

## Teaching Invention

*For students who experience difficulty figuring out what to say, flexible invention strategies can help them generate the kinds of ideas that turn into interesting, imaginative, committed essays that others will want to read. Instructors committed to creating a classroom space for students to establish unique voices may view teaching invention as too mechanical of a topic. Nevertheless, introducing and creating opportunities for students to use invention strategies can afford them useful, transferable tools for generating ideas not only in the first-year composition classroom but also as they engage new subjects and new materials in semesters to come.*

—SCOTT WIBLE

*Invention*, the central, indispensable canon of rhetoric, traditionally means a systematic search for arguments. In composition classes, it has taken on a much broader meaning: a writer's search for all the kinds of material that can shape and determine what can be presented and even known. When writing arguments and analyses, invention strategies help students discover the *thesis*, or the central informing idea of a piece of writing, and all the *supporting material* that illustrates, exemplifies, or proves the validity of the thesis. For personal and lyric essays, narratives, and descriptive writing, invention techniques help writers draw from their memory and observations for the kinds of details that will add depth to their essays (for more on the connection between memory and invention, see Chapter 9; see also Ede, Glenn, and Lunsford, cited at the end of this chapter). No matter what forms and genres you ask your students to write, without content there can be no effective communication, and invention is the process that supplies writers and speakers with content.

Invention is particularly important in college writing courses because it helps students *generate* and *select from* material they will write about (Lauer, *Invention* 3). This process is often difficult, especially for students who have had little practice with it. When faced with a writing assignment, many students are troubled not by the lack of a subject or topic (often one is supplied), but by a seeming lack of anything important or coherent to write about it. Invention comes into play here, providing processes by which students can analyze the assigned or chosen subject in order to discover things to write. Most serious and experienced writers incorporate into their habits some system of invention that they use to plan and carry out their writing. For many this is a subconscious process, and to them, theories of and suggestions for teaching invention as a conscious activity may seem artificial.

Such discomfort with artificial systems is not new. The history of rhetoric is characterized by a continuing disagreement about the usefulness of systems and *topics*. (See Harrington; and Elbow's discussion of "The Neglect and Rediscovery of Invention" in *Everyone*, pp. 141–42, cited at the end of this chapter.) On the one hand are the idealists, rhetorical theorists who believe there can be no meaningful communication unless the speaker or writer is broadly educated; trained in philosophy, morals, ethics, and politics; and possessed of natural intellectual ability. For a person of this order, systems and *topics* might be secondarily useful, for subject matter flows primarily from individual meditations and wisdom, rather than from any artificial system of discovery. On the other hand are the realists, whose greatest spokesperson is Aristotle. The realists are aware that not everyone who needs to communicate possesses the broad educational background necessary to produce subject matter from personal resources; many people need an external system to consult in order to probe their subjects and discover subject matter and arguments. (For more on the rhetorical canon of invention, see Corbett and Connors; Kinneavy; Lauer, "Heuristics and Composition," *Invention in Contemporary Rhetoric*, and "Toward a Methodology"; Young; and Young and Liu, cited at the end of this chapter.)

The systems of invention discussed in this chapter will provide the assistance. Most FY students have had little opportunity to practice serious, extended, coherent writing, and (a no-longer-surprising) few of them have read even two books in the past year. Clearly, many of our students are in need of training in invention; without some introduction to the techniques of discovering subject matter and arguments, they might flounder all term in a morass of vague assertions and unsupported, ill-thought-out essays. They need a system that will buoy them until they can swim by themselves.

### BRINGING THE RHETORICAL CANON OF INVENTION INTO THE WRITING CLASSROOM

In their introduction to *Landmark Essays: Rhetorical Invention in Writing*, Richard E. Young and Yameng Liu discuss the study of invention as both theoretically sophisticated and rooted in pedagogical practices. The essays in their collection span forty years and explore various issues related to the process of composing, such as "the nature of invention as an art, the role of rhetorical invention in the creation of knowledge, [and] the possibility for teaching invention" (xiii). Each of these issues is important not only to theoretical debates but also to classroom practices. This chapter sketches some of the debates about invention that have taken place in composition studies over the past forty-five years, but just as importantly it provides exercises and strategies that you can use to teach invention in your own classroom.

Since the early 1960s, the revival of rhetorical theory has reacquainted teachers with the primary elements of the rhetorical tradition — ethos/writer; pathos/audience; logos/text — and with the way these elements of the rhetorical

triangle have played out in the canon of rhetoric. Close attention to the writer has resulted in much important work that essentially attempts to answer this twofold question: Where do a writer's ideas come from, and how are they formulated in writing? Such a question demands a new focus on invention, the first canon of rhetoric, and has led in two provocative and profitable directions.

The first direction, represented in the work of Richard Young and Janice Lauer (among others), aims toward deriving heuristic procedures or systematic strategies that will aid students in discovering and generating ideas about which they might write. Such strategies may be as simple as asking students about a subject: *who? what? when? where? why? and how?* — the traditional journalistic formula. Or they can be as complex as the matrix presented in Young, Becker, and Pike's *Rhetoric: Discovery and Change*. Essentially, this heuristic asks the student to look at any subject from different perspectives. A student writing about a campus demonstration, for example, might look at it as a "happening" frozen in time and space, as the result of a complex set of causes, as a cause of certain effects, or as one tiny part of a larger economic pattern. Looking at a subject in different ways loosens up the mind and jogs the writer out of a one-dimensional, or tunnel-vision, view of a subject.

We see the interest in procedural heuristics as related theoretically to the work of researchers interested in cognition. Coauthors Linda Flower and John Hayes are best known for their studies of writers' talk-aloud protocols, tape-recorded documents that catch a writer's thoughts about writing while the writing is actually in progress. In "Interpretive Acts," Flower and Hayes discuss a schema of discourse construction comprising social context, discourse conventions, language purposes and goals, and the activated knowledge of both the reader and the writer. The writer and the reader balance these elements to create and re-create a text.

