term Papers, Theses, and Dissertations. I will grade your paper using the following rubric:

Introduction and Thesis Statement										
10	9	8	7	6	5	4	3	2	1	0
Explains problem to be addressed; provides necessary background; ends with contestable thesis statement; thesis answers question  Quality of ideas and argument			Problem statement missing; problem poorly focused; thesis unclear, not contestable, and/or does not fully answer question				Paper begins without context or background; paper lacks thesis statement; reader confused about what writer is attempting to do			
20	18	16	14	12	10	8	6	4	2	0
Strong insights; remains focused on question; effectively links course materials to question; good historical reasoning  Use of evidence			Some good insights; loses focus on question or gaps in argument; connections between question and course materials vague; unsupported generalizations				Fails to adequately answer question; contains no clear argument; descriptive rather than analytical; tends to summarize course materials			
10	9	8	7	6	5	4	3	2	1	0
Excellent use of different course materials to support argument; effectively provides relevant examples, evidence, and appropriate quotes			Uneven use of evidence and examples; evidence not always directly relevant; over-reliance on a single source; significance of quotes not readily apparent				Lack of evidence and examples; evidence, if provided, not related to overall argument; limited reference to course materials			

Organization and Clarity											
10	9	8	7	6	5	4	3	2	1	0	
Clear, well-organized paper; paragraphs begin with topic sentences related to thesis; topic sentences fully developed in each paragraph; paper flows logically, reader doesn't get lost			some to others not full occasion	Generally sound organization; some topic sentences strong, others weak; some paragraphs not fully developed; reader occasionally confused by awkward organization, unclear sentences, fuzzy ideas				Poor organization, lacks clarity; paper not organized around coherent paragraphs; paragraphs lack topic sentences; prose is hard to follow and understand			
10	9	8	7	6	5	4	3	2	1	0	
Flawless paper, or an occasional minor error. Looks like a professional history paper; notes follow assigned format; contains an academic title.			Distractions due to spelling, punctuation, grammar errors; writer seems a bit careless. Varies from assigned style and format in a few ways; contains non-academic title.				Paper seriously marred by mistakes in grammar, spelling, and punctuation; lack of editing. Paper does not follow assigned style and format; papers lacks a title.				

feedback on drafts—was in the syllabus rather than in each writing assignment handout.

Although there are many ways to think about writing assignments and overall course design, I particularly value some of the choices McLeod made for this assignment. Let's go behind the scenes for a moment to analyze some of the decisions McLeod had to make.

## **Problem-Focused Versus Topic-Focused Task**

McLeod could have presented the assignment as a topic rather than a problem: "Write a paper on a topic of your choice connected to Clendinnen's book." Topic-focused tasks, however, often lead to "all about" reports or unfocused data dumping unless the student is able to convert a topic into a disciplinary problem. McLeod's problem-focused assignment puts students on the right track from the start by helping them see how academic writing is rooted in controversies or unknowns within an academic community.

## **Task-Only Versus Task-with-Rhetorical-Context**

Because teachers across the disciplines focus primarily on subject matter, they may not consider the importance of specifying a rhetorical context within an assignment. However, providing a rhetorical context helps students develop transferable rhetorical skills that are essential to any writing situation (see Chapter Three). McLeod creates a rhetorical context for this assignment by asking students to write an academic paper for an undergraduate conference on Latin America. When students realize that

conference participants choose the papers they want to hear on the basis of their titles, they begin to see how titles serve an important rhetorical purpose. Likewise, they appreciate how readers need to be introduced to the problem-at-issue before they can understand the writer's thesis. This assignment also introduces first-year students to a genuine academic genre—the scholarly conference paper—and gives McLeod an opportunity to explain how scholarship is advanced in an academic culture.

## Disciplinary Versus MLA Documentation Style (for a General Education Course)

Students tend to see academic documentation as a baffling maze of arcane, anally compulsive rules. Because students at my institution learn the Modern Language Association (MLA) style in first-year composition, it might seem more logical and efficient for McLeod to let students use MLA instead of Chicago in this first-year history course. But to do so would be to mask useful-to-learn differences between disciplines. In my view, the takeaway knowledge about documentation that students should learn in first-year composition is not how to follow MLA style but how to adapt efficiently to different styles. Students need to understand why each discipline has its own characteristic systems. (Historians prefer Chicago style because it welcomes footnotes and provides detailed guidelines on how to document archival sources.) In specifying Chicago style, McLeod helps students see documentation rhetorically. He's telling students, in effect, "to get used to it"—documentation varies from discipline to discipline. Instead of memorizing one system, students need to learn to follow the directions of different style manuals. I thus applaud McLeod's specification of Chicago style, not because he personally prefers it or because it is better than another style but because it marks the discourse community of historians.

