

4 Writing and Reading Across the Curriculum: Best Practices and Practical Guidelines

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Although we built this book on the idea that reading and writing have been disconnected in theory and in practice and need to be rejoined, a fair amount of work has been done examining the relationship of reading and writing, offering practical suggestions for classroom work. The overall goal is to help students develop the strong reading skills that support and make good writing possible. This chapter offers a review of some of this work, particularly for classroom teachers looking for ways to work consistently on reading while helping students develop their writing. Reading is essential to success in all college courses, not only in writing courses. Because both reading and writing skills are essential to success in every discipline and in personal and professional realms, this chapter presents overall goals that warrant attention, and then focuses on specific approaches for both writing classes, such as first year composition and courses across the curriculum.

ISSUES AND PROBLEMS IN TEACHING READING WITH WRITING

In the United States, questions of how best to prepare teachers to teach reading and writing have been asked since the common school era of the 1830s. These same questions are asked today with much broader historical, social, and technological implications. There have been numerous proposals over the years about how to integrate reading and writing in the classroom. David Jolliffe (2007), a University of Arkansas scholar, leading researcher on college reading, and a con-

tributor whose work appears in this book, argues that the problem for most instructors in teaching effective reading strategies in composition courses occurs because reading, as a topic, is typically delegated to other disciplines in most mainstream composition curriculums and pedagogical strategies. However, he believes writing program administrators and instructors can do several things to remedy this problem. One strategy entails incorporating several kinds of reading material, such as memoranda and reports, in addition to textbooks, that more realistically reflect the kinds of reading students do. Also, we need to determine our outcomes for reading in the writing class and work backward from them. After we have defined our outcomes for reading, we need to determine where exactly our students are as “critical, constructive, active readers” in relation to these goals. Diagnostic testing is one approach to finding clues. Finally, Jolliffe stresses we need to ask ourselves what techniques and strategies need to be taught as we help our students move from start to finish.

Some scholars find writing programs and pedagogies key in examining students’ inability to fuse effective reading and writing practices. Many college instructors complain about how their students do not read the texts they are assigned, and even those who do are ill-equipped to fully comprehend the text or effectively integrate the material into a writing assignment. However, Jolliffe (2007) contends, “Students have to read in college composition, but rarely does anyone tell them how or why they should read” (p. 474). In fact, composition instructors often spend too much class time discussing the topic of a reading selection, effectively giving lessons on social issues like immigration or gender bias in popular music (culture issues about which they may be more or less informed). Too little time is devoted to explaining *how to* actively read an essay or *how to* transfer and assimilate the reading into effective composition. “The problem for these instructors,” Jolliffe explains, “would be that most mainstream composition curriculums and pedagogical strategies aren’t designed to achieve these goals” (p. 478). Since critical reading studies are often performed outside of college composition discourse, instructors do not have the required resources to implement more effective strategies.

Jolliffe (2007) argues that when the topic of reading as a curricular or pedagogical focus is actually taken up by instructors (and administrators and textbook authors), it is typically torn between two “diametrically opposed ends of a continuum of complexity” (p. 474).

On one end of the continuum, reading is reduced to lessons in study skills, or “search and capture” strategies of finding context clues and main and supporting ideas (p. 474). At the other end, reading assignments become overly complex for first year college students, requiring advanced analysis and interpretation skills. This kind of curriculum that promotes “strong reading” cannot represent the students’ experiences in terms of how and what they actually read (pp. 475–76). Before looking at practical research in the categories set up by Jolliffe, there are some more general issues to consider, such as faculty skills and expertise with respect to reading, their ability to use what textbooks effectively provide, and the potential of developing collaborative relationships across disciplines and with library faculty.