The second direction of invention is characterized most notably by the work of Ken Macrorie and, more pervasively, Peter Elbow. Interested in how writers establish "voice" in writing and realize individual selves in discourse, Elbow's work with students presents dramatic evidence of such activity. In a series of influential books (*Writing without Teachers*, *Writing with Power*, *Embracing Contraries*, and *Everyone Can Write*), Elbow focuses on how writers come to know themselves and then share those selves with others. In "What Is Voice in Writing?" he deals with a question related to invention that has perplexed theorists and teachers of rhetoric for thousands of years — "Is ethos real virtue or the appearance of virtue?" — and links this question to the modern debate about the relationship between voice and identity (*Everyone Can Write* 188, 192). Elbow recognizes that voice and its relation to self and text are controversial issues, yet in the midst of controversy he works to make theories of voice and invention practical for teachers of writing.

The researchers and teachers surveyed in this chapter differ from one another in many ways, but they are alike in that their work is aimed primarily at that point of the rhetorical triangle that focuses on the writer's powers of

invention. They want to know what makes writers tick and how teachers can help writers tick most effectively.

In this chapter, the term *invention* deals generally with strategies for helping students access materials that will guide and strengthen their writing, no matter what forms and genres they're working with. More specifically, the chapter also deals with invention as it relates to the development and expansion of three different but closely related elements: the *thesis statement*, a declarative sentence that serves as the backbone of an essay; the *subject matter*, which fills out, expands, and amplifies the thesis; and the *argument*, a specialized form of subject matter consisting of persuasive demonstrations of points that the writer wants to prove. Some of the techniques discussed here will work best for one or two of these elements, whereas others work for all three. You will easily see the characteristics of each technique, and you can choose those you wish to adapt according to what you want your students to learn. Before reviewing the invention techniques, however, you should be aware of a few facts about invention as a whole.

### HEURISTIC SYSTEMS OF INVENTION

Nearly all the systems of invention covered in this chapter can be called *heuristic*, or questioning, systems. (The Greek word *heurisis* means "finding" and is related to Archimedes' cry of "*Eureka!* I have found it!") In her foundational study of invention, contemporary rhetorical theorist Janice Lauer defines heuristic procedure as

a conscious and non-rigorous search model which explores a creative problem for seminal elements of a solution. The exploratory function of the procedure includes generative and evaluative powers: the model generously proposes solutions but also efficiently evaluates these solutions so that a decision can be made. Heuristic procedures must be distinguished from trial-and-error methods which are non-systematic and, hence, inefficient, and from rule-governed procedures which are rigorous and exhaustive processes involving a finite number of steps which infallibly produce the right solution. (*Invention* 4)

Although the systems described here differ widely in their approaches, with few exceptions they fit Lauer's definition. (For more recent work on invention, see Atwill and Lauer, cited at the end of this chapter.)

Writing in 1970 in "Heuristics and Composition," Lauer asserted that the then-emerging discipline of composition needed to appropriate theories from other fields if it was to establish a respectable theoretical foundation. She suggested that composition researchers and teachers should consult the extensive bibliography of psychological research on heuristics, which comprises most of her eight-page article. The works she cited included pioneering studies as well as more contemporary research, such as Herbert Simon, Cliff Shaw, and Allen Newell's cognitive investigations that greatly influenced Flower and Hayes's composition research.

Lauer's suggestion sparked a lively exchange with Ann Berthoff, in which the two debated the benefits, drawbacks, and philosophical and political bases of heuristics. In Berthoff's 1971 response, aptly entitled "The Problem of Problem Solving," she condemned heuristics as an indoctrination of mechanical procedures serving a bureaucratic and technological society, and she critiqued the researcher's failure to consider adequately the relationship between language and the world. In her "Response," Lauer argued that problem-solving strategies were not a dictatorial procedure to find "the right solution, the correct answer," using "a finite number of steps governed by explicit rules" (209). She defined heuristics as open-ended, "systematic, yet flexible guides to effective guessing" that seek reasonable answers (209). Lauer's work was foundational in composition studies, and those who responded provided important information for teachers who needed to decide for themselves not just whether to use heuristics but *how* to use them in flexible ways. In her 1979 "Toward a Methodology of Heuristic Procedures," Lauer proposes that the best invention techniques need to be (1) applicable to a wide variety of writing situations so that they will transcend a particular topic and can be internalized by the student; (2) flexible in their direction, allowing a thinker to return to a previous step or skip to an inviting one as the evolving idea suggests; and (3) highly generative, by involving the writer in various operations — such as visualizing, classifying, defining, rearranging, and dividing — that are known to stimulate insights.

In "Piaget, Problem-Solving, and Freshman Composition," Lee Odell asserts the need for, and the limitation of, teaching problem-solving strategies — because writing is "an aspect of a person's general intellectual development and cannot be fostered apart from that development," but "there can be no quick and painless way to develop a well-stocked mind, a disciplined intelligence, and a discriminating taste in language and fluency in its use" (36, 42). Heuristics can help fill the gap between the ideal writer's knowledge of all and everything and that writer's practical inability to use all of those resources. Building on this early work, Odell's recent scholarship on assessment looks at the extent to which a written "text reflects a mind at work, a writer wondering about things, trying to imagine what *might* be" ("Assessing Thinking" 7). Odell's understanding of writing — even of finished texts — is clearly linked to invention; he defines writing as "an act of discovery, an act of constructing meaning" and looks to students' texts for evidence of questioning minds (7).

