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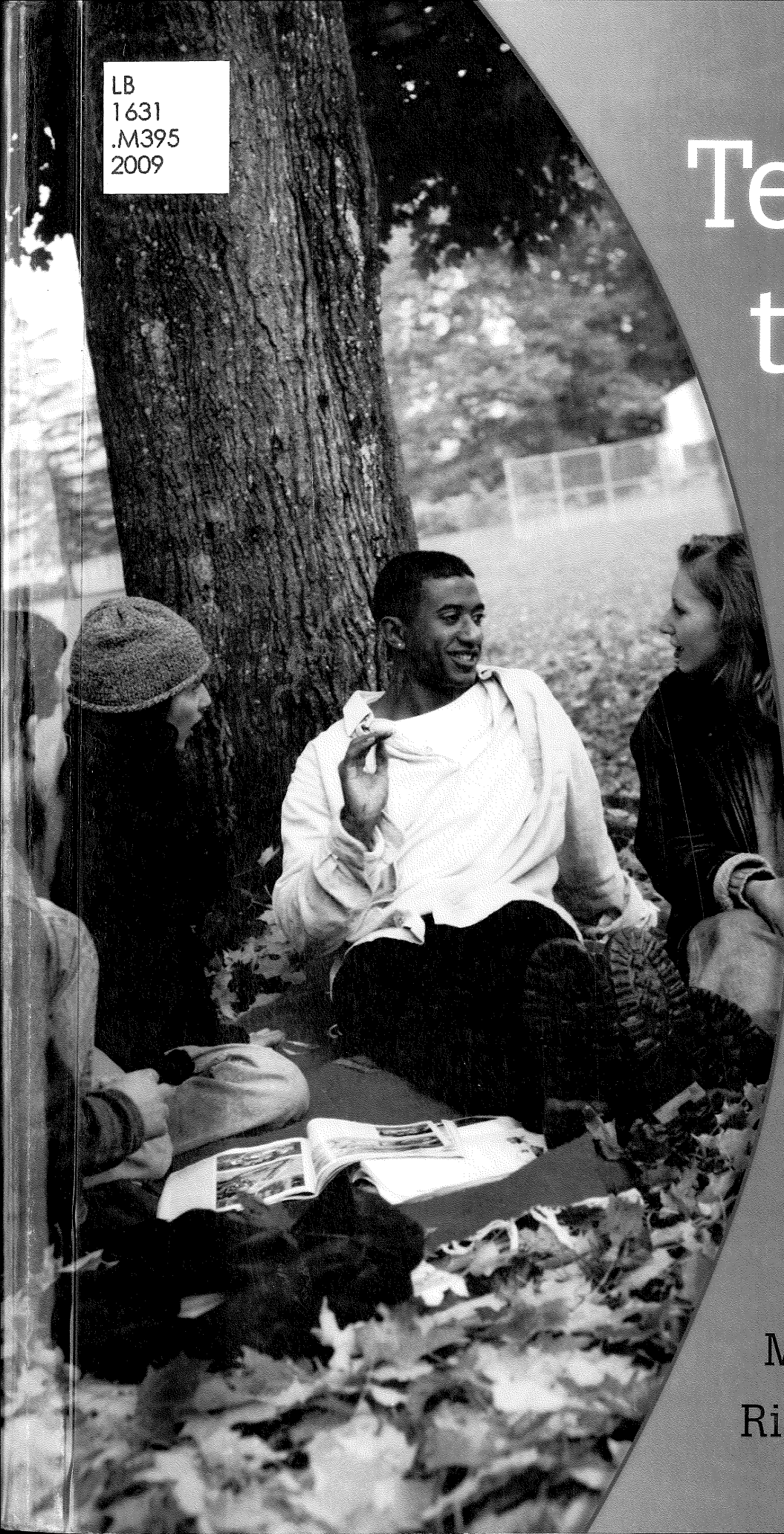
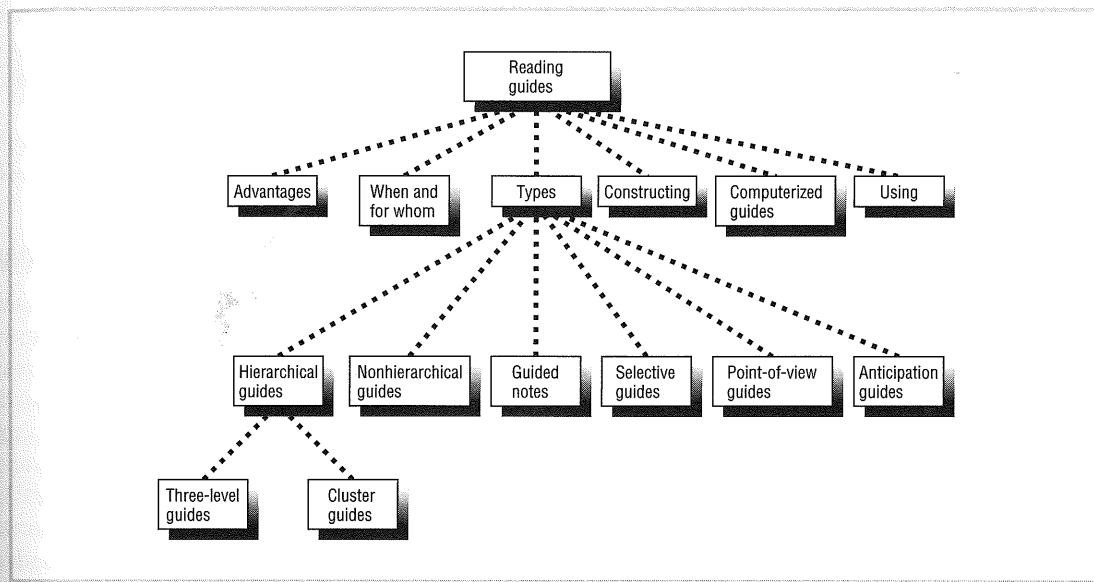# Teaching through Text