Many instructors have a key problem in holding the skills and strategies to get students to complete an assigned reading. Good advice on how to achieve this end comes from Nilson (2010), director of Clemson’s teaching and learning center, and author of *Teaching at Its Best*. In her chapter on reading, Nilson cautions faculty against lecturing on readings in class, and recommends “incentivizing” reading to encourage students. Using any one of a number of techniques (online responses, dialogue journals, quizzes, and the like), Nilson advocates making students’ work with readings count no less than 20% of their course grade. The result of non-performance is significant if students do not complete reading-related tasks, so the likelihood of “reading compliance” is much greater (Nilson, 2010, pp. 21–22).

Doing the reading will not only help students use the reading in the ways enumerated by Jolliffe (2007), but can also provide them with an awareness of what formal and academic prose is supposed to sound like. Reading a substantial amount of non-fiction prose gives writers what language acquisition scholar Stephen Krashen (1983) calls the “din” of language—in this case, academic written language. Though Krashen wrote about second language learning and the need for exposure in order to have the sounds and syntactic patterns of the target language taken in by the learner, the concept also applies to learning to write. A number of years ago, I proposed that learning to write academic prose is, for an increasingly large number of students, like learning a foreign language (Horning, 1987). Whether in language learning or in learning to write, students need to have the sound patterns and sentence structures of the language they are trying to learn in their heads, through listening and especially through reading.

If teachers want students to produce solid academic prose, students must read such prose extensively and carefully for the “din” of that language to get into their heads. The absence of reading has a direct impact on students’ writing, if their goal is to write in what might be called an academic voice. Moreover, better reading might help address the current plague of plagiarism in student writing in a range of courses and disciplines. I believe that true plagiarism is fundamentally a reading problem, not a writing problem or a problem of morals or ethics. I have argued elsewhere (Horning, 2011) that underlying true plagiarism (i.e., not simple theft or fraud) is an inability to read well enough to understand, analyze, synthesize, and evaluate sources and then use those sources in support of an argument. The problem appears not only in writing courses, but in courses in every discipline.

These issues require faculty to learn to teach and use reading in all courses. Callahan, Griffo, and Pearson (2009) emphasize the accountability teachers have in maintaining career and professional development. They dispel the myth that teaching reading is a simple process learned only through the experience of teaching, arguing instead that teachers are “made,” not born, and current theory and research has a lot to teach teachers (p. 41). Likewise, Pearson (2007) argues that broad professional knowledge is a faculty responsibility, and teachers need to be willing to examine and change teaching practices to adapt to the changing needs of students.

Faculty must also consider carefully their book choices and uses in terms of how they address the reading-writing connection. Many researchers have found that textbooks used in the college composition course do not provide adequate approaches for helping students use their reading for writing, and vice versa. Harkin and Sosnoski (2003) accuse three popular argument textbooks of providing reading exercises that assume discovering authorial intention is the primary aim of reading. They argue students need to recognize that emotion and individualized readings create meaning in textbooks and other material. “We are not interested in some sort of return to ‘pure’ reader-response theory,” they stress (p. 120–121). “On the contrary, we conclude by pleading for more respect for the intelligence students will bring to these texts. As teachers, should we not help our students see the unreasonableness of certain positions and the people who hold them?” (pp. 120–21). Fleming’s discussion in a later chapter takes up this issue in detail.

Finally, the implications of recent studies suggest that educators from across disciplines and from the library need to recognize the importance of collaboration. Through the practical application of their various theoretical approaches, all faculty can strengthen both reading and writing practices by recognizing the connections between them. Haller and Drake discuss the possibilities elsewhere in this book.

In the past decade, anxiety over two reports from the National Endowment for the Arts have spurred much conversation and questioning about if, what, how, and why our students are reading. While findings from *Reading at Risk: A Survey of Literary Reading in America* (2004) and *To Read or Not to Read: A Question of National Consequence* (2007) indicate that Americans are losing interest in reading, particularly literature, more recent studies have fleshed out some issues about reading and writing connections more deeply. As John Schilb (2008), editor of *College English*, remarks, “To be sure, the findings can and have been challenged. Still, the reports serve to remind our discipline that teaching reading is a big thing we do so that we should continually ponder how to do it well” (p. 549). Jolliffe’s critique provides a scheme for this pondering.