### Using Heuristic Strategies in the Classroom

In judging the heuristic procedures discussed in this chapter, you can run each one through Lauer's questions for testing heuristics (see Example 6.1). The three necessary characteristics of effective heuristic procedures, according to Lauer, are *transcendancy*, *flexible order*, and *generative capacity*.

### Example 6.1 LAUER'S TEST FOR HEURISTIC MODELS

1. Can writers transfer this model's questions or operations from one subject to another?
2. Does this model offer writers a direction of movement which is flexible and sensitive to the rhetorical situation?
3. Does this model engage writers in diverse kinds of heuristic procedures? ("Toward a Methodology" 269)

Each system described in this chapter is discrete. You can choose one and ignore the others, or you can use several concurrently or at different times. Because invention is a central skill in composition, you will want to introduce at least one system early in the course; otherwise, you may not have a coherent framework on which to hang the other elements of the writing process. Your students can practice some of these methods (for example, prewriting, freewriting, and brainstorming) with you in class. They can use the other methods at home, after you introduce them in classroom exercises. Ideally, your students will gradually assimilate these systems of invention into their subconscious, recalling them when needed.

The goal, then, is to make these artificial systems of discovery so much a part of the way students think about problems that the systems become second nature. Truly efficient writing is almost always done intuitively and then, at the revision stage, checked against models for completeness and correctness. You should not expect the process of subconscious assimilation to complete itself within ten or fifteen weeks. However, when a system of invention is conscientiously taught and practiced for that period of time, it will become a useful tool for students and, eventually, may become part of their thought processes.

### CLASSICAL TOPICAL INVENTION

The tradition of classical rhetoric, as it developed from Aristotle and Cicero and then was codified by Quintilian, is the only complete system that we will deal with in this book; it remains one of the most definitive methodologies ever evolved by the Western mind. The rhetoric of the Renaissance was largely informed by it. Even the epistemological rhetoric of the eighteenth century is far less coherent as a system than is classical rhetoric in its finished form. In contrast to classical rhetoric, contemporary rhetoric is in its infancy, with many workable techniques but no fixed structure. Many books have been devoted to analyzing and explaining the structure and usefulness of the classical rhetorical tradition, but for our purposes, only a few techniques drawn from classical theory are useful.

The classical technique that we will concentrate on as an aid to invention is that of the *topics*, or seats of argument. The *topics* can be used to conceptualize and formulate the single-sentence declarative thesis that usually constitutes the backbone of an FY essay as well as to invent subject matter and arguments. Remember, though, that all classical techniques were originally devoted to the creation of persuasive discourse and that classical invention works most naturally in an argumentative mode; it should not be expected to work as well for nonexpository prose.

Aristotle is responsible for our first introduction to the *topics* or "seats of argument," but his doctrine was continued and amplified by the other classical rhetoricians. The *topics* were conceived of as actual mental "places" (the term itself comes from geography) to which the rhetorician could go to find arguments.

The system of *topics* described here is a modern arrangement of classical topical invention adapted from the work of Edward P. J. Corbett and Robert Connors; Richard P. Hughes and P. Albert Duhamel; and other teachers at the University of Chicago (including Bilsky et al.). These *topics* are not so much places to go for ready-made arguments as they are ways of probing one's subject in order to find the means to develop that subject. The four common *topics* that are most useful to students are *definition*, *analogy*, *consequence*, and *testimony*.

1. **Definition.** The *topic* of definition involves the creation of a thesis by taking a fact or an idea and expanding on it by precisely identifying its nature. The subject can be referred to its class, or genus, and the argument made that whatever is true of the genus is true of the species: "A single-payer national health plan is a socialist policy — and should therefore be classed with other socialist policies." A far less powerful and less sophisticated form of definition is "the argument from the word" — the use of dictionary or etymological meanings to define things or ideas.
2. **Analogy.** The *topic* of analogy is concerned with discovering resemblances or differences between two or more things, proceeding from known to unknown. It should always be kept in mind that no analogy is perfect and that all analogies deal in probabilities. Nonetheless, analogy is a useful tool for investigating comparisons and contrasts: "The first week of college is like the first week of boot camp." Another type of analogical reasoning is the argument from contraries, or negative analogy: "The marijuana laws are unlike Prohibition." Although analogy is often thought of only as a figure of speech, it is an important tool of demonstration as well.
3. **Consequence.** The *topic* of consequence investigates phenomena in a cause-to-effect or effect-to-cause pattern. The best use of consequence is in the prediction of probabilities from patterns that have previously occurred: "Coal-burning power plants, automobiles, and other human-made sources of carbon dioxide pollution have led to global

warming, which—if not curbed—can have serious negative effects on the environment.” The *topic* of consequence is prone to two fallacies. The first is the fallacy of *post hoc, ergo propter hoc*, “after this, therefore because of this.” Just because one element precedes another element does not mean that the former is the cause of the latter. An extreme example of this fallacy is, “The Louisiana Purchase led to global warming.” The second fallacy, *a priori*, claims but does not demonstrate a cause-effect relationship between two phenomena. To support the first cause-effect relationship claimed above, the writer would need to cite scientific studies that link these sources of carbon dioxide pollution to global warming and to provide evidence that global warming can have negative effects on the environment.

4. **Testimony.** The *topic* of testimony relies on appeals to an authority, some external source of argumentation. For example, the authority could be an expert opinion, statistics, or the law. This *topic* is not as useful today as it once was: our controversial age has produced so many authorities whose views are in conflict with one another that all too often they cancel one another out, and celebrities often give paid—and therefore untrustworthy—testimony in the form of advertising. Still, testimony can be a good starting place for an argument, especially when students have a familiarity with, and an understanding of, the source of the testimony.