Reading and Writing in the Content Areas

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Reading Guides

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                        Reading
                        guides
    ┌────────┬───────────┼──────────┬────────────┬────────┐
Advantages  When and   Types   Constructing  Computerized  Using
            for whom                          guides
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          guides      guides      notes  guides    guides       guides
          ┌────────┐
      Three-level  Cluster
      guides       guides
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The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.

—Anatole France

Imagine that you have arranged a field trip to a large national museum associated with your content area. Because the trip will afford your students a special opportunity to enhance their understanding of the subject, you want to do everything possible to ensure that their time will be well spent. You might begin by contacting the museum far in advance to acquire information about exhibits, the building's floor plan, and so on. You may then share this information with your students to acquaint them with what they can expect to find once they enter the facility. When the day of the trip arrives and you enter the museum with your class, you discover that for a small fee, tour guides are available to assist with your visit. While you personally prefer to explore museums on your own, you decide that a certain amount of guidance may be in the best interests of your students.

Once the tour begins, you become convinced that you made the correct decision. The guide leads your students along a preplanned route and stops at key points of interest. During each stop, the guide offers additional information about the exhibits and calls the

students' attention to interesting and important features. Sometimes the guide raises questions or elicits student reactions in other ways.

Now consider the effect of not hiring a tour guide. Do you think that simply "turning the students loose" in the museum would produce results comparable to a guided situation? It is true that some of your more capable students would, like yourself, fare well in such circumstances. For most, however, the museum experience would likely be a random, structureless walk during which much is missed and much more is misunderstood. We suspect that even your more capable students would not benefit to the same degree without a guide.

Our museum analogy closely parallels the situation in which a content area reading selection is assigned. Without guidance, students may wander rudderless through a sea of print, unable to distinguish what is important from what is not and inadequately comprehending its meaning.

Objectives

This chapter introduces methods of guiding your students through assigned reading. When you have completed it, you should be able to

1. list the key advantages of using guides in written form;
2. defend the use of guides for a wide range of reading selections and for students of high reading ability as well as weaker readers;
3. describe the major types of guides and identify their advantages and potential drawbacks;
4. outline the steps of constructing a guide;
5. indicate how such guides are best employed in the classroom.

Advantages of a Written Guide

We concluded the last chapter by suggesting several benefits of providing students with a reading guide. It's true that some purpose-setting techniques can be used orally, such as posing key questions prior to reading. We argue, however, that the advantages of a written format are so persuasive that written guides should easily be the method of first choice. Let's reexamine the benefits in more detail.

First, guides help students focus their attention on important aspects of content. A written format ensures that this focusing occurs at the appropriate time in their reading. The teacher who orally poses a number of questions before students read risks their forgetting one or more of these questions when they reach the appropriate portions of the assigned reading selection. If, on the other hand, the teacher provides these same questions in written form, along with page numbers of the material to which they relate, the student is in a position to reference each question at precisely the moment it will do the most good as a purpose-setting device.

Second, guides make the reading process active rather than passive (Herber, 1978). Suddenly, reading is more than turning pages until the last is reached. The immediate goal is to consult the guide and respond to it—in writing. When reading is made *physically* active, chances are good that it will become *mentally* active as well. No longer can students engage in silent decoding without giving adequate thought to the ideas they encounter, for this is merely the illusion of reading. The guide prompts such thinking at the moment it is most opportune.

Third, responding to guides causes students to *translate* the material into their own words, phrases, and sentences. The process of translation is important in allowing the ideas to become those of the student rather than the author's alone (Pearson & Fielding, 1991). The more that guides can cause this translation to occur, the more successful they will be.

Fourth, guides help integrate reading and writing. We have already described how the use of literacy processes complement one another as the student learns from written materials. Reading provides new information; writing enables students to organize, refine, and extend their understanding of what they have read. Guides permit these processes to work simultaneously, establishing a

synthesis that tends to be more productive than postponing all writing activities until after the students finish reading.

Fifth, written guides and students' responses to them produce a useful tool for review. In studying for tests, students with guides will have far more tangible assistance than the help available from the text itself, which they may have comprehended poorly to begin with. Moreover, well-constructed literacy guides serve as note-taking models that students may come to emulate when reading on their own.