THE FUNCTIONS OF READING

In between the extremes of reading as a study skill and reading as a complex analysis of extended arguments, Jolliffe (2007) finds three functions of reading in the college composition course: (1) to promote critical thinking and writing (the “bounce off” function); (2) to model organizational patterns (the “reading-to-imitate development” function); and (3) to identify the general idea of a primary text for incorporation into the students’ own arguments (the “digest-to-incorporate” function) (p. 477). Regardless of the chosen function, Jolliffe says, “no one is very clear about what reading is or does in such courses” (p. 477). These three functions set up an organizational structure in which to consider the research that has been done from a practical perspective.

THE “BOUNCE OFF” FUNCTION

The first function of reading in writing courses discussed by Jolliffe is the “bounce off” function, where students are expected to read criti-

cally and use their reading as the basis for their writing. A number of studies support this kind of approach, showing that students who can engage in serious critical reading can effectively use sources in their writing. For example, Cynthia Haller (2010), another reading researcher whose contribution appears in this volume, has done three careful case studies to demonstrate that students' thorough, effective reading and engagement with sources produces a stronger, more rhetorically-based argument. In her study, Haller examined the ways in which three students incorporated source materials into their research writing. The students who went beyond simple reporting of data or summarizing evidence "established a new knowledge claim with a rhetorical argument" (p. 34), whereas the other students who simply used their sources for data or evidence were not able to do so. Students who learned to do careful critical reading produced much better writing.

Jolliffe and Harl (2008) come to a similar conclusion from their detailed study of a small group of University of Arkansas students, as discussed in the introduction to this book. After reviewing students' reading journals and other materials to see what first year students are reading and why, they suggest three program implications. First, they argue, faculty need to spend time teaching inter-textual connections. Second, faculty and administrators need to create curriculums, co-curriculums, and extra-curriculums that invite students to engage in their reading and connect texts to their lives, to the world they live in, and especially to other texts. (Learning communities and service learning opportunities are often useful for this purpose.) Finally, instructors should incorporate more technology into reading assignments to help students read critically in the electronic contexts they often prefer to textbooks.

Alexander (2009) agrees with this last implication especially, situating the idea of reading and writing in electronic contexts with more interactive, visual media. Based on research such as that of Hawisher & Selfe (2007), Alexander suggests that instructors can use massively multiplayer online role-playing games (MMORPGs) for guided reflections about literacy narratives of the present as they learn to play the game. Instructors might ask, "What kind of writing do you find yourself doing during game play?" or "What's the relationship between visuals and text (and writing) in game play?" Students could also become literacy researchers conducting field research about the reading and writing connections other gamers make. Alexander argues that

students might even design their own MMORPG that would engage students as they practice multiple rhetorical activities, such as writing: proposals, literature reviews, audience analyses, position papers, and research proposals (p. 59). This approach builds on technology as the source of “bounce off” reading and writing.

Games are not the only source for “bounce off” work. A study by Peter Smagorinsky (1992), a literacy researcher at the University of Georgia, clearly shows that reading to improve student writing should take place in every discipline, and requires instructors’ direction and supervision. Smagorinsky compared three groups of college students who either read models carefully; read them and received general instruction on composing procedures, like brainstorming and freewriting; or read them and received focused instruction on procedures needed to write like the model. Smagorinsky collected, transcribed, and analyzed think-aloud protocols from the composing work of six students in each group, where students spoke aloud about their work as they wrote. The findings showed that students who received instruction in combination with reading models showed significant improvement in the processes of critical thinking and composing. In every discipline, students needed to read more, but also needed instruction in how to use what they received from reading to improve their “bounce off” writing.

