Reading, Writing, and Understanding

Secondary school teachers are more willing to integrate reading and writing strategies in their content-area instruction when they see how these strategies can support their goals for students' understanding.

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Why hasn’t the concept of secondary reading—also known as “reading and writing across the curriculum” and “content-area reading and writing”—become better rooted in our schools? One reason is an understandable reluctance among secondary school teachers to think of themselves as reading or writing teachers.

Secondary school teachers rightfully consider themselves first and foremost teachers of such content areas as science, history, and mathematics. When we ask them to integrate reading and writing into their instruction, it sounds as if we are asking them to teach additional content. As a result, we get such reactions as, “That’s not my job,” “I don’t have time,” or “Why doesn’t the reading teacher do it?” (Jacobs & Wade, 1981). For subject teachers to implement principles and practices of secondary reading and writing, they must first recognize reading and writing as meaning-making processes that can support their instructional goals, particularly those related to understanding content.

Certainly, most teachers would agree that a central purpose of their instruction is to help students understand something significant about their content area. What do we really mean when we say that we want our students to understand? Understanding is more than “doing” or “knowing”: Students may do multiplication problems or know historical facts without understanding much about them. Understanding is a problem-solving process that involves making meaning of content. Teaching for understanding, in part, involves choosing topics into which students can find their own points of entry; directly telling students the goals for their understanding; and developing assessments that allow students to demonstrate their understanding (Perkins & Blythe, 1994). The principles and practices of secondary reading and writing provide means by which students can move from understanding goals to demonstrating understanding.

Reading-to-Learn as a Means of Understanding

The difference between primary and secondary school reading is the difference between learning to read and using reading to learn (Chall, 1983). Through about the 3rd grade, students learn to read. They become familiar with the roles that literacy can play in various contexts, the value of reading, and the enjoyment that reading can provide. They build their vocabulary, acquire conceptual knowledge, learn about letter-sound relationships and the relationship between oral and written language, and practice the skills necessary to become automatic and fluent readers who can tackle the more specialized and technical texts of secondary reading (Chall, 1983; Chall & Jacobs, 1996; Jacobs, 2000).

At about the 4th grade, students begin using these early reading skills to learn. Reading-to-learn is a matter of meaning-making, problem-solving, and understanding.

The process through which students come to understand something from a text is called comprehension. In order for students to focus on comprehension, the teacher must present a text as a mystery—a dilemma or problem to be solved. Comprehension is a three-stage...
process in which teachers engage students in problem-solving activities that serve as scaffolds (Bruner, 1975)—between reader and text, and from one stage of the comprehension process to the next.

**Stage 1: Prereading**

Frequently, a struggling secondary reader will come to class and say, "I read last night's homework, but I don't remember anything about it (let alone understand it)!” How successfully students remember or understand text depends, in part, on how explicitly teachers have prepared them to read it for clearly defined purposes.

During prereading, teachers help students activate and organize the "given"—the background knowledge and experience they will use to solve the mystery of the text. The "given" includes students' cultural and language-based contexts, their biases (for example, from previous successes or failures with learning about the subject), and the relevant factual and conceptual knowledge that they have gained from daily experience and formal study. When teachers know what students bring to their reading, they can purposefully choose strategies that serve as effective scaffolds between the "given" and the "new" of the text—clarifying unfamiliar vocabulary and concepts, helping students anticipate the text, and helping them make personal connections with it—thus promoting their interest, engagement, and motivation (Jacobs, 1999).

Prereading activities can include brainstorms, graphic organizers of students' background knowledge (using concept maps, clusters, or webs), or cloze exercises (during which students attempt to replace important vocabulary or concepts that the teacher has deleted from the text in order to draw attention to those points). In addition, the teacher or students may develop questions, through directed writing or interactive discussions, such as, "What do I already know and what do I need to know before reading?” or “What do I think this passage will be about, given the headings, graphs, or pictures?” (Jacobs, 1999, p. 4; 2000, p. 38). Such prereading activities not only prepare students to understand text but also help build their vocabulary and study skills.

**Stage 2: Guided Reading**

During guided reading, teachers provide students with the structured means to integrate the background knowledge that they bring to the text with the "new" knowledge provided by the text. During guided reading, students probe the text beyond its literal meaning for deeper understanding. They revise their preliminary questions or predictions; search for tentative answers; gather, organize, analyze, and synthesize evidence; and begin to make generalizations or assertions about their new understanding that they want to investigate further (Jacobs, 1999; Scala, 2001).

Common guided reading activities
include directed writing (such as response journals or study guides) and collaborative problem-solving activities that engage students in searching beyond the text’s literal meaning. For example, teachers might take the factual questions that texts usually provide at the end of a chapter and transform them into questions that ask how or why the facts are important or how information that students have to locate in the text informs the problem that the students are trying to address through their reading (Jacobs, 2000). As in prereading, such guided reading activities not only enhance comprehension but also promote vocabulary and study skills.