Sixth, the completed guide provides students with a valuable discussion aid. Few experiences are as disconcerting for teachers as asking questions that students cannot answer. We are not suggesting that reading guides will completely remedy this problem, but there is no doubt that post-reading discussions will generally be smoother, quicker, and far less frustrating for students and teachers alike when students have completed reading guides. The guide amounts to a blueprint of the ensuing discussion. While postreading talk may occasionally digress, the guide itself serves as the primary source of questions. Regular use of guides will rapidly instill in students an expectation that both discussion and examinations will follow the guides and that they are therefore well worth attending to while reading.

Seventh, a compelling body of research evidence now documents the effectiveness of guides in improving students' comprehension of assigned reading (McKenna, Davis, & Franks, 2003; Tierney & Readence, 2005; Wood, Lapp, & Flood, 1992). In short, guides work!

When Should Reading Guides Be Used?

Vacca & Vacca (2004) have suggested that reading guides be used only with unusually difficult reading selections. They have argued that adequate comprehension will in most cases result when teachers take the trouble to prepare students orally for a reading selection. We strenuously disagree with this reasoning. It may be true that comprehension will be reasonably good without guides for most students and most selections. However, there is now ample evidence that comprehension is better for students who make use of guides. Armstrong, Patberg, and Dewitz (1988, 1989) observed not only superior comprehension, but also better transfer of learned strategies to new material among students who had used literacy guides. These results are hardly surprising, since the advantages we have just discussed will always be present regardless of a selection's difficulty.

Another limitation often ascribed to reading guides is that they are useful primarily for poor readers. It is probably natural for teachers (who tend to be good readers) to infer that because they can comprehend well without guides their better students also don't need them. These teachers tend to forget, however, that even their best students are not likely to be as sophisticated as they are in reading, especially when selections are drawn from the area of the teacher's greatest expertise.

There is now evidence that better students may actually benefit the most from reading guides. Armstrong et al. (1988) found greater comprehension gains for good readers using guides than for poor readers also using guides. This research finding tends to confirm Savage's (1983) recommendation that guides be used with gifted students.

Finally, a long-standing assumption concerning guides is that they are unsuitable for children prior to middle school. A recent Eisenhower research project, however, revealed that even third graders could respond well to guides and that their overall ability to read nonfiction improved compared with children who did not use guides (McKenna, Davis, & Franks, 2003). These results are very much in line with Chall's stages of reading development (1983/1996), discussed in Chapter 2. Third grade is a pivotal year, when most children are developmentally ready to learn through text. Providing support through reading guides is an effective way to help them along this path.

In summary, the three long-prevailing reservations about using reading guides appear to be myths. One is that they are useful only with difficult selections. Another is that they are helpful only to poorer readers. A third limits their use to the middle and secondary grades. The evidence suggests that guides are a powerful tool for a wide range of readers and a wide variety of selections. We now look at various types of guides in common use. As you read about them, it is important for you to consider each type in relation to your own content area. Consciously look for those you feel are most suitable to the sorts of material you intend to assign.

Types of Guides

Reading guides come in an assortment of shapes and sizes. This diversity is natural since written materials vary considerably and the type of assistance students may need will vary also. Some formats are better researched than others and some have a better track record in content classrooms. Below, we examine the most common types together with one or two promising innovations.

Hierarchical Guides

In 1969, Earle suggested a format designed to lead students through three levels of mental processing as they read. His three-level guides consisted first of questions of a literal nature, having factual, explicitly stated answers. Next came a series of inferential questions that required students to arrive at logical conclusions based on stated facts. The final set of questions required students to apply and interpret what they had read. Herber (1978) and later Vacca and Vacca (2004) have subsequently urged content teachers to make use of three-level guides. An example of such a guide, which Armstrong et al. (1988) call a hierarchical guide, appears in Figure 8.1, for use with the hurricane passage (see Figure 5.3, page 70).

The rationale of the three-level guide is appealing. Presumably, it takes students through the proper process of critical reading, namely, by starting with stated facts, inferring other facts, and arriving at judgments and applications. The main difficulty with such guides is that efforts to validate them through research have as yet been disappointing. While the reasons for their failure are not entirely understood, one problem may be that students must answer every literal-level question first before answering a single higher-order question. Consequently, to make an inference based on the first subsection of a textbook chapter, students must wait until they have completed the entire chapter. In our view, timing is a crucial difficulty with the traditional three-level guide and may in some cases actually hinder higher-level thinking.

Nonhierarchical Guides

Armstrong et al. (1988) tested an alternative to the three-level guide, one in which questions at various levels were intermingled. This nonhierarchical guide follows the reading selection from

FIGURE 8.1

A hierarchical guide for the hurricane selection in Figure 5.3

Part 1. *As you read the selection on hurricanes, answer these questions.*

True or False?

A hurricane can cause a tornado._____

People who live away from the coast are safe from hurricanes._____

Average number of hurricanes per year in the Atlantic, Caribbean, and Gulf:_____

What makes hurricanes hard to predict?_____

Where do hurricanes get their power?_____

When they are in the tropics, hurricanes are steered by winds from what direction?

_____

Hurricane season   Starts:_____

                                    Ends: _____

In your own words, tell the three conditions needed for a hurricane to form:

1.

2.

3.