### Same Task for All Students Versus Freedom of Choice

In designing a syllabus, instructors often wrestle with the dilemma of how much freedom to provide in individual assignments—whether to have the whole class work on the same problem-based task or allow students to choose their own problems. For this course, McLeod assigned three four- to six-page papers on assigned problems rather than giving students a choice.

There are advantages either way. When students choose their own topics, they may become more invested in the assignment. Moreover, learning to pursue one's own passions and to find problems that connect with one's own interests is crucial for a liberal education. Yet there are also disadvantages in giving students this freedom. Freedom of choice places extra work on the instructor, who often needs to monitor students' choices

and help them convert broad topic areas into a problem focus. Additionally, when students pursue their own problems the instructor has only limited ways to connect the paper assignment to in-class work. In contrast, when all students work on the same problem, class time can be devoted to debates, brainstorming sessions, and small group exercises on thinking like a historian (examples of the NSSE/WPA "interactive components" that promote deep learning). Although it may seem that students have less nominal freedom when given an assigned problem, they often feel a kind of existential freedom in having to stake out a claim and make an argument, especially when confronted with classmates' alternative claims. From this perspective, students' individual voices are expressed in the distinctiveness of their thesis statements and methods of argument rather than in their choice of topic.

McLeod opted to give students assigned problems because this approach promoted, in his view, the most effective way to maximize active learning while giving him an efficient means of coaching disciplinary ways to use evidence and make arguments. (Of course, it is possible to mix and match methods also—for example, to give students an assigned problem for the first paper and then to let them pose their own problems for a second or third paper.)

## A Common Problem: Asking Too Many Questions

Some instructors, in an understandable effort to stimulate students' thinking, include in their assignments a whole series of "you might want to think about" questions instead of a single focusing question. My experience suggests that this practice confuses students more than it helps. Exhibit 6.4 is an example of too many such questions.

### **EXHIBIT 6.4**

## **Confusing Task Statement**

In the graveyard scene of *Hamlet*, Shakespeare calls to mind the medieval *memento mori* ("remember thy death") philosophic tradition by having Hamlet contemplate the meaning of a human skull. But Shakespeare alters his sources by adding the clownish gravediggers. How does the presence of the gravediggers influence the way you read this scene and perhaps the play itself? Why did Shakespeare add the gravediggers? Do you think "comic relief" is an adequate explanation? Do you think the gravediggers are funny? Absurd? Blasphemous? How does Hamlet's attitude toward the gravediggers affect the scene? Do you think it is appropriate to sing while digging a grave? You might also want to think about the jokes they tell. Do these jokes comment on themes in the play? Do you think that Yorick was more like the gravediggers or more like Hamlet? Does Hamlet seem like a Christian in this scene or something else? You may want to do some research to help you with this topic, but you don't need to. If you do use research be sure to cite your sources.

Although the instructor probably regards these questions as suggestions to stimulate thinking, students may believe they are supposed to answer all of them in some way. Because the questions seem parallel rather than hierarchical, students are apt to produce a series of short answers, addressing each question in turn, rather than a unified essay.

In Exhibit 6.5, the assignment is phrased as a single question and now forces the student to frame a single answer as a thesis statement for the essay. (Some of the "you might want to think about questions" could be used as informal exploratory assignments earlier in the course to stimulate thinking about the gravediggers.)

# Asking a Colleague to "Peer-Review" Your Assignment Handout

A good way to fine-tune an assignment is to ask a colleague to read it and role-play a student, trying to predict how students would react. Then discuss with your colleague questions such those as in Exhibit 6.6.

Such discussions with colleagues may help you see ways to revise the assignment to make it both stronger and clearer.

## **Giving the Assignment in Class**

When giving the assignment in class, allow plenty of time for students to ask questions. No matter how clearly you think you have explained the assignment, students will ferret out ambiguities. If possible, show students an A paper from a previous class on a slightly different but related topic.

### **EXHIBIT 6.5**

## **Improved Task Statement**

In the graveyard scene of *Hamlet*, Shakespeare calls to mind the medieval *memento mori* ("remember thy death") philosophic tradition by having Hamlet contemplate the meaning of a human skull. But Shakespeare alters his sources by adding the clownish gravediggers. What do you think is the function of the gravediggers in this scene? Imagine readers who believe in the "comic relief" theory: "The function of the gravediggers is to supply comic relief. When we laugh at the grave diggers, we are temporarily relieving some of the tragic tension that has been building up." Your goal is to show these readers that the gravediggers serve a deeper, more complex function than comic relief. But what is that function? We'll be debating this question in class, so you'll have plenty of chances to generate ideas.