### Using Classical Topical Invention in the Classroom

When using classical topical invention in your classes, you’ll need first to teach the use of the *topics* in general and then familiarize students with their use in generating theses, subject matter, and arguments. Classical invention takes just a short time to teach because it is elegantly simple. Students are often impressed when they learn the background of the technique—at last, a high-level classical skill!—and use it with enthusiasm once they have learned to apply the different terms.

Ultimately, a thesis or an argument must say something about the real world. Teaching the *topics* requires using examples, and good examples are to be had by applying each *topic* to a definite subject and coming up with several thesis statements. You may want to pass out examples for students to have in front of them as they begin to create their own theses. You won’t find that drawing theses from the *topic* is difficult for you. In the following discussion of cloning, run through the topical-thesis mechanism.

**Definition.** Definition always answers the question “What is/was it?” in a variety of contexts. The subject can be defined in its immediate context, in a larger context, in different settings, in space, in time, or in a moral continuum. Here are some examples:

- Cloning is a form of asexual reproduction.
- Cloning humans is immoral.
- Cloning cells may one day make it possible to grow healthy organs.

**Analogy.** Analogy always asks the question “What is it like or unlike?” and the subject of the analogy usually answers the question by explaining a lesser-known element in the context of a better-known element.

- A clone is like an identical twin.
- Cloning is, according to Josef Ratzinger (Pope Benedict XVI), “Nazi madness.”
- Cloning opens Pandora’s box.

**Consequence.** Consequence always answers the question “What caused/causes/will cause it?” or “What did it cause/is it causing/will it cause?” It is not a *topic* to be taken lightly because, even in a thesis statement, it demands that the writer trace the chains of consequence to the end. Consequence can be either explanatory or predictive.

- If therapeutic cloning is made illegal, it will hinder scientific progress in finding new treatments for diseases.
- Cloning farm animals will help farmers produce higher-quality meat.
- The uproar over questionable cloning practices may cause U.S. lawmakers to ban human stem-cell research.

**Testimony.** Testimony always answers the question “What does an authority say about it?” Authorities can range from experts and statistics to eyewitnesses and accepted wisdom.

- The National Right to Life organization opposes embryonic stem-cell research.
- The U.S. Food and Drug Administration questions the safety of food derived from cloned animals.
- Thomas Okarma, President and CEO of Geron Corporation, opposes human reproductive cloning but supports beneficial applications of therapeutic cloning technology.

These are just a few of the theses available for each topic. Using the *topics* to create theses demands some immediate knowledge of the subject, but students will derive theses and argumentative lines that are very specific. You can also see that some *topics* will be more fruitful than others. The *topics* of definition, analogy, and consequence are the most useful for creating theses, whereas testimony is most naturally suited to the buttressing of already created theses.

The *topics* are not magic formulas that can make something out of nothing, but they are useful in organizing masses of information. Students need not have more than a layperson’s knowledge of cloning to come up with many of the preceding thesis statements, but after having created these theses, they will know more clearly what they do know. They will also have a much better idea

of where they need to go to look up information they do not have at hand. As you work through the *topics* in class, spend enough time on each of the first three (testimony is more specialized) to allow your students to digest the examples you provide and to see the process by which you arrive at the statements under each topic. You may want to pass out a photocopied sheet with the examples of the *topics* in action on a particular subject. After you explain the examples and show how they derive from the *topics*, assign a few subjects and ask students to use the topical system to come up with at least three theses for each topic (perhaps nine theses in all). After this assignment has been written, either in class or as homework, ask students to volunteer to read their theses aloud in class. The next step is to ask students to come up with ideas for an essay on a topic relevant to another class they are currently enrolled in and to apply classical topical invention to that subject. At this point, students should be comfortable enough with the system — perhaps even openly pleased with it — to be able to reel off theses for other subjects without much trouble.

Once students have successfully used the *topics* to produce theses, they will readily see how they can use them to generate supporting subject matter. After they have chosen their thesis from among the myriad possibilities that the topical system offers, they are left with many other statements that are at least indicators of other informational lodes. Very often after choosing a thesis, students can structure their essays around other thesis statements that they need to change only slightly to make them subordinate to the main purpose of their essays.

If you have the time in class, ask your students to put together a rough topic outline of a projected essay by arranging as many of the theses they have generated as possible in an order that could be used to structure an essay (remind them that often they may have to change the direction of the theses slightly to subordinate them to the main thesis). Here is an example of such a rough outline using some of the theses generated about cloning:

*Main thesis:* If therapeutic cloning is made illegal, it will hinder scientific progress in finding new treatments for diseases.

*Subordinate thesis 1:* Scientists believe stem-cell research may lead to vaccines and breakthrough medicines to treat diseases.

*Minor thesis:* They believe cloned functional cells can replace damaged cells in the body.

*Minor thesis:* Patients with heart disease could benefit from new heart muscle cells.

*Subordinate thesis 2:* The uproar over questionable cloning practices — such as cloning humans — may cause U.S. lawmakers to ban human stem-cell research.

*Minor thesis:* Reproductive cloning is not safe.

*Minor thesis:* There are ethical and moral objections to reproductive cloning.

*Subordinate thesis 3:* It is important to consider reproductive cloning and therapeutic uses of cloning technology as separate issues.

Although this list is more structured than those that many students will come up with, it exemplifies how such a topic list can be constructed.

The preceding description shows a deductive use of the *topics*, in which the thesis statement is decided on and then subject matter is arranged according to the perceived needs of the thesis. The *topics* can, of course, also be used inductively, to explore the subject and gather a mass of potential material, with the student creating a thesis only after the subject material has been grouped or categorized. With this inductive use of the *topics*, it is necessary for students to leave the whole area of thesis creation until after they have used the topical system to gather subject matter. You may well find that students often cannot wait to begin to arrange the material under a thesis and so greet the stage of thesis creation with enthusiasm.