The strongest winds are in the

_____ eye

_____ eyewall

_____ bands of thunderstorms

How high is the top of the eyewall?_____

FIGURE 8.1 (*continued*)

A hierarchical guide for the hurricane selection in Figure 5.3

Part 2. *Now that you know some of the facts about hurricanes, answer these questions.*
Look back at the passage as you work.
Use the sidebar to complete this chart:

Type of Storm	Maximum Sustained Winds	
	Lowest mph	**Highest mph**
Tropical Depression	0	
Tropical Storm		73
Hurricane		

Check the agency that is most important *before* a hurricane strikes.

_____ American Red Cross

_____ NOAA

_____ FEMA

A hurricane that forms in the Pacific is called a(n)_____.

How would tropical storms be rated on the Saffir-Simpson Scale?
(Warning! Trick question!)

A hurricane with maximum sustained winds of 120 mph would be what category?

Why do hurricanes not form in winter?_____

How many months does the hurricane season last?_____

Which month is probably the worst for hurricanes?_____

Look at the satellite photo. If you were directly above the eye of a hurricane, could you see the ocean?_____

Part 3. *Now you're ready to form some opinions about hurricanes.*

In your opinion, why aren't homes along the coast simply built to be hurricane proof?

In your opinion, why do think there is no Category 6?

In your opinion, how could a building be designed to withstand a Category 5 hurricane? Offer a few ideas.

If you were in a boat, do you think you could stay safe by remaining in the eye? Why or why not?

start to finish. The teacher writes questions without concern for their level and arranges them in the order in which students will encounter the appropriate portions of the selection. Contrast the nonhierarchical guide depicted in Figure 8.2, also for the hurricane passage, with the hierarchical approach represented in Figure 8.1.

Nonhierarchical guides have the advantage of positioning questions at the points where they are most answerable. Teachers merely concern themselves with what is important and leave the issue of levels to take care of itself. Note how the teacher is able to add subheadings and page numbers so that the students can keep their place as they read the passage. It would be awkward to supply these road signs in a hierarchical guide.

FIGURE 8.2

A nonhierarchical guide for the hurricane selection in Figure 5.3

WHAT IS A HURRICANE?

True or False?

A hurricane can cause a tornado._____

People who live away from the coast are safe from hurricanes._____

Use the sidebar to complete this chart:

Type of Storm	Maximum Sustained Winds	
	Lowest mph	Highest mph
Tropical Depression	0	
Tropical Storm		73
Hurricane		

Average number of hurricanes per year in the Atlantic, Caribbean, and Gulf: _____

What makes hurricanes hard to predict?_____

Check the agency that is most important *before* a hurricane strikes.

_____American Red Cross

_____NOAA

_____FEMA

In your opinion, why aren't homes along the coast simply built to be hurricane proof?

SAFFIR-SIMPSON HURRICANE SCALE

A hurricane that forms in the Pacific is called a(n)_____.

How would tropical storms be rated on the Saffir-Simpson Scale?

(Warning! Trick question!)

A hurricane with maximum sustained winds of 120 mph would be what category?_____

In your opinion, why do think there is no Category 6?

In your opinion, how could a building be designed to withstand a Category 5 hurricane? Offer a few ideas.

FIGURE 8.2 (continued)

A nonhierarchical guide for the hurricane selection in Figure 5.3

HOW HURRICANES FORM BREEDING GROUNDS

Where do hurricanes get their power?_____

Why do hurricanes not form in winter?_____

When they are in the tropics, hurricanes are steered by winds from what direction?_____

Hurricane season   Starts: _____

                                     Ends: _____

How many months does the hurricane season last?_____

Which month is probably the worst for hurricanes?_____

Look at the satellite photo. If you were directly above the eye of a hurricane, could you see the ocean?_____

Storm Structure

In your own words, tell the three conditions needed for a hurricane to form:

1. _____

2. _____

3. _____

The strongest winds are in the

_____ eye

_____ eyewall

_____ bands of thunderstorms

How high is the top of the eyewall?_____

If you were in a boat, do you think you could stay safe by remaining in the eye? Why or why not?

Selective Guides

Cunningham and Shablak (1975) developed a guide that not only focuses attention on elements a teacher feels are important but actually encourages students to skim or skip other portions of a selection. This approach may remind you of Samuel Johnson's remark, quoted in Chapter 7, that he seldom read every word contained in a book. The rationale behind selective guides is the same as Johnson's: All parts of a reading assignment may not deserve equal attention and concentration. By means of a selective guide, the teacher makes these decisions for students in advance, and Cunningham and Shablak reasoned that repeated use of such guides would encourage students to become more flexible and selective readers by themselves.

Selective guides address two of the recurrent problems of textbook reading assignments. One is that readability tends to fluctuate among chapters and even among sections of the same chapter. The other is that the writing is often dense with facts, not all of which are vital to an understanding of the content. Selective guides aid students in selecting the wheat and ignoring the chaff. Teachers must begin by closely examining the selection to be assigned. They must first decide what students should *know* after completing the assignment by identifying important ideas, concepts, and supporting details. They must then decide what students can be expected to *do* as well as identify the information needed to do it. The result is a blend of questions, comments, and suggestions. Tierney and Readence (2005, p. 422) offered these examples of the kinds of remarks a teacher might include in a selective guide. Some focus thinking on key ideas.

- P. 93, paragraphs 3–6. Pay special attention to this section. Why do you think Hunter acted in this manner? We will discuss your ideas later in class.

