

data actively in writing assignments and in class discussions and debate. (Recall that by “writing assignments,” I mean anything from formal term papers to one-minute freewrites.) The rest of the chapters in this book discuss numerous strategies for integrating teacher-designed problems into a course.

## Teaching Thinking Through Teaching Revision \_\_\_\_\_

Composition research over the past two decades confirms that most students do not revise their essays, as the term *revise* is understood by expert writers (see, for example, Beach, 1976; Sommers, 1980; Faigley and Witte, 1981). Of course, students *think* they are revising, but usually they are merely editing—cleaning up spelling, tinkering with sentences, playing with punctuation. What they submit to us for grades, by and large, are first drafts that exhibit the problems typical of most first drafts, even those of expert writers: confused purpose, inadequate development, rambling organization, uncertain audience, lack of clarity. (I like to tell my students that a C essay is an A essay turned in too soon.)

What our students need to understand is that for expert writers, the actual act of writing causes further discovery, development, and modification of ideas. If one examines the evolving drafts of an expert writer, one sees the messy, recursive process of thinking itself. Early drafts, in the language of Flower (1979), are “writer-based” in that writers are struggling to clarify their meanings for themselves without yet worrying about clarity for audiences. Later, writers reshape their original drafts extensively in order to create “reader-based” prose, which aims to meet readers’ needs for effective organization, adequate development, and clarity. Expert writers often go through three or four—and sometimes dozens—of drafts. Typically, the final product is substantially different from the first draft.

The foregoing description differs considerably from the older “positivist” model of the writing process that many of us were taught in school. The old model looks like this:

### **A Positivist Model of the Writing Process**

1. Choose a topic.
2. Narrow it.
3. Write a thesis.
4. Make an outline.
5. Write a draft.

6. Revise.

7. Edit.

This description presupposes what Elbow (1973) calls the “think, then write” model of composing in which writers discover and clarify their ideas before they start to write. But it seriously misrepresents the way most academic writers actually compose. For example, few scholars report starting an article by choosing a topic and then narrowing it. Rather, academic writers report being gradually drawn into a conversation about a question that does not yet seem resolved. The writer-to-be finds this conversation somehow unsatisfactory; something is missing, wrongheaded, unexplained, or otherwise puzzling. Similarly, having focused on a problem, only rarely does a skilled academic writer write a thesis statement and outline before embarking on extensive exploration, conversation, correspondence with colleagues, and even, on some occasions, writing one or more drafts. A thesis statement often marks a moment of discovery and clarification—an “aha!” experience (“So *this* is my point! Here is my argument in a nutshell!)—not a formulaic planning device at the very start of the process.

Compare the positivist description of the writing process with the following “new rhetorical” or problem-driven description, which more accurately represents the thinking processes used by most academic writers. (I have adapted and abridged this model from Freedman, 1982.)

### **The Composing Processes of Expert Academic Writers**

1. *Starting point: perception of a problem.* Expert writers feel an uncertainty, doubt a theory, note a piece of unexplained data, puzzle over an observation, confront a view that seems mistaken, or otherwise articulate a question or problem.

2. *Exploration.* The expert writer gathers data through library or laboratory and field research and through probing of memory; explores ideas in a journal or research log, in the margins of texts, or on note cards or the backs of envelopes; analyzes, compares, puzzles, talks with others, writes to self; focuses intensely on problem. The expert writer often explores ideas by rapid drafting of potential pieces of the essay or by making notes, doodles, or tentative outlines.

3. *Incubation.* The writer takes time off from the problem, does other things, and lets ideas cook in the subconscious. These first three stages are all recursive—as writers alternate between exploration and incubation, their perception of the problem may change.

4. *Writing the first draft.* Expert writers try to get ideas down on paper in preliminary form. Some writers make an informal outline prior to writing; others discover direction as they write, often pursuing different branches of ideas without worrying about coherence. To avoid writer's block, expert writers lower expectations. They do not try to make first drafts perfect as they go.

5. *Reformulation or revision.* Having gone once through the territory, expert writers take another look at the problem and think it through again. Many writers report dismantling their first drafts and starting afresh, often discovering their true thesis at the conclusion of their first draft. At this point, writers often make new outlines; they begin considering audience; they clarify their rhetorical purpose; they try to make the essay work for readers. Several drafts are often necessary as writer-based prose is gradually converted to reader-based prose.