#### **EXHIBIT 6.6**

## **Questions for Collegial Peer Review of an Assignment Handout**

- Is the assignment clear? How might a student misread the assignment and do something not anticipated?
- Does the assignment focus on an "intriguing problem"—either directly or implied?
- Does the assignment specify a rhetorical context for the writer (that is, a purpose, audience, and genre)?
- Are my grading criteria clear? Does my rubric adequately explain criteria to students? Is my rubric too sketchy or too detailed?
- If you were a student, would you find the assignment interesting and challenging?
- If you were a student, how difficult would this assignment be? How long do you think it would take?
- If the assignment is quite difficult, could it be preceded by a simpler "skill-building assignment" that would serve as scaffolding?
- To what extent does this assignment stimulate critical thinking? Does it cause students to wrestle with key concepts or key thinking skills in the course?
- Is the purpose of the assignment clear? Does it seem to tie into my course goals? Would it seem like busy work to some students?
- Are the mechanics of the assignment clear (due dates, expected length, single versus double spacing, manuscript form, documentation style, and so forth)?
- Is the process students should go through as explicit as possible?
- Should I build more "interactive components" into the assignment to keep students productively on task? Some possibilities:
  - · Class time for brainstorming
  - · Submission of a thesis, title, and introduction
  - · Mandatory conference
  - Annotated bibliography
  - Opportunities for rewriting
- How easy will it be for me to coach and grade this assignment? What problems can I anticipate?

Even better, if you can afford the class time, pass out a set of representative essays, strong and weak, and ask students to grade them for themselves in an in-class collaborative session. (See Chapter Ten, page 194, for a discussion of group norming sessions.) You can then explain how you would grade the papers in order to clarify your expectations. Be prepared for a lively discussion!

In the rest of this chapter, I offer a variety of options for designing formal assignments. I have placed them loosely into four categories:

- Assignments leading to closed-form thesis-governed writing
- Microtheme assignments for writing-to-learn (includes an analysis of student microthemes in physics)
- More open forms: alternatives to the thesis-governed paper
- A potpourri of other kinds of alternative assignments

# **Assignments Leading to Closed-Form Thesis-Governed Writing**

Chapters Two and Four provide a rationale for closed-form, thesis-governed writing—the prototypical structure for most academic prose. Because thesis-governed writing does not come naturally to students, teachers need to encourage it. The following strategies suggest ways that you can teach students to write closed-form prose that addresses a problem with stakes.

## Present a Proposition (Thesis) for Students to Defend or Refute

In this strategy, the teacher's task is to develop arguable propositions that engage students with disciplinary controversies.

In recent years, advertising has (has not) made enormous gains in portraying women as strong, independent, and intelligent. [Cultural studies]

The overriding religious view expressed in *Hamlet* is (is not) an existential atheism similar to Sartre's. [Literature]

Prescribing Ritalin and other psychotropic medications is (is not) an appropriate treatment for behavioral problems of children. [Nursing]

This proposed bridge design does/does not meet the criteria set forth by the city in its request for proposal. [Civil engineering]

Schizophrenia is a brain disease/schizophrenia is learned behavior. [Psychology]

Thesis-support writing, as exemplified in these assignments, works best when students are urged to consider opposing views and to sift and weigh evidence on all sides. Teachers can help students consider opposing views by showing them how to add an "although" clause to a thesis statement along with appropriate qualifiers: "Although there is some evidence to suggest that schizophrenia is a learned behavior, the preponderance of current research favors the theory that schizophrenia is a brain disease." In addition, teachers can allow students to revise the provided thesis to represent their own arguments more accurately. (For further examples of thesis support assignments, see Chapter Nine, pages 152–153; see also, in Chapter Eleven, the "believing/doubting" strategy, page 192; and the "evidence-finding" strategy, pages 192–193.)