We are too civil to books. For a few golden sentences we will turn over and actually read a volume of four or five hundred pages.

RALPH WALDO EMERSON

■ P. 94, subtopic in boldface print at top of page. See if you can rewrite the topic to form a question. Now read the information under the subtopic just to answer the question. You should pick up the five ideas very quickly. Jot down your answers in the space provided below.

■ P. 94, picture. What appears to be the reaction of the crowd? Now read the fifth paragraph on this page to find out why they are reacting as they are.

■ P. 95, paragraphs 5–8. Read this section very carefully. The order of the events is very important and you will want to remember this information for our quiz.

Other remarks actually guide the student in deemphasizing or ignoring material:

■ P. 179, all of column 1. The author has provided us with some interesting information here, but it is not important for us to remember. You may want to skim over it and move on to the second column.

■ Pp. 180–181. These pages describe a fictitious family who lived during the Civil War. You may skip this section because we will learn about the lifestyles of the time through films, other readings, and class discussions.

■ Pp. 221–222. Recent discoveries in science have improved the information contained on these pages. I will discuss this information with you in class. Now move on to page 223.

Note how the last three examples encourage students to skip and skim particular sections of the assignment.

Vacca and Vacca (2004) have suggested that content teachers gradually wean students away from selective guides. Our belief is that there is little reason to do so. Molding students into independent readers is not likely to result from gradually reducing the support that guides offer for a single textbook. A sizable advantage in prior knowledge of content will always place the teacher in the better position to judge what should be skimmed and what should be read with deliberate care.

> In Chapter 5, we discussed how tape-recording textbook material can involve informing the student to skip over less important portions of an assignment. A selective guide accomplishes the same result.

Point-of-View Guides

Wood (1988) introduced a new type of guide designed to assist middle-level students with textbook assignments. Her point-of-view guide uses questions in an interview format "to allow students to experience events from alternative perspectives" (p. 913). A variety of interview questions pushes the student to comprehend at more than one level of thought. The teacher begins

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Assisting Students with Special Needs

Guided Notes

Questions provide an effective format for reading guides, but they are not the only format. Lazarus (1988, 1993) developed an approach called guided notes, which consists of an incomplete outline of the material. Originally designed for use with lectures, this technique required teachers to prepare a skeleton outline of the material they wished to present. Enough space was available for students to fill in the outline as the teacher spoke. Lazarus (1993) observed remarkable successes using guided notes with mildly learning-disabled students.

While guided notes can be an effective device for use during lectures, modifying the technique for reading selections is a simple matter. Subheads provide a natural basis for the skeletal framework, but it is probably a good idea to go one step further and indicate the sorts of information and conclusions students should derive from within each subsection. Even though guided notes are not based on questions, the resulting product is nevertheless a useful tool during postreading discussions. In fact, Lazarus and McKenna (1991) found that a combination of guided notes and subsequent review produced the best results. Figure 8.3 provides an example of guided notes applied to the selection on the hurricane presented in Chapter 5 (Figure 5.3). Note how this example differs slightly from the simpler outlining approach (Figure 7.8) by providing additional suggestions about what the student should write. Take a moment to contrast the two examples.

FIGURE 8.3

Portion of a guided notes guide for the hurricane selection in Figure 5.3

History

    Hunraken:

    Huracan:

Storms

    Tropical Depression:

    Tropical Storm:

    Hurricane:

Threats from tropical depressions and storms:

1.

2.

3.

by choosing an appropriate perspective on the material the students will read. In the example presented in Figure 8.4, we chose the perspective of a hurricane forecaster. The viewpoint a teacher selects, however, might be a real person. We might have chosen the governor of a threatened state, for instance.

The point-of-view guide offers several advantages that we feel make it useful, even with students above the middle grades. First, it encourages writing about what is read, sometimes at length. Second, Wood's experiences reveal that students feel less pressure to use "textbook language." They feel freer to reexpress content in their own words. Third, the point-of-view guide seems applicable to a variety of content subjects. As Wood observes, "In literature students

FIGURE 8.4

Portion of a point-of-view guide for the hurricane selection in Figure 5.3

Imagine that you are a hurricane forecaster. As you read, answer these questions the way you think he or she might have answered them.

WHAT IS A HURRICANE?

Two storms are developing at about the same distance from the United States. One is Tropical Depression Abe and the other is Tropical Storm Bess. Which one will you monitor more closely and why?

As a hurricane approaches, would you issue a warning to people who live inland, away from the coast? Why or why not?

In May, the head of the Red Cross calls you. She asks you how many hurricanes her volunteers should prepare for in the coming season. What do you tell her?

can assume the role of various characters as they react to events in a story. In science, they can describe the process of photosynthesis from the perspective of a plant or the act of locomotion from the perspective of an amoeba" (p. 915). Fourth, such guides encourage perspective taking—seeing issues from another's viewpoint. Gardner and Smith (1987) observed that this ability is related to inferential comprehension. Point-of-view guides may therefore offer the bonus of enhancing student inferences.

Anticipation Guides

Readence, Bean, and Baldwin (1981) developed a very different kind of guide especially for use with materials that involve controversy or factual misunderstanding. Their anticipation guide consists of a series of statements about the material covered by the selection. Students read the statements prior to the selection and indicate whether they agree or disagree with each. The teacher and the class openly discuss the statements, but the teacher refrains from suggesting responses. The rationale of the anticipation guide is simple: The statements serve to activate appropriate prior knowledge, while a student's responses provide hypotheses to be tested through reading.