6. *Editing.* At this point, craftsmanship takes over from initial creativity. Writers worry about unity, coherence, paragraphing, sentence structure. Finally, writers begin to polish by correcting spelling and punctuation. Often, the recursive nature of the process is again felt as a writer, working on sentence structure, discovers new meanings or new intentions that require the rethinking of minor or even major parts of the essay.

This description of the writing process emphasizes the fact that expert academic writers are driven by their engagement with questions or problems and by their need to see their writing as a contribution to an ongoing conversation. Presenting students with this problem-driven model of the writing process has a distinct advantage for teachers. It allows them to link the teaching of writing to their own interests in teaching the modes of inquiry and discovery in their disciplines. Their goal is to get students personally engaged with the kinds of questions that propel writers through the writing process. Thus, the writing process itself becomes a powerful means of active learning in the discipline.

## Why Don't Students Revise? \_\_\_\_\_

If one of our major goals is to teach thinking through revision, we need to understand more clearly why students do not revise. Our first tendency may be to blame students' lack of motivation or their ineffective time management. They do not revise because they are not interested in their work or do not care about it or simply put off getting started until the night before a paper is due. But other explanations should also be considered.

For example, Piagetians propose that revision requires the ability to “decenter,” which is a trait of formal operations (Kroll, 1978; Bradford, 1983). Piaget demonstrated that concrete operational reasoners have trouble imagining other people’s viewpoints. If sitting in the back of a classroom, for example, concrete reasoners have trouble drawing a picture of the room from the perspective of a lecturer standing in front. By analogy, such persons cannot imagine their drafts *from a reader’s perspective*. If a passage seems clear to the writer, he or she believes that it ought to be immediately clear to the reader also.

Related theories also emphasize a writer’s difficulty in adopting a reader’s point of view but see the problem related to intellectual growth or accumulated experience rather than Piagetian formal operations. What drives revision for mature writers, as we have seen, is their awareness of the complex conversation that a piece of writing must join—how its argument must accommodate opposing views, for example, while also contributing something new to the conversation. Thus, mature writers need multiple drafts because, in the face of many different goals and rhetorical constraints, they can concentrate on only one or two problems at a time. From still another perspective, before writers can revise effectively, they must learn to appreciate what readers expect and need within a given genre. To write academic prose, in other words, students need to read academic prose and to have teachers point out the writing strategies that experts use.

Teachers often ask whether the advent of word processing has increased students’ tendency to revise. Word processors have had a curiously ambiguous effect on students’ revising habits. Several researchers (Daiute, 1986; Hawisher, 1987) have shown that word processing facilitates sentence-level revision as well as some larger-scale revisions such as additions, deletions, and block moves of text but that it may actually discourage major reconceptualizing of a text—the kind of global revision that leads to substantial dismantling and rewriting. Perhaps because students have invested so much time typing the draft into the computer, they do not like to make changes that require complete deleting of large blocks of text and starting over. Or perhaps, because they tend to revise off the screen rather than off a hard copy, they see only narrow windows of their text rather than the whole.

Whatever the cause of students’ failure to revise, teachers need to create an academic environment that encourages revision. Fortunately, it is relatively easy to do so. I offer fifteen suggestions that can help turn the tables, making revision an expected way of life.

### Fifteen Suggestions for Encouraging Revision

1. *Profess the "new rhetorical" or problem-driven model of the writing process.* Instead of asking students to choose "topics" and narrow them, encourage students to pose questions or problems and explore them. Show how inquiry and writing are related.

2. *Give problem-focused writing assignments.* Students are most apt to revise when their essays must be thesis-governed responses to genuine problems. See Chapter Five for advice on creating writing assignments that guide students toward a problem-thesis structure.

3. *Create active learning tasks that help students become posers and explorers of questions.* Students need to be seized by questions and to appreciate how the urge to write grows out of the writer's desire to say something new about a question or problem. Through classroom activities that let students explore their own responses to questions, students rehearse the thinking strategies that underlie revision. Chapters Eight through Thirteen focus on strategies for active learning.