## Give Students a Problem or Question That Demands the Student's "Best Solution" Answer

Unlike the previous strategy, in which the instructor provides a controversial thesis to defend or attack, this strategy avoids a pro/con framework by inviting a variety of different thesis statements arguing different conceptual positions. In the following examples, the instructor's focusing question is italicized:

What should Project Manager Hisako Hirai propose to her supervisor in response to the problems that have cropped up in Week Three? Role-playing Ms. Hirai, write a memo to your supervisor presenting and justifying your recommendations. [Part of a business management case]

So far, your team has examined four alternative design solutions for the circumference-mounted radiator fan. Which solution do you think your team should propose to the project manager as the most optimal? Write a brief technical proposal to the project manager explaining your proposed solution and justifying it with reasons and evidence. [Mechanical engineering]

Gauss's law relates the field at the surface to the charge inside the surface. But surely the field at the surface is affected by the charges outside the surface. How do you resolve this difficulty? [Mullin, 1989, p.207] [Physics]

At the end of Act I of As You Like It, Celia says, as they contemplate leaving for the Forest of Arden, "Now go in we content/ To liberty, and not to banishment." This assignment asks you to analyze the meaning of "liberty" in As You Like It by contrasting Touchstone's view of liberty with that of Rosalind. Write a three- to four-page critical argument addressing this question: How does Rosalind's view of liberty differ from Touchstone's? [Literature]

## Assign a Thesis-Governed Paper Requiring Analysis of Raw Data

Another effective way to guide students toward thesis-governed arguments is to give them raw data (such as lists, graphs, tables) to analyze and have them write a thesis-governed paper based on the data. The meaning induced from the data becomes the writer's thesis. Selected pieces of the data serve as evidence.

To what extent do the attached economic data support the hypothesis "Social service spending is inversely related to economic growth"? First create a scattergram as a visual test of the hypothesis. Then create a verbal argument analyzing whether the data support the hypothesis. [Economics]

You and your friend are looking over the attached table and note that in 1998 the median income for all families was \$33,400 but the mean income was \$53,000. Your friend was confused about the difference between median and mean and didn't see any significance in this difference. Send your friend a well-structured email message, about one screen in length, that explains the difference between median and mean and then gives your answer to the following question: What can we say about the distribution of income in the United States if we know that mean income is considerably higher than median income? [General education mathematics]

## Create "Strong Response" Assignments Based on One or More Scholarly Articles or Other Readings

For this strategy ask students to read one or more scholarly articles or other texts. Then ask them to summarize each article's argument and provide a "strong response" that speaks back to the texts through closed-form prose. This strategy teaches skills of academic reading while showing students how to position themselves within a conversation of alternative views.

Do animals have rights? Read the assigned article by Peter Singer. In a short essay that sets up the question about whether animals have rights, summarize Peter Singer's argument in response to that question and then set forth the strongest objection that a naysayer might make to Singer. Don't for this paper reveal your own view. [First year seminar]

Read the speech President Barack Obama delivered at Cairo University in Egypt on June 4, 2009. Summarize the main argument of his speech and then analyze the rhetorical strategies he used to appeal to Muslim listeners and readers. [Communication]

(Continued)

In the introduction to a conference paper, you want to show that critics disagree on how to read the ending of Hawthorne's *The Scarlet Letter*. Read the two scholarly articles that I have placed on our course website. Then write the section of your introduction that will show the critical controversy over the ending of the novel. Devote about two hundred words to your summary of each critic. Note that I'm not asking for your own argument about the ending—just set up an interpretive problem by showing that critics disagree. [Literature]

### **Let Students Develop Their Own Questions**

This strategy gives students the greatest amount of free choice. Often, however, students need help learning how to pose appropriate questions.

Now that we have practiced asking interpretive questions about poems, consider Yeats's "Among School Children." Propose your own interpretive question about this poem, and then write an explication of the poem that tries to answer your question.

The Generic Term-Paper Assignment: Write a researched argument [specify length] on any topic related to the subject matter we have been studying. Early in your research process you must identify within your topic area a problem, question, or controversy that requires from you a contestable thesis statement supported by your own critical thinking. Use the introduction of your paper to engage your reader's interest in the problem or question you plan to address, showing why it is both problematic and significant. The body of your paper should be your own contestable response to this question made as persuasive as possible through appropriate analysis, argumentation, and use of evidence. Midway through the course, you will submit to the instructor a prospectus that describes the problem or question that you plan to address and shows why the question is (1) problematic and (2) significant.

This last assignment, which I have called "the generic term paper assignment," has a number of advantages. First, for teachers who like to give students as much freedom as possible, the generic assignment permits free choice of topics while guiding students toward thesis-governed prose that addresses a real problem. By requiring that the introduction set forth a problem, the assignment implies both an audience and a purpose, thus helping inexperienced writers overcome their tendency toward "all about" papers. Second, in its focus on question asking, the assignment encourages teachers to discuss the process of inquiry in their disciplines. Finally—and this is an advantage not to be taken lightly—the assignment is easy to coach. Well before the assignment due date, students can be asked to submit a prospectus explaining and focusing the question to be addressed

(the prospectus later serves as a rough draft of the introduction). In responding to the prospectus, the instructor can guide the student toward an appropriately delineated question and thesis. (See Exhibit 13.9, page 246, for an example of how I have used the generic term-paper assignment as the final project for a course designed to teach research writing to literature majors.)