Figure 8.5 shows an example of an anticipation guide based on the hurricane passage from Chapter 5. This particular illustration is a modification of the basic idea and is sometimes called an anticipation-reaction guide. Students place a check mark in the first column when they agree with the statement prior to reading. They place a check mark in the second column if they *still* agree with the statement after they have finished reading.

Duffelmeyer (1994) warns that in order for anticipation guides to be effective, the statements they contain must be carefully worded. Good statements, he stresses, should have three characteristics: (1) they must center on key ideas, not details; (2) they must activate and draw on prior knowledge; and (3) they must *challenge* students' existing beliefs. He offers four steps leading to an effective anticipation guide:

1. Identify the major ideas presented in the material to be read.
2. Consider what beliefs your students are likely to have.
3. Create statements that elicit those beliefs.
4. Arrange the statements in a manner that requires a positive or negative response.

We have tried to follow Duffelmeyer's advice when we wrote the statements in Figure 8.5. We were especially interested in statements that might run contrary to a student's preexisting beliefs or to "common sense."

FIGURE 8.5

Example of an anticipation-reaction guide for the hurricane selection in Figure 5.3

The teacher instructs the students to read each statement in advance and to place a check in the Before column if they agree with it. After they read, students are asked to return to the guide and put a check in the After column for each statement they still support.

Before	After	
_____	_____	1. The word *hurricane* comes from the name of an evil god.
_____	_____	2. People who live away from the coast are safe from hurricanes.
_____	_____	3. A hurricane is a cyclone.
_____	_____	4. The greatest threat of a tropical storm is high winds.
_____	_____	5. A "super typhoon" can never strike Florida.
_____	_____	6. A hurricane could strike the United States on Thanksgiving Day.
_____	_____	7. It is very violent inside the eye of a hurricane.

Constructing a Reading Guide

Our discussion of various formats for reading guides should in no way limit your thinking about how to construct them. In fact, there is no real limit to the number of formats possible, and Wood et al. (1992) provide an excellent resource for additional blueprints for developing guides. The reading selection itself should always be the major factor in developing a guide. Rather than use one of these formats, you may wish to improvise a unique format. You can use any of the purpose-setting devices discussed in Chapter 7—including questions, charts, graphic organizers, problems, and the like—to develop a guide. These hybrid guides are ideally suited to the reading selections they cover. The key to constructing them is to be familiar with a wide variety of purpose-setting techniques.

Figure 8.2 is actually a hybrid, containing several types of purpose-setting techniques. They include literal, inferential, and critical questions to answer, a chart to complete, true/false statements to judge, checklists to evaluate, and a list to compile. We might have combined techniques still further by merging Figures 8.2 and 8.5. That is, we might have begun with an anticipation-reaction guide and then proceeded to cover the selection! Constructing a good guide is a truly creative process.

We offer the following suggestions for constructing a reading guide that will effectively focus attention and enhance comprehension as students read. The first four suggestions come from Earle (1969) in an early discussion of study guides.

1. *Analyze the material.* Read the selection carefully to decide which information to emphasize. Ask yourself what thought processes students will need to use as they read. For example, will they need to classify information into categories? If so, the completion of a chart may be an effective format for a guide. Will they need to understand the relationships among clusters of concepts? In this case, the completion or construction of a graphic organizer may be warranted. Do they need to be able to recall detailed factual information? Guided notes may be indicated. Do they need to arrive at inferences based on the factual information presented? Here, question clusters proceeding from literal to inferential thinking would be ideal.

2. *Don't overcrowd the print.* A page teeming with type may overwhelm some students, particularly weaker readers. Effective guides contain plenty of white space, inviting the students to make notes. The best guides are friendly aids, not laborious appendages that simply add to the total reading assignment.

3. *Make the guide interesting.* There is no reason a guide should not motivate as well as assist. Use clear and considerate wordings. Rely on your own background knowledge to add an occasional (though brief) interesting tidbit or sidelight. From time to time, you might also include a little cheerleading ("We're about to wrap this up," "You're doing great—only two more sections," etc.).

4. *Review your own purposes.* When you have finished the guide, read it over to ensure that it captures your own instructional objectives. Ask yourself whether students who successfully complete the guide will have the knowledge and skills that the reading and writing activities should give them. Be prepared to modify the guide whenever you are not satisfied.

5. *Use word processing to prepare the guide.* Like any writing product, the best reading guides are not first drafts. Word processing tends to make revisions relatively painless. Because some of your best ideas for revision will come as a result of actually using the guide with students, it is important to keep your thoughts about a guide as fluid as possible so that changes can easily be made long after the guide is initially printed. Using a word processor helps to keep your thinking flexible.

6. *Include page numbers or subheads.* Students must know how each part of a guide relates to the reading selection. You can make this relationship clear by indicating the page numbers or subsections to which questions, charts, and so forth refer. Providing this information helps ensure that students will read and complete each section of a guide as they encounter the corresponding portion of the selection rather than read the entire guide in advance.