Classical invention, in its simplified form, can be satisfying to teach. You use a tradition of education that is as old as any in Western culture. And since it is easy enough for students to memorize, they can carry it with them for use in other classes. It is neither the simplest nor the most complex heuristic system, but it has a charm and a comprehensiveness that make it one of the most attractive.

## JOURNAL WRITING

Over the last twenty-five years, journal writing has become an intrinsic part of many English classes. Journals serve as a repository of material and concepts that can lead to more formal essays; journal writing does not impose systematic techniques of invention and thus can have a salutary effect on students' feelings about writing (Gannett). Journal writing can take many forms. Some forms are more structured than others, while all forms are used for different pedagogical purposes:

- *Writing logs:* The writing log helps students reflect on their writing processes, providing a place for them to keep track of their thoughts about writing and particular assignments — both while they are working on the assignment and after they've completed it. Reading a writing log that they have kept over a period of time can help students identify their own strengths and weaknesses as writers. The writing log can also be used as a place to record ideas for future writing assignments.
- *Reading journals:* The reading journal helps students make sense of and reflect on their reading assignments; in it, students can wrestle with ideas, note correspondences with and differences between the reading and their own experience, and prepare for class discussions. One effective format for the reading journal is the double-entry notebook, in which students write facts or quotations from their reading on one side of the page and personal responses or observations on the other side. The reading journal works well in the literature-based composition class — or in any class requiring a substantial amount of reading.



- *Commonplace books*: Used by many writers, the commonplace book is a journal where students record not only experiences, ideas, observations, and images, but also quotations from their reading. The commonplace book, when used well and often, becomes a rich source for informal essays, often containing powerful details as well as the voices of others. It is especially helpful to writers of creative nonfiction.
- *Research journals*: A research journal helps students keep track of their research process and the development of their ideas on a particular topic; like the reading journal and commonplace book, it can also include quotations and the student's thoughts or responses to the ideas of others. When combined with a research project, the research journal helps ensure students are thinking regularly about their project, provides a record of their development of ideas, allows students to respond informally to their reading, and may encourage more personal investment in the research process.
- *"Everyday" journals*: Many students already keep personal "everyday journals" or their more public, online counterparts: blogs. Some teachers assign journals simply because they want students to write every day. Teachers might provide general prompts if students get stuck (such as, "What book or movie has affected your thinking?" or "What person do you most admire? Explain."), but the topics for everyday journal writing are generally chosen by students themselves. In addition to encouraging students to write daily, these journals often become repositories of ideas for formal essays.

### Using Journals in the Classroom

For students to get the most from journal writing, it is necessary to introduce them to the art of keeping a journal. First, acquaint your students with the definition of *journal*—a record of reactions, not actions. A journal is not a diary, nor is it a record of events. If you fail to be specific about this, students may end up writing diary entries—"Got up at 7:30, went to Commons for breakfast, saw Diane." Students need to be shown, and then convinced, that a journal is a record of a mind and its thoughts, rather than a record of a body and its movements. (For an essay on journal writing written for students, see Anson and Beach, cited at the end of this chapter.) One good way of demonstrating this difference is by showing students excerpts from the journals of established writers—such as Plath, Thoreau, Pepys, Woolf, and Hawthorne—or from student writing submitted in previous classes. Compared to keeping a journal, keeping a diary will soon seem to most of your students like a lame activity.

Along with familiarizing students with good examples of journal writing, you may want to provide particular prompts that will help get them started. Example 6.2 offers journal prompts that could be used for either writing logs or everyday journals. Provide just enough prompts so that students will occasionally have to grope for a sense of their own will to write something; too

many questions and suggestions can be a crutch. Encourage students to move beyond each prompt to more self-directed writing.

One potential problem with journal writing for FY students is their tendency to rely on ready-made opinions, premanufactured wisdom, and clichés. Because some students have not yet begun to question their parents' or their friends' norms, they sometimes repeat the most appalling prejudices as if they had invented them. A ready-made challenge to such secondhand thought is the requirement that students be as concrete in their entries as possible. Discourage generalizing and opining unless the opinion can be tied to some actual experience in the student's life. (This is, after all, good argumentation—no assertions should be made without concrete support.) Macrorie suggests that students write journal entries on the same topic over a period of time, from "different and developing viewpoints" (*Telling Writing* 137). Such writing gives students the distance they need to reflect on, deepen, and enrich their perceptions and thus make their stories more moving and effective. But most important, Macrorie tells us, journals are the best starting place and the best storehouse for ideas: "A journal is a place for confusion and certainty, for the half-formed and the completed" (*Telling Writing* 141).

### Example 6.2 JOURNAL PROMPTS

#### Journal Statements

You will submit ten *single-spaced* journal statements of one page each throughout the term: no more than one each Wednesday (you get to pick the Wednesdays).

The purpose of the journal statements is twofold: (1) to help you think strategically about your writing assignments; and (2) to help you both examine yourself as a writer and imagine yourself as a writer who sets goals and develops specific, effective steps to achieve them.

The subject of each of your journal statements should be different. The following options—some on writing in general, others specifically about this course—should help get you started on the weekly journal assignment.

Journal 1: What are two of your strengths as a writer? What are two of your writing weaknesses? Specifically, how would you like to improve as a writer? What could you do or learn to make such improvements?

Journal 2: What expectations do you have for the course? What is your feeling toward first-year college writing? What has been your experience in a writing classroom? What did you like or dislike?

Journal 3: Informational process analyses should provide a specific audience with information it needs to replicate a process. Use this journal entry to describe possible topics for your process analysis essay, considering the following questions: What sorts of directions or instructions could students on campus, incoming students, or people in your community benefit from? Why?

Journal 4: Look at two editorials from this week's campus newspaper. What are the writers' goals? What kinds of appeals do the writers make? Explain the (in)appropriateness of each writer's use of rhetorical appeals.