For shorter assignments, an even simpler method of screening is possible: teachers can ask students to submit two sentences—their introductory question and their thesis statement—which can be quickly checked for focus and direction. Conceptual problems noted at this stage can often be solved through individual or group conferences or through referral of the student to a teaching assistant or writing center consultant. (See Chapter Fourteen for further discussion of this screening technique.)

# Microtheme Assignments for Writing-to-Learn

Although writing-to-learn is often associated with informal, exploratory writing such as journals, in-class freewriting, or "thinking pieces" (the subject of Chapter Seven), teachers can also design short formal assignments (I call them "microthemes") that help students learn important concepts in a course (Bean, Drenk, and Lee, 1986). I define a microtheme as a very short piece of formal, closed-form writing usually less than 250 words.

## **Examples of Microtheme Assignments**

In the following cases, consider how a physics professor and a psychology professor developed assignments focusing on key course concepts—acceleration versus velocity in physics and operant conditioning in psychology.

Microtheme assignments like these can prompt intense, purposeful rereading of textbooks and class notes while stimulating out-of-class discussions among students. Furthermore, students report that the act of writing often alerts them to gaps in their understanding. In the operant conditioning problem, for example, students reported in interviews with me that it was easier to explain how the professor conditioned the cats than how the cats conditioned the professor, yet the latter case is essential for full understanding of the concept.

[Physics] You are Dr. Science, the question-and-answer person for a popular magazine called *Practical Science*. Readers of your magazine are invited to submit letters to Dr. Science, who answers them in "Dear Abby" style in a special section of the magazine. One day you receive the following letter:

Dear Dr. Science:

You've got to help me settle this argument I am having with my girlfriend. We were watching a baseball game several weeks ago when this guy hit a high pop-up straight over the catcher's head. When it finally came down, the catcher caught it standing on home plate. Well, my girlfriend told me that when the ball stopped in midair just before it started back down, its velocity was zero, but its acceleration was not zero. I said she was stupid. If something isn't moving at all, how could it have any acceleration? Ever since then, she has been making a big deal out of this and won't let me kiss her. I love her, but I don't think we can get back together until we settle this argument. We checked some physics books, but they weren't very clear. We agreed that I would write to you and let you settle the argument. But, Dr. Science, don't just tell us the answer. You've got to explain it so we both understand because my girlfriend is really dogmatic. She said she wouldn't even trust Einstein unless he could explain himself clearly.

Sincerely,

**Baseball Blues** 

Can this relationship be saved? Your task is to write an answer to Baseball Blues. Because space in your magazine is limited, restrict your answer to 250 words or less. Don't confuse Baseball and his girlfriend by using any special physics terms unless you explain clearly what they mean. [Adapted from Bean, Drenk, and Lee, 1986, p. 35]

[Psychology] Consider the following problem:

In the morning, when Professor Catlove opens a new can of cat food, his cats run into the kitchen purring and meowing and rubbing their backs against his legs. What examples, if any, of classical conditioning, operant conditioning, and social learning are at work in this brief scene? Note that both the cats and the professor might be exhibiting conditioned behavior here.

You and some fellow classmates have been discussing this problem over coffee, and you are convinced that the other members of your group are confused about the concepts. Write a one-page essay (250 words or less) to set them straight.

From a teacher's perspective, these assignments—because they are short—have the additional benefit of being easy to grade. They use what we might call the "principle of leverage": a small amount of writing preceded by a great amount of thinking. Such assignments can be very effective at maximizing learning while minimizing a teacher's grading time. (For a discussion of how to grade microthemes quickly using "models feedback" rather than writing comments on the essays, see Chapter Fifteen, pages 314–315).

### **Using Microthemes for Formative Assessment**

Another benefit of microthemes is their use as formative classroom assessments of student learning. In designing write-to-learn assignments, we obviously hope that writing a microtheme will help students learn the desired concepts. Often—to our disappointment and chagrin—this is not the case. What many students reveal in their microthemes is the depressing variety of ways that they can misunderstand the very concepts we hoped they would learn.

Nevertheless, students' errors, mistakes, and misunderstandings can give us valuable insights into their thinking processes and provide clues about how to redesign and sequence instruction. Teachers who assess their students' understanding of concepts as a course progresses can adjust instruction to improve the quality of learning (Stewart, Myers, and Cully, 2010; Angelo and Cross, 1993). For assessing students' learning, short write-to-learn assignments are particularly effective because they provide direct windows into students' thinking processes.