Recent research evidence supports this view. Bazerman et al. (2005) take up several studies in the writing across the curriculum (WAC) context that show the use of reading in the teaching and learning of writing. Drawing on the work of Risemberg (1996), Johns & Lenski (1997), and Haas (1993), Bazerman et al. (2005, pp. 54–56) explain that more extended reading of source materials has a direct, positive effect on the quality of writing produced. In addition, reading sources prior to writing also has a positive impact on writing produced. Furthermore, not only does the type of material read by students, such as reference works as opposed to trade books, but also the type of reading strategy used (i.e., careful reading rather than skimming) had a similarly positive impact on the quality of the writing students produced. Detailed studies of students’ use of source materials in writing in the national research study called the Citation Project point clearly to students’ weaknesses in reading. Papers analyzed in the project (174 drawn from a variety of institutions across the U.S.) show that students rarely use sources in ways that capture a full argument or that

synthesize several sources in terms of their overall discussions (Howard, Rodrigue, & Serviss, 2010). If students are expected to “bounce off” the reading, faculty can use strategies discussed below to help them learn how to read well enough to do so.

READING TO IMITATE

Much attention has been given to the debate over using the “reading-to-imitate-development” function in the classroom, a second function for reading proposed by Jolliffe (2007). One example of this approach is teaching writing through rhetorical strategies such as comparison/contrast, definition, cause and effect, and so on, requiring students to read models that demonstrate these forms for the purpose of imitation. Prose (2006) argues that “not only does reducing writing into prose structures oversimplify the complexity of writing, as writers often employ multiple genres in their writing, but it assumes transfer between reading and writing will occur by ‘osmosis’” (p. 3). Despite this critique, this approach is still widely used in composition textbooks and readers (see Fleming’s chapter for illustrations of this point).

Foster (1997) also investigates the reading-to-imitate function, and his research surveys students’ resistance to writing with such models. Foster’s students mostly resisted modeling texts when they had the choice to write responses in the form of a personal essay instead. Foster was hesitant to conclude that reading/writing transferability does not generally work for students. Instead, his findings suggest that “students’ willingness to enact this transferability is strongly affected by the pedagogical context of the task” (p. 537). Again, faculty approaches play a key role in reconnecting reading and writing in class.

READING TO DIGEST AND INCORPORATE

Students often write as they read by annotating, taking notes, and composing essays in response to assigned readings. Likewise, students read as they write and review their own drafts and those of their peers in collaborative workshops. While some scholars examine the processes of reading-to-write, others focus on writing-to-read. Bazerman (1980) suggests a “conversational model” for students to connect reading and writing through classroom practices by a process of first un-

derstanding reading content, then reacting to the reading, and finally evaluating the text to develop informed views on the issues.

Kathleen McCormick (2003) provides another practical approach, arguing that teachers start by meeting and validating students where they are, giving agency as they move toward becoming stronger critical, active readers. She suggests that after teachers acknowledge the specific personal experience and literacy practices individuals already bring to the classroom, they focus primarily on asking exactly how their students can acquire knowledge about what they *have not* lived. Students often have a difficult time with reading and writing connections because they do not share historical and cultural experiences with the texts they are assigned. They often struggle with producing and analyzing their ideas. Furthermore, McCormick says we can help students with symptomatic readings, as such readings help students understand cultural tensions and ideologies through an analysis of omissions, or what authors intentionally do not say. She suggests we help our students ask of themselves and write about three basic questions to bridge the gap from the street knowledge they already possess to the academic knowledge they strive to acquire: “What are their histories of reading?”; “How does the media encourage their reading?”; “What are their culture’s dominant reading practices?”

