## Introduction

How Can I Teach Writing if I'm Not a Writing Teacher?

Pirst things first: This book is *not* about teaching writing. It's about *using* writing as an instructional tool for increasing students' understanding of content. Therefore, it is written for non-language arts teachers with approaches and strategies that are applicable from the upper elementary grades through high school.

Writing increases understanding in all content areas, whether math or science, social studies or foreign language, art or music, or physical education. And you don't need to be a writing teacher in order to use writing as an instructional tool any more than you need to be a computer programmer to use a computer or an auto mechanic to drive a car.

The goal of this book is to show readers—teachers and prospective teachers—how to use writing as an integral part of effective instruction, not to turn you into writing teachers. There are many reasons why writing increases students' understanding of content and many easy-to-use but highly effective strategies that teachers can integrate into existing lessons in order to heighten student achievement. Both the reasons and the strategies will be explored in the chapters that follow, but here's a sample of what to expect.

As a content specialist, who better than you to get students writing about the ideas and concepts that drive understanding of your content area? You know—as do effective teachers everywhere—that asking students simply to acquire knowledge through listening or reading does not lead to full understanding. The goal of effective instruction is more than acquisition of information. We want our students to be able to use the information they gain, to apply it in both familiar and unfamiliar contexts, to manipulate it, to distill it, to roll in it mentally until it becomes part of

## 2 Writing for Understanding

the fabric of their minds. Until this higher level of understanding is reached, students cannot truly use content knowledge. They may be able to regurgitate facts for a short-answer test—and forget them soon afterward—but they often cannot use new information in other contexts or connect new content understandings to existing knowledge.

Why does writing make a difference? An old Chinese proverb says:

I hear . . . and I forget.

I see . . . and I remember.

I do . . . and I understand.

Writing is part of "doing." It activates learning. Let's take an example from a science class and examine how students might increase their understanding of a lesson through writing. An introductory lesson about oxygen and combustion might proceed this way:

First, the teacher tells students that oxygen is necessary for burning. (*I hear and I forget*.)

Next, the teacher says, "Let me show you an example," and stands a lighted tea candle on a rubber mat. Then the teacher places an upturned glass or clear jar over the candle. Students watch as the candle flame goes out. (*I see and I remember*.) Finally, the teacher asks the students to pair off with their own candles and jars, saying, "Try it yourselves." (*I do and I understand*.)

At this point, the teacher has accomplished a basic goal. Students know that a candle flame will go out if the lighted candle is placed into a glass jar so that air cannot get inside to replenish the oxygen used by the flame. But no good teacher, even at the most elementary level, would stop at this point. The next logical question is to ask students, "When you put a lighted candle in a closed jar, why does the flame go out?" Depending on the age of the students, they may put forward various theories or simply state the obvious: the burning flame uses up enough oxygen so that too little remains to sustain the fire, and so the candle goes out. (Advanced classes also will be able to explore other facets of this and similar experiments, such as the production of water vapor, the role of carbon dioxide, and so forth. But the oxygen-combustion connection is sufficient for this example.)

In some cases, this is where the lesson ends. That's unfortunate because this fundamental knowledge has broad applicability if students are allowed and encouraged to make the knowledge truly their own through deeper understanding. The students will remember that oxygen is necessary for the candle to keep burning, but will they be able to take that principle of combustion and apply it to other contexts?

This is the teachable moment at which using writing as an instructional tool can help deepen and expand students' understanding. For example, the teacher might ask students to write in their science journals, prompted by one or more of the following questions:

- You are standing close to a campfire to stay warm when suddenly your pant leg catches fire. You remember the safety lesson about "stop, drop, and roll." So you quickly drop to the ground and roll until the fire goes out. Explain why this safety technique works.
- The local newspaper carries a story about a car fire. Firefighters used foam to put out the blaze. Describe the science behind this firefighting technique. Speculate on why using hoses and water might not be as effective for putting out a car fire.
- You are frying a hamburger in a skillet when all at once the grease in the pan catches fire. You remember being told never to throw water on a grease fire because it can spread the fire and make matters worse. So you calmly reach over and put a lid on the skillet, and the flames go out. How is this technique for controlling a fire on your stove like the candle-flame experiment?
- Think about astronauts in space. Space often is characterized as "airless," meaning that there is little or no oxygen in space. After all, isn't that why astronauts wear spacesuits? If space is airless, suppose that a part on a space station needed to be repaired by welding it while the station is orbiting the earth. How might that be accomplished? Once you have written down your ideas, research this topic and see if you can confirm your answer.

Writing for understanding often can be thought of as writing to reflect on ideas. Southern author Eudora Welty (1984) once commented, "In writing, as in life, the connections of all sorts of relationships and kinds lie in wait of discovery, and give out their signals to the Geiger counter of the charged imagination, once it is drawn into the right field" (p. 99). As students write in their journals in response to one of the preceding prompts, they are reflecting on the experiment that they witnessed and replicated. They are being asked to consider: What does this experiment really show me? How is this experiment related to the situation in the question? What is the *big idea*—that is, the general principle—and how can this idea be applied in other situations?