Consider the following three student responses to the physics microtheme on acceleration versus velocity. The teacher graded the microthemes on a 1 (lowest) through 6 (highest) scale using the grading rubric shown in Chapter Fourteen (page 283). The following microtheme received a top score of 6:

#### High-Scoring Microtheme

Ask your girlfriend's forgiveness because she is absolutely right. An everyday definition of acceleration means speeding up. But the scientific meaning is more precise. It means the rate at which speed or direction changes over a certain period of time—two things really. Thus it is indeed possible for the ball to still be accelerating even when it has zero velocity. If the baseball had no acceleration when it stopped in midair, it would float in the air where it stopped forever. A baseball can accelerate in either of two ways. It can change its speed or it can change its direction of travel. If it does either or both of these things over a period of time, it has accelerated. As the baseball stopped in midair its speed—or velocity—became zero. Yet the acceleration was not zero because, like a stretched out spring, gravity was pulling at it. As you noticed, it soon turned around from going up and came plummeting straight down toward the catcher's mitt. During any given interval of time, it was changing direction or speed (velocity). Because of this, its acceleration (a measurement taken over a period of time) was never zero.

In giving this microtheme a 6, the instructor felt that the student both understood the concept accurately and explained it well in his own words to a new learner.

In contrast, the following microthemes were rated in the 1 to 2 range because their writers failed to apply the concepts accurately. But the significantly different patterns of thinking in these low-success microthemes helped the teacher understand each writer's difficulty.

### **Student A's Microtheme**

Acceleration is defined as the ratio of the change in velocity to the time over which this change occurs. When the pop-up left the hitter's bat it had a certain acceleration in the upward direction. This acceleration soon became deceleration (a decrease in speed with time) as the downward pull of the earth became strong enough to decrease upward acceleration to 0. This force is called gravity and by definition accelerates a free falling body at 32 ft./sec.<sup>2</sup> in the downward direction. When the ball paused at the peak of its flight, before beginning its descent, the upward acceleration and the downward acceleration were equal, even though the ball was stationary.

#### Student B's Microtheme

It makes me sad to hear that you have lost your girlfriend over such a trivial problem. I have some good news for you, though. You are right. An object cannot have 0 velocity and have acceleration too. I hope that with the arguments I lay forth in the next few paragraphs you two can reconciliate.

First, velocity is defined as how far an object moves during a certain time. If an object is moving then, in any direction, it has velocity. An airplane is a good example of this. It flies at a certain velocity such as 160 miles per hour, which means it covers 160 miles every hour it is in the air. Next we need a definition of acceleration. This is simply the change in velocity over a certain period of time. If you have an object that is moving at a constant velocity, and covers the same amount of distance during each time period, then it cannot have any change in velocity and thus any acceleration. Going back to the airplane we see acceleration when it speeds up or slows down.

Now we can use these two above concepts to give an answer to your question. If you have an object having no velocity it can have no change in that velocity, thus it cannot be accelerating. If this is still not clear think of the airplane sitting in its hangar. It has no velocity just sitting there, right? Therefore it cannot be accelerating or it would run through the side of the building! The baseball is the same way. I hope that the explanation above will help your girlfriend to see the light.

Student A's microtheme reveals a problem-solving strategy commonly encountered among novices in any discipline—what one of my colleagues calls "text-parroting." Unsure of the answer, the student uses the textbook as a crutch, attempting to imitate its authority by creating a dense, academic-sounding style complete with impressive technical data ("This force is called gravity and by definition accelerates a free falling body at 32 ft./sec.² in the downward direction"). To nonspecialist readers, this strategy is often successful—what students in my part of the country call a "snow job." When shown student A's microtheme, beginning physics students (and many faculty members outside of science) often give it a top-ranking score of 5 or 6. When it is pointed out that student A never actually answers the question (is the girlfriend right or wrong?) and that there is no such thing as upward and downward acceleration, the weakness of this microtheme starts to emerge. To help text-parroters make

progress on their next microtheme assignment, the instructor can urge them to replace their current strategy ("When in doubt, sound like the textbook") with a more productive one in which they explain the answer in their own words. (To see how a history professor helps students overcome text-parroting, see Walvoord and McCarthy, 1990, pp. 97–143.)

In contrast, student B writes admirably in his own voice but is led astray by his inability to transfer his own personal analogy (the airplane sitting in the hangar) to the problem of the baseball in midair. The microtheme's structure records the student's thinking process as he proceeds systematically from what he knows to what he is trying to learn. The middle paragraph shows a correct understanding of velocity and acceleration when applied to the simple example of the airplane in flight, and despite his misunderstanding by the end, the student may be only a few moments away from an "aha!" experience. A few probing questions from the instructor might make the concept snap into place for the student. By discussing microthemes such as this one, the instructor can review the concepts of acceleration and velocity while helping the class see where and how analogies can either be helpful or break down.