Taking a different approach, Salvatori (2003) seeks to improve her students’ reading through writing assignments situated in ambiguity and difficulty. She explains

to name something as difficult is to demonstrate a form of knowledge, incipient perhaps, inchoate, not (yet) fully communicable, but knowledge nevertheless, and one that it is both profitable and responsible to tap into—whether to further develop or to “readjust” it. (p. 200)

Like Salvatori, Yancey (2004) stresses the importance of having students understand and actually chart their difficulties with reading surfaces. Most introductory literature or writing about literature courses end up teaching students about *readings* of texts rather than about *reading* texts (Jolliffe, 2007). However, Yancey (2004) provides a more effective approach as she examines three curriculums that students encounter in typical, introductory literature courses: the lived curriculum (i.e., students’ own experiences with literature curriculum); the delivered curriculum (i.e., the syllabus); and the experienced curriculum

(i.e., the course that is actually created rhetorically as students “read” the delivered curriculum and make it their own) (p. 17). Students map the way they read a text at the beginning and the end of the course. They generate their own questions and work collaboratively to answer them. Finally, the students use simple technology to create pop-up, multiple connections while reading.

Huffman’s (2010) analysis of a handful of commonly-used composition textbooks supports the various approaches to the “digest and incorporate” function of reading. She analyzed the reading instruction and approaches of five different textbooks, in terms of six different functions of reading. Textbooks such as *Ways of Reading* and *Reading Culture* have all gone through multiple editions, indicative of their popularity and widespread use in the field. They represent both the “reader” approach (i.e., a compilation of readings with apparatus) and the “rhetoric” approach (i.e., using guidelines and processes) (Huffman, 2010, p. 164). The functions of reading include attentive, expressive, interpretive, evaluative, comparative, and projective (pp. 169–71). The interpretive function of reading entails understanding meaning and using it to answer questions or write analytically (p. 170). Close examination of five books shows that the most favored function is the interpretive, in terms of the books’ approaches to pre- and post-reading (pp. 176–78).

Thus, it should be clear that plenty of research supports the “digest to incorporate” function of reading. Overall, the pragmatically-focused research offers a good array of support to connect reading and writing. Jolliffe’s “bounce off,” “reading to imitate,” and “digest to incorporate” functions all find research backing. Teachers looking for Monday morning advice might find these various studies a little bewildering in terms of actual classroom use. Like a patient with a medical problem who hopes the doctor knows what the most current research findings are, teachers should be informed about the studies and findings that provide support for Monday morning approaches in class.

MONDAY MORNING GOALS

Reading and Writing in Writing Classes Monday Morning

The goal of helping students become efficient and effective critical readers who can analyze, synthesize, evaluate, and apply ideas and informa-

tion can be achieved through specific strategies that can make faster, better reading possible for everyone. These strategies can be roughly divided into those useful in writing classes, such as first year composition, and those useful in classes across the curriculum. This division makes it easier to present the strategies in an organized fashion; in practice, some or all of them may be useful in either type of class.

Strategy One: Understanding Reading

As a first strategy, readers need to understand the nature of reading in both print and digital contexts. Effective reading is fast, not precise, and not strictly—or even mostly—a visual activity. These characteristics of reading are quite interesting and easily demonstrated with a few simple psycholinguistic exercises. Kenneth Goodman's (1996) work contains many examples of the right kinds of exercises, as does the work of Frank Smith (2004) and Steven Pinker (1994), such as the one from *The Language Instinct*, constructed long before text messaging became common. The example illustrates something of how redundancy works in language: "Thanks to the redundancy of language, yxx cxn xndxrstxnd whxt x xm wrxtxng vxxn xf x rxplxcx xll thx vxwxls wxth xn 'x' (t gts lttl hrdr fy dn't vn kn whr th vwls r)" (Pinker, 1994, p. 181). Psycholinguists can help teachers and students understand the nature of the reading process in ways that allow them to read faster and better. Goodman's (1996) *On Reading* includes exercises that show how readers rely on letter-sound relationships, sentence structures, and context to get meaning from print, rarely reading every word on a printed page. Understanding the nature of the reading process allows teachers to improve students' reading activities. Professional development of this kind is one approach mentioned in the NCTE Policy Research Brief (2011), and is an approach favored by Seattle University English professor and writing across the curriculum scholar, John Bean (2011).