Students' answers are food for further discussion, clarification, and extension. Reflective writing, such as science journal responses, are not "public" in the sense that they are not intended to be read, much less graded, by the teacher. Reflective writing provides a way for students to think *intentionally*. It's easy to say to students, "Now think about this experiment and how you might apply this principle to some other situation." But in many cases, not much critical thinking will go on, certainly not much organized thinking. Asking students to write is a way of helping students reflect on ideas in an intentional, organized way. Teachers do not need to read this type of writing. Indeed, it's probably better if they don't. (Later chapters will explain why.)

But, you might ask, "If I don't read students' journals, will they take the writing seriously?" The short answer is yes—if you establish the

## 4 Writing for Understanding

importance of writing for understanding as part of the ethos of your class-room. One way to do so is to *use* students' writing in various ways. For example, ask a few students to volunteer to read their reflections to the class in order to propel discussion. This is a way not only of extending the reflection and stimulating further thought but also of validating students' writing efforts.

"Don't I have to grade students' writing?" The short answer is no. Following are five alternatives to "grading" students' writing.

*Monitor* students' writing behaviors by allowing class time specifically for reflective writing. This is a management-by-walking-around strategy. Move around the classroom to observe students in the act of writing. Stop and ask a question if a student seems puzzled or hesitant.

Register students' writing activity. Acknowledge students' efforts as you move about the classroom. Check off that students have done the writing assignment. This doesn't require reading or grading the written work. It merely notes that students have made the effort and been recognized for it.

Discuss students' ideas. Encourage students to read aloud what they have written as a way to initiate and propel class discussion. Having written reflectively, students now have something to say. They aren't being called on for a spur-of-the-moment response. Writing provides starting points, and the reflection already evident in the writing allows the discussion to proceed at a high level.

*Critique* students' conclusions, for example, by pairing students to share their writing with one another. Ask students to find key ideas in their peers' work and to ask questions for clarification. When students read their writing aloud to the whole class, be prepared to do the same. Point out how students have been insightful and ask questions to draw out additional ideas.

Correct students' misunderstandings. When students share their written reflections, it is easy to identify content misunderstandings and faulty interpretations and to correct them. Correction at this point can save future reteaching.

All of these strategies, which will be explored in greater depth, engage students in *using* writing to develop and deepen understanding of content. None requires the teacher to read or grade the writing. Indeed, Glasgow and Farrell (2007) believe,

Experienced teachers recognize that writing skill develops on a continuum, and they help their students to see individual growth along that continuum. Students who understand that what they have to say is unique and valuable are much more likely to risk committing their thoughts and ideas to paper. They know that the mechanical components of writing can be addressed concretely father along in their writing process. (p. 91)

The chapters that follow show how to use writing as a tool for increasing students' understanding of content. Chapter 1 provides an overview of

how writing increases understanding and why using writing as strategic instruction is important in order to meet challenging curricular standards and the requirements of high-stakes testing. Chapters 2 through 6 describe how to develop specific types of writing assignments. These types, or genres, include narrative, descriptive, expository, argumentative, and persuasive writing. All of these types are valuable in every content area, as examples will demonstrate.

Chapter 7 draws together the preceding chapters to examine how writing can be used in ways that engage students in discussions—termed classroom and student dialogues—that both validate students' understandings and enhance them. Chapter 8 focuses on connections between writing and the Internet and includes a number of online resources for teachers and students. Online writing opportunities can stimulate student writing, and online resources can help students and teachers get the most out of their writing endeavors. Chapter 9 offers a troubleshooting guide in the form of FAQs (frequently asked questions) about writing, in particular about standard writing conventions. The straightforward answers make it easier to use writing as an effective teaching tool for increasing students' content knowledge and understanding. Finally, Chapter 10 provides an annotated compilation of books and downloadable online resources that teachers may find useful in further exploring how to use writing for strategic teaching and learning.

A note about student writing examples: Most are composites for the sake of illustration. In almost all cases, any usage and spelling errors have been corrected to maintain the focus on content. None of the student names refer to real persons.

The idea behind writing for understanding has a long history. The phrase "writing for understanding"—sometimes rendered as "writing to learn"—is used or implied in countless books and other resources for curriculum and instruction, many of which are referenced in various chapters. An excellent example at the collegiate level is the Writing-in-the-Major Project at the University of Wisconsin-La Crosse that, according to its Website, "establishes department-based programs to advance students' capacities in formal writing and writing-to-learn" (www.uwlax.edu/wimp/index.htm, accessed January 3, 2008). Much of what visitors find at this Website can be adapted for pre-collegiate classrooms.

The notion of writing for understanding rests on constructivist learning theory—that is, students construct their own understanding based on integrating new information with existing knowledge. Students are not empty vessels into which information is poured. Rather they are repositories of experiences wherein new ideas are connected with already acquired information to construct new understanding. Writing is a vehicle for increasing and strengthening such connections.