My point here is that short write-to-learn assignments, though not guaranteeing student learning, nevertheless provide a window into students' thinking that allows the instructor to monitor student progress, to readjust instruction, and to develop teaching strategies that reach different kinds of learners. (For a detailed account of how a mathematics professor analyzes and responds to learning problems revealed in student writing, see Keith, 1989, pp. 141–146.)

## More Open Forms: Alternatives to the Thesis-Governed Paper

As discussed in Chapter Four, many teachers may be wary of thesis-governed writing, or weary of it, or simply more attracted to more personal forms of writing that privilege the subjective, creative, personal voice of the writer. There are many ways to assign formal, finished-product writing that offer variations from strictly closed-form, thesis-up-front prose: exploratory essays, reflection papers, personal narratives, myths, dialogues, letters, poems or short stories, magazine-style articles for popular audiences, advertisements, satires, parodies, and so forth. What follows are examples of alternative assignments.

## **Formal Exploratory Essays**

An academically oriented alternative to thesis-based writing is an exploratory essay, which we might define as a *thesis-seeking* essay rather than a *thesis-supporting* essay. The assignment asks students to provide a chronological account of their thinking process while wrestling with a problem. It records the evolution of their ideas-in-flux (Ramage, Bean, and Johnson, 2009, pp. 175–208; Heilker, 1996; Spellmeyer, 1989; Zeiger, 1985). I often assign an exploratory essay as an intermediate stage in a research project leading ultimately to a thesis-governed final paper. Because the subject matter of the exploratory essay is *the student's thinking process* while doing research, the essay encourages and rewards critical thinking while giving teachers insights into the intellectual lives (and study habits) of their students. (An example of an exploratory assignment from nursing earlier in this chapter is "Assignment Option 5" on therapeutic touch, page 92; another example, from a Renaissance literature course, is in Chapter Thirteen, pages 247–249.)

Write a first-person, chronologically organized account of your thinking process as you explore possible solutions to a question or problem related to this course. Begin by describing what the question is, how and why you became interested in it, and why it is problematic for you (that is, why you can't answer it). Then, as you contemplate the problem and do research, narrate the evolving process of your thinking. Include three kinds of information for your reader: (1) external details of your search (coffee shop conversations, trips to the library, methods for finding sources—the narrative "story" of your search); (2) summaries of the new arguments/information you recovered along the way (summaries of arguments you read from the scholarly literature, new information from interviews, and so forth); and (3) your own internal mental wrestling to make sense of new material (what you were thinking about, how your ideas were evolving—reformulating the problem, changing your mind, experiencing confusion versus "aha!" moments). For this essay, it doesn't matter whether you reach a final position or solve the problem; your reader is interested in your process, not your final product. Make your exploratory essay an interesting intellectual detective story—something your readers will enjoy.

Another version of the exploratory paper is used by Berlinghoff (1989) in teaching mathematics. Berlinghoff asks each student to write a paper focusing "on the *process of solving* a particular problem" (p. 89, emphasis in original). He begins the course by teaching students a number of problem-solving tactics such as "check the definitions," "restate the problem," "draw a diagram," "argue by analogy," "solve a similar problem," and "reason backward from the desired conclusion." He then gives each student a challenging mathematical problem to try to solve and

asks the student to write a paper about his or her process. "The student is asked to describe," Berlinghoff explains, "how he or she used these problem-solving tactics to attack a particular question. Thus, there is always something to write about, regardless of whether or not the student can 'solve' the problem. Even a dead end is worthwhile, provided the path to it can be described. Moreover, by paying careful attention to the problem-solving tactics (because they provide a guaranteed source of material for their papers), students often succeed in doing a lot more mathematics than they think they can" (p. 90).

### **Reflection Papers**

A popular assignment for many teachers is a "reflection paper," sometimes called a "reader-response paper" or a "personal reaction paper." Although this genre seems to vary considerably in its meaning from teacher to teacher, in most cases it evokes writing that is more exploratory, tentative, and personal than the standard closed-form academic essay. Its essential nature is the exploration of the connections between course material and a person's individual life or psyche. Reflection papers are often assigned to elicit students' responses to complex, difficult, or troubling readings and invite the writer to "speak back" to the reading in a musing, questioning, and probing way (Qualley, 1997).