4. *Incorporate nongraded exploratory writing into your course.* Chapter Six suggests numerous ways to incorporate exploratory writing into a course. Exploratory writing gives students the space, incentive, and tools for more elaborated and complex thinking.

5. *Build adequate talk time into the writing process.* Students need to converse among themselves, to bounce ideas off each other, to test arguments, and to see how audiences react. In this regard, consider having students talk through their ideas in small groups, or reward them for visits to a writing center if one is available on your campus. Perhaps the most important service offered by writing centers is the opportunity for students to talk through their ideas in the early stages of drafting.

6. *Intervene in the writing process by having students submit something to you.* Take advantage of the summarizable nature of thesis-based writing by having students submit to you their problem proposals, thesis statements, or self-written abstracts. Use these brief pieces of writing to identify persons who need extra help. See Chapter Thirteen for further details.

7. *Build process requirements into the assignment, including due dates for drafts.* If students are going to stay up all night before a paper is due, make that an all-night session for a mandatory rough draft rather than for a finished product.

8. *Develop strategies for peer review of drafts, either in class or out of class.* After students have completed a rough draft, well in advance of the final due date, have students exchange drafts and serve as "readers" for each other. See Chapter Thirteen for advice on conducting peer reviews.

9. *Hold writing conferences, especially for students who are having difficulty with the assignment.* Traditionally, teachers in American universities spend more time writing comments on finished products than on holding conferences earlier in the writing process. As a general rule, time spent "correcting" finished products is not as valuable as time spent in conference with students at the rough draft stages. See Chapter Thirteen for suggestions.

10. *Require students to submit all drafts, notes, and doodles along with final copies.* Have students staple their final copies on top of draft material arranged chronologically like geological strata. Not only will you have evidence of your students' writing process, but you will also set up a powerful defense against plagiarism.

11. *Allow rewrites of final drafts, or make comments on typed next-to-final drafts and make your comments revision-oriented rather than editing-oriented.* Many students are motivated toward revision by the hope of an improved grade. If students have an opportunity to revise an essay after you have made your comments, you will strike a major blow for writing as a process. See Chapters Four, Thirteen, and Fourteen for advice on writing marginal and end comments that encourage revision rather than cosmetic editing.

12. *Bring in examples of your own work in progress so that students can see how you go through the writing process yourself.* Students like to know that their teachers also struggle with writing. The more you can show students your own difficulties as a writer, the more you can improve their own self-images.

13. *Give advice on the mechanics of revising.* If students compose at a computer, explain the advantages of revising off a double-spaced hard copy rather than on the screen. If they compose by hand or use conventional typewriters, explain the advantage of writing double-spaced on one side of the page to provide plenty of room for revision and to facilitate cutting and pasting. Many students simply do not leave enough room on the page to make revisions.

14. *Don't overemphasize essay exams.* Symbolically, essay exams convey the message that writing is a transcription of already clear ideas rather than a means of discovering and making meaning. They suggest that revision is not important and that good writers produce acceptable finished copy in one draft. Although essay exams obviously have an important place in liberal education, they should not substitute for writing that goes through multiple drafts. See Chapter Eleven for further discussion of essay exams.

15. *Hold to high standards for finished products.* Teachers are so used to seeing edited, patched-up drafts that they often forget how good an effectively revised essay can be when teachers demand excellence. Students do not see much point in revision if they can earn A's or B's for their edited first drafts.

## Conclusion: The Implications of Writing as a Means of Thinking in the Undergraduate Curriculum \_\_\_\_\_

As this chapter has tried to show, teaching thesis-based analytical and argumentative writing means teaching the thinking processes that underlie academic inquiry. To use writing as a means of thinking, teachers need to make the design of writing assignments a significant part of course preparation and to adopt teaching strategies that give students repeated, active practice at exploring disciplinary questions and problems. Additionally, it is important to emphasize inquiry, question asking, and cognitive dissonance in courses and, whenever possible, to show that scholars in a discipline often disagree about answers to key questions. By teaching a problem-driven model of the writing process, teachers send a message to the Skylers of the world that good writing is not a pretty package for disguising ignorance. Rather it is a way of discovering, making, and communicating meanings that are significant, interesting, and challenging.