Journal 5: Spend several minutes freewriting about particular difficulties that you have encountered thus far when drafting your process analysis. Specifically, what strategies have you used to work through these problems? What special concerns about your first draft would you like your peer reviewer to address during this week's draft workshop?

Journal 6: How do you define literacy? How can you measure it? How might your definition differ from that of your classmates?

Journal 7: Write for several minutes about the pressures you feel as a college student.

Journal 8: How do you respond to any writing assignment? In other words, is your reaction always the same, or does it vary, depending on the course, the teacher, or the level of instructional detail or freedom?

Journal 9: What specific revision strategies that we have discussed could you use to revise your process analysis assignment? Why will these strategies help you to create a more effective essay?

Journal 10: Do you ever get frustrated while driving or shopping? Why? What kinds of incidents, events, or situations can lead to your frustration?

Journal 11: Think for a minute about a special problem or talent you have. Maybe you're shy, behind in your classwork, overly committed, out of shape, or out of money; maybe you're highly motivated, popular, or particularly witty. Make a list of both the causes and consequences of your problem or gift. Which list provides you with more information about your problem or talent?

Journal 12: Write about the specific parts of the composing process that are most difficult for you. What particularly pressing concerns do you have when drafting your essays? What presents you with the most trouble? Why?

Journal 13: What are your feelings about the role of technology in education?

Journal 14: Reflect on your writing progress during the course of this semester. Consider the following questions as you write: How did you envision your writing at the beginning of the semester? How do you "see" your writing now? What improvements or discoveries have you made? What setbacks or successes have you experienced?

Elbow also recommends having students keep a journal, what he calls a "freewriting diary." He warns that it is "not a complete account of your day; just a brief mind sample from each day" (*Writing without Teachers* 9). Like Macrorie, Elbow sees the "freewriting diary" as the mother lode of ideas for essays. Elbow writes that "freewriting helps you to think of topics to write about. Just keep writing," he tells his readers; "follow threads where they lead and you will get the ideas, experiences, feelings, or people that are just asking to be written about" (*Writing with Power* 15).

You, too, should join your students in the journal-keeping practice, recording your own classroom experiences and your responses to your students' journals and essays. Nancy Comley, when she was director of FY writing at Queens College, City University of New York, encouraged her teaching assistants to keep their own journals. Comley writes that

through the journal one comes to know oneself better as a teacher, and in the discipline of keeping a journal the teacher can experience what students experience when they are told to write and do not really feel like it. As part of the journal, I suggest that each teacher keep a folder of the progress (or lack of it) of two of his or her students, noting the students' interaction with the class and the teacher as well as evaluating their written work. Such data can form the basis for a seminar paper presenting these case histories, augmenting journal observations with student conferences and with research done into special problems or strengths the students had as writers. (55-56)

Encouraging teachers to keep a journal is in keeping with Comley's sage pedagogical advice: Never give an assignment you have not tried yourself.

### Evaluating Journals

The issue of whether to evaluate journals is simple to answer: don't. Instead, read the entries to ensure that the student has made a sincere effort and assign a grade based on the number of pages a student turns in; four a week for ten weeks might earn an A; three a week, a B; and so on. Students are expected to



write for themselves, yet they know that the instructor will see everything in the journal. While some teachers put no marks on journals except for a date after the last entry, others initiate a written conversation with the students, and still others write on separate sheets of paper that they insert into the journals. At times, you may find an entry directed to you — an invitation to reply.

Journals, then, shouldn't be judged by the standards you might bring to a student essay. The fact that students' journals do have an audience, however — namely, the teacher — means that they “do not speak privately,” as Ken Macrorie puts it in *Telling Writing* (130). Macrorie insists that journals

can be read with profit by other persons than the writer. They may be personal or even intimate, but if the writer wants an entry to be seen by others, it will be such that they can understand, enjoy, be moved by [it]. (131)

Helping students distinguish between what is personal and what is private is an important task for teachers who assign and read student journals. Emphasizing that you won't be grading the journals but that you will be reading them should help students work toward balancing the different demands of writing for themselves versus writing for others.

## BRAINSTORMING

### Using Brainstorming in the Classroom

Brainstorming is the invention method used by most professional and academic writers. The technique of brainstorming is simple: the writer decides on a subject, sits down in a quiet place with pen and paper or computer, and writes down everything that comes to mind about the subject. Alex Osborne codified the main rules of brainstorming in the late 1950s:

1. Don't criticize or evaluate any ideas during the session. Simply write down every idea that emerges. Save the criticism and evaluation until later.
2. Use your imagination for “free wheeling.” The wilder the idea the better, because it might lead to some valuable insights later.
3. Strive for quantity. The more ideas, the better chance for a winner to emerge.
4. Combine and improve ideas as you proceed. (84)

The writer, in other words, free-associates, writing down as many ideas as possible. After doing so, the writer either tries to structure the information in some way — by recopying it in a different order or by numbering the items, crossing some out, adding to others — or finds the list suggestive enough as it stands and begins to work.

Brainstorming is extremely simple — and effective. The most widely used inventive technique, brainstorming moves in naturally to fill the void if no structured method is ever taught. Research suggests that if an inventive system is not internalized by around age twenty, brainstorming is adopted, probably because it represents the natural way the mind grapples with the storage and retrieval of information. Most professional and academic writers were never taught systematic invention and therefore turned to brainstorming.

Sometimes, young, self-conscious writers who have little specialized educational experience are initially stymied by brainstorming, for their stores of knowledge and general intellectual resources aren't as developed as those of experienced writers. Hence, they go dry when confronted with the task of listing ideas about an abstract topic. You may want to walk such writers through the brainstorming system by doing a sample exercise on the board or in small groups before you turn them loose with their own ideas. Brainstorming works well as a collaborative exercise, allowing students to feed off each other's ideas and draw from and extend each other's knowledge.