7. *Label the thinking skills students will need.* When a guide consists of questions, consider labeling them according to the level of comprehension they require (literal, inferential, and so forth). In other cases, make sure to emphasize the skill in the instructions to the student. You might precede a chart with instructions like these: "In this section, be on the lookout for ways in which igneous, sedimentary, and metamorphic rocks are different. Classify them by putting a check mark in the chart when you find one of the characteristics listed."

8. *Include comprehension aids.* Some of the formats we've discussed, such as the selective reading guide, incorporate help with possible comprehension problems. We suggest that the best guides anticipate possible difficulties. That is, they should do more than set purposes; they should also assist students through potential pitfalls so they can actually accomplish the purposes. This assistance might include the following:

- Quick definitions or synonyms for key terms
- Bridging comments (for example, "This is like the example we read about in Chapter 2")
- Clarifying comments that might paraphrase or summarize difficult passages
- Indications of material that is extremely important
- Indications of material that may be skipped or skimmed

9. *Include questions that encourage students to think carefully about the content.* Fordham (2006) suggests that teachers must learn to distinguish between questions that merely assess comprehension and those that help students think through content. For example, a question might prompt a student to link an idea expressed in one paragraph to one that was expressed in a previous paragraph. Such questions are ideally placed *during* rather than *after* reading, and a guide can position them at just the right spot.

Computerizing Reading Guides and Units

In Chapter 5, we introduced the idea of hypermedia, a nonlinear arrangement of reading materials and other media ideally suited to computer presentation. Dillner (1993–1994) describes how an American history teacher constructed a hypermedia unit for the Bill of Rights to complement the textbook treatment of the same topic. Dillner's pioneering work can be replicated far more easily today with authoring software such as Inspiration and Kidspiration.

This application of hypermedia to content materials suggests a wide range of possible applications. For example, the text itself might be incorporated into the computerized unit. If this were done, the students might toggle back and forth between the guide and the material. The textbook content might also be interwoven with other selections, allowing students to explore subtopics in more detail, explore other writers' perspectives, or access simplified treatments. Involving students in the development of units as a postreading activity is another possibility of proven effectiveness (Reinking & Watkins, 2000). The creativity of the teacher is apparently the only limit on what can be achieved.

Using Reading Guides

There is more to using a reading guide than simply distributing it—construction is only half the job. Begin with a final check of its adequacy by filling one out yourself. This exercise may alert you to important aspects of a selection that the guide may have ignored. It will also provide you with a convenient reference when conducting the postreading discussion. If you have produced the guide on a word processor, you can easily correct those sections where too much or too little space is available.

Guides and Comprehension Monitoring

An ample body of research informs us that good readers constantly monitor their own comprehension as they read (Paris, Wasik, & Turner, 1991). When a sentence or paragraph does not make sense, they reread to discover the source of the difficulty. When textual information jars their prior understanding of a topic, they consciously reason the matter through. When their purposes for reading are not being met, they ask why and seek ways of meeting these purposes.

Reading guides facilitate the process of comprehension monitoring. Because they require written responses, students cannot proceed until they have fashioned an acceptable response to each task the guide presents—or at least until they *realize* they have been unable to do so. In this sense, guides model for students the very processes that mature readers use to check their understanding as they read. Teachers must make this fact clear to students. They must inform them that this is the manner in which effective reading should work and that students should endeavor to check their understanding whenever they read.

Using Guides from Day to Day

Once students become familiar with reading guides, do not assume that no introduction is necessary. Always take a few moments to walk the students through a new guide. You might undertake this as part of a chapter walk-through, as discussed in Chapter 5. When the time for discussion comes, ask the students to place the completed guide on their desks and to refer to it as necessary when responding. By using the guide as a blueprint for your postreading discussion, you will reinforce for your students the expectation that completing it has benefits. Once the discussion is over, encourage students to keep the guide as an aid to review. You can reinforce this suggestion by basing examinations, in whole or in part, on the content of completed guides. Other ways to encourage students to complete guides include (1) assigning grades occasionally to the guides themselves and (2) administering tests during which the guides may be used (open-note tests).

Finally, be reflective. During class discussions be attentive to possible deficiencies, or "bugs," in your guides. Look on each discussion as a field test of the reading guide, and be prepared to revise it when you discover problems. Having the guide on a word processor simplifies the procedure.

> To the list of basic purpose-setting devices presented in Chapter 7, we can now add another: assigning students the task of constructing a reading guide or of modifying, refining, or critiquing one that you provide. To do so, they would of course need to be fairly familiar with guides of various types.

Guides and Cooperative Learning

Cooperative learning involves placing students in groups that work collaboratively to achieve common goals. An underlying idea is that cooperation is healthier and more productive than the competition that individual work may foster. Research on cooperative learning has been encouraging with respect both to students' achievement and to their growth in social skills and attitudes (Slavin, 1988, 1989–1990). However, content area teachers in the secondary grades are often reluctant to experiment with the approach, perhaps because it differs so markedly from the lecture-oriented instruction they find more familiar.