Strategy Two: Overt Teaching of Critical Reading Skills

Readers must be taught specifically and overtly how to do critical reading so they can develop the key skills of critical literacy in all the reading they do. They must be able to analyze, including summarizing key points, the main ideas and the point of view of a writer. They must be able to synthesize, that is, draw ideas together from several sources to support their own views and ideas. In addition, read-

ers should be able to evaluate what they read and judge authority, accuracy, relevance, timeliness, and bias. Finally, when readers can do all these things, they should then be able to apply information and ideas from their reading to their own writing, or for other purposes. There are a number of good guides to classroom activities that lead readers in this direction, including Bean's *Engaging Ideas* (2011, pp. 161–82), and Nilson's *Teaching at Its Best* (2010), along with Keene and Zimmermann's *Mosaic of Thought* (1997). Although the latter book is addressed to K–12 teachers, the strategies and approaches described, such as a reader's workshop that includes silent reading, a mini-lesson, workshop time for students to exchange responses and a whole-class exchange, can easily be used at the college level. Keene and Zimmermann advocate focused teaching of reading comprehension strategies to help move readers to critical literacy essential to successful reading in college and beyond. This approach can and should be expanded to include critical evaluation skills, speed, search capabilities, web page design, video conferencing skills, and other strategies that are essential for high levels of literacy in a digital age, according to Leu et al. (2004, p. 1589).

Strategy Three: Modeling by Reading Aloud

It's clear to most faculty that students do not read the way teachers think they should and the way teachers themselves read. One way to help students understand the kind of reading expected of them is to model it by reading aloud, showing students what they can and should be doing. This approach has shown by Coiro (2011) to be useful in working with online materials. In reading aloud, teachers can illustrate how to analyze, synthesize, evaluate, and apply ideas. They can also help students learn to deal with an array of “online cueing systems” now commonly used when texts are drawn from the Internet (Coiro, 2011, p. 109). These skills are crucial to careful reading of both print and Web-based sources; students definitely do not have them and definitely do need them.

Strategy Four: Intensive Reading Through the Use of Reading Guides

Teachers can also provide focused practice in reading in every assignment they give, building readers' skills over the course of every semester, through the use of a carefully constructed set of reading guides.

Examples are provided in Syracuse University education professor Harold Herber's *Teaching Reading in the Content Areas* (1978), an old but thoughtful approach to moving students from reading the lines of a text to reading between and beyond those lines (p. 56). Herber's procedures fit well with standard assessment techniques currently in widespread use: determining learning outcomes and creating reading guides to help students achieve those outcomes.

Herber advocates reading guides that first help students get literal meaning to develop basic comprehension and vocabulary. This is suitable, perhaps, for the introductory chapters of a textbook. He then suggests reading guides that move students to an interpretive level, where they must read to create, support, or respond to generalizations made by their texts. In this work, the kind of think-aloud approach suggested by Haswell et al. (1999) might be helpful. Finally, Herber recommends reading guides that help students apply concepts from the reading to broader issues and problems under discussion in the course, using material from the reading and other knowledge readers may have, from class discussion, from Internet sources, and from other materials. In my own experience using reading guides of this kind, I find that students become stronger readers over time, and that the reading guides serves as a basis of lively classroom discussion, small group work, and as a source of peer pressure to make sure students actually do the reading.