## CLUSTERING

In *Writing the Natural Way*, Gabriele Lusser Rico describes clustering. Based on theories of the brain's hemispheric specialization, Rico's creative search process taps the right hemisphere of the brain, the hemisphere sensitive “to wholeness, image, and the unforced rhythms of language” (12). Usually, Rico tells us, beginning writers rely solely on the left hemisphere, the hemisphere of reason, linearity, and logic. By clustering, they can learn to tap the other hemisphere as well and produce writings that demonstrate

a coherence, unity, and sense of wholeness; a recurrence of words and phrases, ideas, or images that [reflect] a pattern sensitivity; an awareness of the nuances of language rhythms; a significant and natural use of images and metaphors; and a powerful “creative tension.” Another by-product of clustering seem[s] to be a significant drop in errors of punctuation, awkward phrasing, even spelling. (11)

### Using Clustering in the Classroom

Clustering is an easy-to-use invention activity because there is no right or wrong way to cluster. Rico guarantees that the words will come and that writing eventually takes over. Students' clusters — and your own — are likely to be messy, drawing on both memory and association and displaying a mix of images, experiences and ideas. Here are Rico's simple directions for clustering, using the word *afraid* as an example:

1. Write the word *afraid* in the upper third of the page, leaving the lower two-thirds of the page for writing, and circle it. We'll start with this word because even the most hesitant of us will discover many associations triggered by it.
2. Now get comfortable with the process of clustering by letting your playful, creative . . . mind make connections. Keep the childlike attitude of newness and wonder and spill whatever associations come to you onto paper. What comes to mind when you think of the word? Avoid judging or choosing. Simply let go and write. Let the words or phrases radiate outward from the nucleus word, and draw a circle around each of them. Connect those associations that seem related with lines. Add arrows to indicate direction, if you wish, but don't think too long or analyze. There is an “unthinking” quality to this process that suspends time.

3. Continue jotting down associations and ideas triggered by the word *afraid* for a minute or two, immersing yourself in the process. Since there is no *one* way to let the cluster spill onto the page, let yourself be guided by the patterning... [abilities of your] mind, connecting each association as you see fit without worrying about it. Let clustering happen naturally. It will, if you don't inhibit it with objections from your censoring... mind. If you reach a plateau where nothing spills out, "doodle" a bit by putting arrows on your existing cluster.
4. You will know when to stop clustering through a sudden, strong urge to write, usually after one or two minutes, when you feel a shift that says "Aha! I think I know what I want to say." If it doesn't happen suddenly, this awareness of a direction will creep up on you more gradually, as though someone were slowly unveiling a sculpture.... Just know you will experience a mental shift characterized by the certain, satisfying feeling that you have something to write about.
5. You're ready to write. Scan [your] clustered perceptions and insights.... Something therein will suggest your first sentence to you, and you're off. Students rarely, if ever, report difficulty writing that first sentence; on the contrary, they report it as being effortless. Should you feel stuck, however, write about anything from the cluster to get you started. The next thing and the next thing after that will come because your [right hemisphere] has already perceived a pattern of meaning. Trust it. (36-37)

Like brainstorming, clustering works best when it's done very quickly, when students don't have time to edit or overthink their responses. Remind them that it's good if their clusters are messy, if they go off on tangents. When a cluster works well, students are surprised by how much material they were able to develop and the connections that their minds naturally made—even without conscious thought. When you model clustering for your students, allow a volunteer to suggest the starting place, the center word that you will work from. Don't try to explain the process as you're clustering; wait until after you're done and then take them through the process of your own clustering, explaining the associations you made and where you might go from there if you were to write about something that came up in your cluster. Students can practice clustering in pairs, too, choosing the same center word and then comparing their clusters. Such an activity allows students both to recognize their own individual ideas and associations and to see how much knowledge is communally constructed.

## FREEWITING

Unlike the heuristic-type invention techniques discussed in this chapter, freewriting is not a device through which experience can be consciously processed, nor do freewriting exercises (in their pure form) provide theses, arguments, or subject matter. Rather, freewriting—like clustering—is a ritual that can elicit possible subjects to which the conscious mind may not have easy access. What freewriting does best is loosen the inhibitions of the inexperienced writer. Thus, while freewriting differs strikingly from some of the other techniques discussed

in this chapter, it follows well from both brainstorming and clustering. Once students have scanned their brainstorming lists or cluster diagrams and have an idea for a topic or first line, they are ready to freewrite—to begin putting the ideas suggested by their lists or cluster into prose, even as they hold out the possibility of discovering even more new material.

Freewriting, of course, does not need to follow another invention activity such as brainstorming or clustering. Freewriting itself can be a good starting place for invention. A number of writers over the past sixty years have developed freewriting exercises as methods of getting potential writers used to the idea of writing. Perhaps the first mention of freewriting-type exercises is in Dorothea Brande's 1934 book *Becoming a Writer*, in which the author suggests freewriting as a way for young would-be novelists to get in touch with their subconscious selves. Brande advocates writing "when the unconscious is in the ascendent":

The best way to do this is to rise half an hour, or a full hour, earlier than you customarily rise. Just as soon as you can—and without talking, without reading—begin to write. Write anything that comes to your head. Write any sort of early morning reverie, rapidly and uncritically. The excellence or ultimate worth of what you write is of no importance yet. Forget that you have any critical faculty at all. (50-51)

Brande's technique, the ancestor of freewriting, was largely ignored by teachers of expository writing until the 1950s, when Ken Macrorie, who had read *Becoming a Writer*, began to use an updated version of it in his composition classes. He modified Brande's directions for use in general composition and told his students to "go home and write anything that comes to your mind. Don't stop. Write for ten minutes or till you've filled a full page." This exercise produced writing that was often incoherent but that was also often striking in its transcendence of the dullness and clichéd thought teachers too often come to expect in English papers (*Uptaught* 20). Macrorie popularized the freewriting technique with his books *Uptaught* and *Telling Writing*, but it was Peter Elbow who developed and refined freewriting, making it a well-known tool. In his *Writing without Teachers* (which every writing teacher should read for the author's opinions on how to teach and learn writing), Elbow presents the most carefully wrought freewriting plan published thus far.