In a two- to three-page reflection essay, consider the following statement by Aristotle (*Ethics* II, 2) with respect to your own life:

"We are not studying in order to know what excellence is, but to become good, for otherwise there would be no profit in it ... [We must therefore] consider the question of how we ought to act."

Are you studying in order to become good? Explain what you think Aristotle is getting at and then explore your own response. [Philosophy]

Throughout this quarter we have looked at questions about the rights and obligations and the costs and benefits of being citizens of a civil society. Throughout our discussions about the social contract, the criminal justice system in the US, and panopticism on our city streets, we have returned again and again to questions of justice. Your task is to write a self-reflective essay that narrates AND analyzes how your understanding of (or confusion about) justice has evolved as you encountered various theories of justice we have read this quarter (Locke, Scarry, Williams, van den Haag, Reiman, Glover, and Foucault). Make sure that you are specific in your narrative (draw from specific journal entries and essays—quote from yourself!) and specific in your analysis (draw from at least three theorists we have read—quote from them!). In all cases, have fun with this and be real with yourself. [Adapted from freshman seminar assignment by Dr. Jennifer Schulz, Seattle University]

# A Potpourri of Other Kinds of Alternative Formal Assignments

Many other kinds of assignments remain. What follows, in no particular order, is a potpourri of ten different kinds of alternative assignments. Each of these asks students to wrestle with a disciplinary problem or disciplinary ways of thinking, but in styles and genres different from closed-form, thesis-driven prose.

- A psychology professor asks his students to write a poem from the perspective of a schizophrenic. The teacher claims that students learn a great deal about schizophrenia in their attempt to walk in a schizophrenic's shoes. The best poems are moving and memorable (Gorman, Gorman, and Young, 1986).
- A religious studies professor asks students to write a dialogue:

Write a dialogue between a believer (in God) and an unbeliever, in which the main issues that we have raised in class are debated. Each participant will be a spokesperson for a whole range of ideas and arguments, whatever serves to advance his or her basic position. As you write the dialogue, draw on the strongest ideas and arguments for each side that we have seen in this course. Wherever relevant, include your own responses or arguments. The point of this dialogue is not to have a clear victory for one side or the other; rather, the point is to engage the issues in an active and critical manner.

- A literature teacher has students rewrite the ending to a short story or retell a story from the perspective of a different narrator; a history teacher asks students to rewrite a historical narrative from a different point of view.
- A social psychologist requires students to interview someone who has a job, lifestyle, or worldview very different from the student's and then to write a "profile" of the person interviewed. The idea is for the student to encounter an "other" whose sphere of experience differs extensively from the student's.
- A women's studies professor asks students to create myths or parables to express their personal understanding or vision of the role of the feminine.
- A mathematics professor asks students to write their own "math autobiography" in which they reflect on their past math history and experiences. She reports getting very useful insights into the mathematical

- anxieties and learning problems of her students (as well as the causes of many of these problems).
- A history of religions professor asks students to write essays from the perspective of different persons—an exercise in decentering, seeing the world from a different context.

Write a brief letter back to Paul, as if you were a member of the Corinthian community, responding to his letter. You may choose any point of view you wish—arguing back from the point of view of a faction, repenting the error of your ways, or any other option you can think of.

- A sociologist teaching an environment course asks students to write personal narrative essays about their encounters with the natural world, taking as their models such nature writers as Loren Eiseley, David Quammen, Annie Dillard, and Lewis Thomas. In part, this course juxtaposes study of academic articles about nature and personal essays about nature. Students talk about what can and cannot be said in each genre.
- A teacher of a course called "Cyberspace and Digital Writing" asks students to create a multimodal argument. According to the assignment handout, this "text will be ten minutes in length composed with a computer software program that allows for multimodality (the inclusion of visuals, video, gestures, and/or sound to traditional literacy)" (Depew, 2009).

# Conclusion: Writing Assignments in the Context of the Whole Course

Developing high-quality writing assignments is one of the best ways to improve students' writing. A good writing assignment also deepens students' engagement with course material, promotes critical thinking, and helps students learn the discipline's characteristic methods of inquiry, analysis, and argument. This chapter has tried to expand the notion of formal assignments beyond the conventional "term paper" and has shown how variations in rhetorical context for an assignment can promote different kinds of thinking. In addition to offering suggestions for designing effective assignment handouts (with interactive elements, meaning-constructing tasks, and clear expectations), it has provided examples of various kinds of assignments including closed-form, thesis governed assignments, writing-to-learn microthemes, and a variety of alternatives to thesis-governed prose.

The next chapter focuses on informal, low-stakes or nongraded writing aimed at helping students generate and explore ideas, deepen their thinking, and make personal connections between their courses and their lives.