Strategy Five: Discourse Synthesis

The work of Carnegie Mellon reading scholar Nancy Spivey (1997) suggests additional types of reading and writing tasks that can support students' development as active readers and writers. Her studies of what she calls "discourse synthesis" offer opportunities for students to develop expert reading and writing abilities. Spivey defines discourse synthesis as

the process in which writers are engaged when they read multiple texts and produce their own related texts" particularly for the purpose of the writing task and in which they use the texts they have read in some direct way. (p. 146)

Spivey conducted four studies of the discourse synthesis process, three of which involved undergraduates as participants, and one of which examined developing skills among younger students. These studies en-

tailed having participants generate their own texts based on materials they were given to read. Participants were given a variety of rhetorical situations and audiences, such as preparing a research proposal or an informative article about a local event for newcomers to the area. Findings show that writers shape their meanings with organizational patterns, make selections on the basis of given criteria of relevance, and generate inferences that integrate material that might seem inconsistent or even contradictory (Spivey, 1997, p. 191). Discourse synthesis, a task common not only in college composition but also in disciplinary writing assignments, offers clear opportunities for students to practice reading more actively within their respective disciplines. This kind of task fits well with the NCTE Policy Research Brief (2011) that advocates the use of low stakes writing assignments to help students engage more fully with reading, as well as using a variety of texts at several of levels of difficulty (pp. 16–17).

READING AND WRITING ACROSS THE CURRICULUM MONDAY MORNING

All of the strategies discussed thus far are particularly well-suited to first year composition classes, regardless of individual teachers' preferred approaches or those required by a writing program. At many colleges and universities, students must complete additional coursework in writing at the upper level or within their chosen major. Whether these courses are officially labeled as "writing intensive" in the general education requirements, or whether they are required courses that incorporate writing in the discipline, these courses entail teaching writing, and can integrate and improve students' reading. In doing so, teachers can make use of the first five strategies discussed thus far. There are more strategies that can be especially helpful in discipline-based courses beyond first year writing.

Strategy Six: Scaffolding with Text Apparatus

Textbook writers and publishers spend fortunes providing supporting materials to help students read their texts efficiently and effectively. These materials are increasingly available online, as are a growing number of the texts themselves, thanks to the company called CourseSmart, a consortium of many of the major textbook publishers, including

Pearson, Cengage, McGraw-Hill, John Wiley, and Macmillan (Olsen, 2011; Eisenberg, 2011). While not all of these materials are useful and effective, some of them are. Their use of them can provide students with a kind of scaffolding, supporting stronger reading until students are able to read quickly and critically on their own. Teachers can review these materials and encourage or require students to use them if they are appropriate and helpful to the overall goal of improving reading. In a chapter of *Engaging Ideas* (2011) focused on reading issues called “Helping Students Read Difficult Texts,” Bean supports this kind of approach, recommending an array of “low-stakes” writing tasks in conjunction with reading that moves students toward faster and more effective reading, such as: having students take notes that include writing “What It Says” and “What It Does” statements for each paragraph of an article (p. 170); summary-response notebooks (p. 178); interviews with the author (p. 179); and translations of complicated passages into ordinary language (pp. 179–80).

Strategy Seven: Scaffolding with Graphic Organizers

Research in second language learning suggests that students can improve their reading and learn about discourse structures useful to writing at the same time through the use of graphic organizers. Jiang and Grabe (2007), writing about teaching reading to ESL learners, discuss the usefulness of having students read to find text elements to put into visual diagrams that make clear their understanding of text structure. A series of boxes with arrows for a process text, or a t-shaped diagram for pros and cons of an argument, are two obvious examples. Graphic organizers allow students to see the organizational structure of a text as they work through the content. Bean (2011, p. 179) also points out the usefulness of this approach. For some students, a visual representation is more helpful than a traditional outline. In addition, having seen the visual layout of a particular discourse structure, students can use that same structure in their own writing.