Reading guides provide an excellent way of introducing cooperative learning in a limited, structured way. A good approach for teachers to begin with is the Jigsaw technique (Aronson, Stephan, Sikes, Blaney, & Snapp, 1978). Freely adapted for use with literacy guides, the Jigsaw technique involves these steps:

1. Choose a reading selection that can be divided into relatively independent sections. For example, a biology chapter on mammals might contain sections on physical characteristics, different types of mammals, their geographic distribution, and so on. The idea is that each section could be comprehended adequately without first having read other sections. (This type of reading selection is necessary because each student will read only one section.)
2. Partition your reading guides into sections corresponding to the sections of the reading assignment.
3. Develop an objective quiz over the entire selection.
4. Assign students to groups of about four. The groups should represent the ability distribution of your class. For a heterogeneous class, a mix of one above-average student, one below-average student, and two average students is recommended.
5. Build background for the reading selection in the usual manner, using techniques described in Chapters 5 and 6.
6. Give each student a portion of the reading guide. Each group will have one person responsible for reading and completing a specific portion of the partitioned guide.
7. Give each student an opportunity to teach the other group members the material that was assigned.
8. Administer the quiz to all students.

The knowledge that they must eventually pass a test on the material motivates the students to do well on their assigned work. Peer pressure is brought to bear in an unusual way: Students expect other group members to do well, since their own grades depend on it.

Tierney and Readence (2005) list several potential problems with Jigsaw, including (1) the effect of student absences when the activity lasts more than one day, (2) the possibility that team members may not get along, and (3) the chance that a predominance of slow learners may prohibit the effectiveness of groups. These problems are not without solution, however, and our experience is that Jigsaw is well worth the effort. A useful variation of the technique involves letting each team work collaboratively on completing an assigned section of the reading guide. Each group then teaches its section to the rest of the class.

SUMMARY

Reading guides provide students with a variety of writing tasks as they read. They offer teachers and students a number of powerful advantages. Such guides focus the attention of students on important information and ideas as students encounter them in print. Guides make reading an active process during which students are involved in specific thinking tasks. In this way they provide an excellent means of integrating reading and writing. Completed literacy guides serve as review aids and as a prompt during class discussions.

Authorities differ on the subject of when to use reading guides and with which students. We discussed evidence suggesting that guides can improve comprehension of virtually any reading selection and that better students may profit from them as much as or more than students experiencing reading difficulties. These are strong arguments for the use of guides at all times.

Numerous types of guides have been developed and researched. Hierarchical guides use questions to move students from the literal to higher levels of comprehension. Three-level hierarchical guides pose all literal questions first, then progress to inferential questions, and so forth, while cluster guides repeatedly move from literal to inferential or critical with each new subtopic. Nonhierarchical guides present questions in the order in which the material is organized, without regard to the question levels. Guided notes are composed simply of subheads, suggestions as to important points students must work toward with regard to each, and plenty of blank space in which to write. Selective guides assist students by indicating sections of greater or lesser importance and suggesting appropriate reading speeds. Point-of-view guides present questions in interview form, requiring the students to adopt the role of a specified individual. Anticipation guides survey the prior beliefs and expectations of students in the hope of alerting them to issues on which their thinking may change as they read. All of these types of guides have been the subject of numerous research studies. Some now seem to be more effective than others. In particular, the anticipation guide and the traditional three-level guide are currently somewhat suspect.

While no magic formula can produce perfect guides every time, a few simple suggestions will help. Teachers should begin by analyzing reading selections to determine what they actually expect students to derive from them. The guide itself should be unintimidating and should offer plenty of white space in which to write and should be in a format as interesting as possible. Teachers should review their own purposes in an effort to ensure that the guide reflects the purposes. Word processing makes revisions reasonably easy. For lengthier selections, subheads or page numbers provide students with landmarks that enable them to correlate the guide with the selection. It is a good idea to label the thinking skills or levels associated with each writing task and to provide comprehension assistance—definitions, synonyms, restatements, and so on—wherever needed.

Prior to actual use, the teacher should complete the finished guide with expected responses, both as a final check for "bugs" and as a means of providing a discussion aid. The teacher should walk students through the guide rather than simply hand it out. It is important to familiarize students with the nature of reading guides early on. Describing the content literacy inventory as the first in a series of guides can be highly effective. Presenting guides to cooperative learning groups can be another effective way to engage students in completing guides. Teachers must use reading guides reflectively, remaining alert to problems and be willing to revise them whenever deficiencies become evident.

Getting Involved

1. Take a few minutes to contrast the two guides presented in Figures 8.1 and 8.2. Their content is identical, but the hierarchical guide (Figure 8.1) presents the student first with all of the literal questions and tasks, then all of the inferential, and finally all of the critical. The nonhierarchical guide (Figure 8.2) intermingles these tasks in the order of the text. Which do you think would be more effective?

2. If you are currently teaching, prepare a reading guide for a selection you will assign in the near future. When the time comes, try an action research experiment in which you compare the discussion that follows a reading selection that made use of the guide with the discussion of a comparable reading selection for which no guide was developed. Do the results convince you?

3. If you are not currently teaching, develop a reading guide for a stand-alone selection that you may assign regardless of the official text or curriculum from which you may eventually teach. (We hope you have chosen such a selection already, as part of Getting Involved activities in previous chapters.) It could be a magazine article, short story, essay, or poem. Follow the construction guidelines provided in this chapter as closely as you can. If you lack students with whom to field-test your guide, exchange guides with a colleague in the same subject area and provide one another with feedback.