## Using Freewriting in the Classroom

Freewriting is a kind of structured brainstorming, a method of exploring a topic by writing about it—or whatever else it brings to mind—for a certain number of minutes without stopping. It consists of a series of exercises, conducted either in class or at home, during which students start with a blank piece of paper, think about their topic, and then simply let their minds wander while they write. For as long as their time limit, they write down everything that occurs to them (in complete sentences as much as possible). They must not stop for anything. If they can't think of what to write next, they can write

"I can't think of what to write next" over and over until something else occurs to them. When their time is up, they can look at what they've written. They may find much that is unusable, irrelevant, or nonsensical. But they may also find important insights and ideas that they didn't know they had; freewriting has a way of jogging loose such ideas. As soon as a word or an idea appears on paper, it often triggers others.

The point of freewriting is to concentrate on writing, taking no time to worry about what others might think of it. When writers struggle to keep words—any words—flowing, they overload their "academic superego," which is usually concerned with content, criticism, spelling, grammar, and any of the other formal or content-based issues of correctness that so easily turn into writing blocks. In other words, they are writing—for five, ten, or fifteen minutes. Here are Elbow's directions for freewriting:

Don't stop for anything. Go quickly without rushing. Never stop to look back, to cross something out, to wonder how to spell something, to wonder what word or thought to use, to think about what you are doing. If you can't think of a word or a spelling, just use a squiggle or else write, "I can't think of it." Just put down something. The easiest thing is just to put down whatever is in your mind. If you get stuck, it's fine to write, "I can't think what to say" as many times as you want, or repeat the last word you wrote over and over again, or anything else. The only requirement is that you never stop. (*Writing without Teachers* 3)

The requirement that the student never stop writing is matched by an equally powerful mandate to the teacher: never grade or evaluate freewriting exercises in any way. You can collect and read them—they are often fascinating illustrations of the working of the mind—but they must not be judged. To judge or grade freewriting would obviate the purpose of the exercise; this writing is free, not to be held accountable in the same way as other, more structured kinds of writing. Be sure to tell students that you will not be grading their freewriting. The value of freewriting lies in its capacity to release students from the often self-imposed halter of societal expectations. If you grade or judge such creations, you will convey the message that this writing is not free.

Most teachers who use pure freewriting use it at the opening of each class, every day for at least four or five weeks of the term. A session or two of freewriting, though interesting, is insufficient. For long-term gains, students must freewrite frequently and regularly. Only then will the act of writing stop being the unnatural exercise that some students see it as and start being a part of a writer's habit. Regular freewriting in class has two particularly worthwhile effects, says William Irmscher: "It creates the expectation that writing classes are places where people come to write, and it makes writing habitual" (*Teaching Expository Writing* 82–83). Students can also freewrite outside of class. You can assign freewriting as homework, grading it only according to whether or not it is done.

As students become more used to being pushed by a time constraint, their freewriting will become more coherent—the superego adapts and learns to work under pressure, although not with the deadly efficiency it once had. As this occurs, you can begin to intersperse directed writing assignments with the

freewriting assignments. Or you may consider phasing out the pure freewriting exercises altogether.

Combined with brainstorming and clustering, freewriting can be used as an aid to writing longer pieces. But you won't want to try this combination of techniques until students are comfortable with each one individually. Combining techniques is most fruitful when students use them at home, since they require an extended period of time. Example 6.3 provides an exercise that helps students combine the brainstorming, clustering, and freewriting invention techniques.

### The Benefits of Freewriting

Pure freewriting does not provide the neatness of the heuristic systems nor even the coherent processes of some other invention techniques, but as long as you explain its purpose and make certain that students don't see it as busy-work, freewriting can accomplish two important goals.

First, it can familiarize beginning writers with the physical act of writing. Mina Shaughnessy suggests that it is hard for some teachers to understand exactly how little experience many FY students have had in writing (14–15). Their handwriting may be immature, and their command of sentence structure may suffer because they cannot match their writing process with their thought process. Freewriting forces them to produce, without the conscious editorial mechanism making the writing process harder than it is. A full five or six weeks of directed freewriting can make a difference.

Second, freewriting demystifies the writing process. After simply pouring out their thoughts in a freewriting exercise, students can no longer view the ability to write as a divine gift that has been denied them. They soon come to realize the difference between writing and editing, a difference crucial to their willingness and their ability to write. Freewriting primes the pump for more structured writing by demonstrating that a writer normally cannot, and need not, produce a perfectly finished essay on the first try, that the process has many steps, and that the most seemingly unpromising gibberish can yield valuable material.

### Example 6.3 COMBINING INVENTION TECHNIQUES

Give students a subject to write about, and then suggest the following pattern:

1. Brainstorm for ten minutes.
2. Choose one item from your brainstorming list.
3. Cluster that word or idea for five minutes.
4. Set a timer or an alarm clock for twenty minutes, and freewrite for the entire time. Don't stop, and use only the brainstormed list and cluster as a basis for ideas.

Although students may grow tired while writing and may discard much of what they write, this piece of writing (or maybe the next one) will be the first draft of an essay that they can edit and you can grade. This technique works best when you assign the topics a week or so before the essays are due. Successful topics range from "the meaning of the funny papers" to "feminism"—topics even teenage students have lived with for many years.

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