Strategy Eight: Extensive Reading for Practice

Adults in the population at large, both students and others, are reading extended non-fiction prose less and less, as discussed in the studies presented in the introduction to this book. There is a clear need for more reading and more practice with focused critical reading. In my

own teaching, I have created more reading practice, integrated with a writing task, in my outside reading assignment. My assignment requires that students read two books outside of class from a short list of choices of current books on topics related to those discussed in the course. They must also write about these books in reviews that summarize key ideas and tie them to concepts in the course, making cheating difficult. I grade these reviews, and they count in students' course grades for Nilson's (2010) recommended 20% of the course grade, so that they must do this work. The incentive is very important in getting students' compliance. The most interesting thing is that although I do not usually discuss the reading task in class beyond casual questions about their reading and their reactions to the books, this work has changed students' behavior, responsiveness, and level of engagement in every one of my classes, from developmental reading to graduate-level courses in psycholinguistics and sociolinguistics.

Strategy Nine: Learning to Read in Specific Disciplines

To be an expert reader in a particular subject area, students need to come to understand the genres and conventions of that discipline. In the natural and social sciences, for instance, understanding research reports that use typical APA form (Statement of Problem, Review of the Literature, Methodology, Results, Discussion, and Conclusion) is one way to facilitate reading in these areas. More detailed understanding of where an article fits in a body of work on a topic is also helpful to students and other readers. While teachers in any discipline already have an intuitive understanding of the discourse conventions of their discipline, several studies of reading practices within subject areas provide helpful background for discussion.

Literacy scholar Charles Bazerman's (1988) study of physicists' reading, for example, reports the reading approaches of seven practicing physicists in several different research fields within that discipline. In this study, Bazerman, who chairs the Department of Education at the University of California Santa Barbara, conducted detailed interviews with these scientists about their reading, and then observed them searching for and reading materials in their fields. Bazerman found a number of distinctive features of these scientists' reading: they have a clear purpose for their reading and rely on a schema, defined by Bazerman as "structured background knowledge" (p. 236). There is also useful research on the nature of communication patterns in dif-

ferent disciplines that is helpful to those teaching reading across the curriculum.

Bean (2011) takes up this point in his approach to helping students read difficult material, pointing out that students often lack an understanding of both the cultural and the rhetorical contexts for a text (pp. 172–73). Similarly, Sussex University professor Tony Becher's (1989) investigation of twelve different academic disciplines examines the nature of written and oral exchanges of ideas in the pure sciences, applied sciences, social sciences, humanities, and several other areas that do not fit into one of these recognized academic categories, including law, geography, and mathematics (p. 2). Across the disciplines, teachers can help students learn to recognize the discourse conventions of the texts produced in that field, and also learn to write them once they understand their conventions and expectations.

Strategy Ten: Learning to Read Critically on Screens

One kind of text that addresses students' need to deal with digital/visual as well as printed texts is Odell and Katz's *Writing in a Visual Age* (2004), a text and reader for college writing courses. In their presentation, Odell and Katz discuss the reading and analysis of web page elements: layout, including columns and spaces; page design, including tension and alignment; pictorial graphics, including photos and drawings; representational graphics, such as pie charts and bar graphs; and other features like color and font (p. 23). Their text provides multiple opportunities for students to read for writing using both print and digital materials. There is some discussion of other books that help students learn to read visuals (on screen or on paper), presented in Fleming's chapter on textbooks in this volume. Similarly, Kathleen Blake Yancey (2004a), a leader in college composition, pointed out in her Chair's address to the Conference on College Composition and Communication that students are increasingly working with texts of various kinds outside of school settings, and increasingly online. A full discussion of the implications of present and coming search strategies and other aspects of multimodal, online reading, and writing appears in the work of John Battelle (2005) and in Thomas Friedman's *The World is Flat* (2006).

Use of these strategies can help teachers improve students' reading in significant ways in writing courses and in courses across the disciplines. From the point of view of students, reading and writing has the

potential to make all of their educational experience much more rewarding and successful. Reading is clearly the key to work in writing, and to courses and in every discipline. If students want to be successful in college and in their professional lives, more and better reading, together with writing, is essential. Thoughtful application of the strategies discussed here will provide the basis for student success across the curriculum. Teachers can make good use of practical research that has been done, and try the various strategies suggested here, to reconnect reading and writing in every class.