The ability to self-monitor often distinguishes effective from poor readers in the secondary years. Thus, guided reading activities might also ask students to reflect on the reading process itself: to keep a process log of how their background knowledge and experience influences their understanding of the text, where they get lost in their reading and the possible reasons why, and what questions they have for the author or the text to clarify their growing understanding. Teachers can then use these reflections to decide whether they need to be more explicit about the particular reading strategies that students should use to understand their texts.

Stage 3: Postreading
During postreading, teachers provide students with opportunities to step back and test the validity of their tentative understanding of the text. For example, students might "believe" and "doubt" one another’s assertions in light of evidence from the text or outside the text (Jacobs, 2000). By doing so, students help their peers revise and strengthen their arguments, and also reflect on and improve their own.

Reading Comprehension and Understanding
The stages of instruction in reading comprehension—prereading, guided reading, and postreading—essentially describe how students can move from understanding their goal to demonstrating their understanding. This insight can help teachers view these strategies as a means to accomplish the content-based goal of understanding, rather than simply as add-on activities.

Writing-to-Learn as a Means of Understanding

Purposes of Writing in Secondary School
We most frequently use writing in secondary schools in two ways. More often, we use writing as a means to evaluate students’ mastery of content or of the written form. Less often, we use writing as a means to engage students in learning (Applebee, 1981).

For learning, the act of writing provides a chronology of our thoughts, which we can then label, objectify, modify, or build on; and it engages us in becoming invested in our ideas and learning. Writing-to-learn forms and extends thinking and thus deepens understanding (Fulwiler, 1983; Knoblauch & Brannon, 1985). Like reading-to-learn, it is a meaning-making process.

The Pedagogy of Writing-to-Learn
Research about the most effective ways to improve composition has found positive effects for such strategies as literary models, freewriting, sentence combining, and scales (also called rubrics). The strategy most solidly supported by research to improve composition is a process called inquiry (Hillocks, 1986).

Inquiry treats writing as a problem-solving activity in which students come to understand something that they want to say before they begin drafting. In an inquiry-based classroom, teachers guide students through the development of assertions and arguments about these assertions. They choose instructional strategies to help students 1) find and state specific, relevant details from personal experience; 2) analyze and generalize about the text or pose assertions about it; and 3) test the validity of their generalizations, arguments, or assertions by predicting and countering potential opposing arguments (Hillocks, 1986). The inquiry process is a way to discover something worth writing about.

Strategies that accomplish the purposes of composition-based inquiry engage students in developing their thinking in preparation for drafting (also called prewriting). These writing-to-learn strategies can include freewriting,

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focused freewriting, narrative writing, response writing (for example, response logs, starters, or dialectic notebooks), loop writing (writing on an idea from different perspectives), and dialogue writing (for example, with an author or a character) (Bard College Institute for Writing and Thinking, n.d.; Elbow & Belanoff, 1989). Not surprisingly, writing-to-learn activities are also known as “writing-to-read” strategies—means by which students can engage with text in order to understand it.

The Relationships Among Reading, Writing, and Understanding

Figure 1 illustrates how reading, writing, and understanding are related. The cognitive processes involved in the stages of comprehension (prereading, guided reading, and postreading) are virtually the same as the cognitive processes involved in the three inquiry stages that promote effective composition. Both reading-to-learn and writing-to-learn are meaning-making activities that result in understanding—a central goal of content-based instruction. They both help students proceed from understanding goals to demonstrating understanding. As a result, if we have engaged our students well in reading-to-learn, then we will have also prepared them to draft well. As a bonus, we can also use writing-to-learn strategies to engage students in the prereading, guided reading, and postreading process.

Staff Development

Most inservice programs on reading and writing across the curriculum offer teachers a variety of strategies for integrating reading or writing into their content-based instruction. But such programs rarely ask teachers to examine their own instructional goals and then to consider how well various reading and writing strategies actually support those goals.

If teachers decide that their goals for students’ learning include understanding, then professional development programs should give them time to think about what they mean by “understanding” and how they engage students in the process of understanding. Teachers might consider the following questions: What strategies do they use to engage students in the process of making their own meaning? What strategies do they use to prepare and guide students in problem-solving—allowing students to integrate the “given” of what they bring to a text and the “new” that the text provides? What means do teachers provide for students to test assertions of their understanding before they have to demonstrate their understanding? How explicitly do they share with students the purposes of any given activity in light of their instructional goals? And how faithfully do the reading and writing strategies that they use serve their goals?

Only after teachers have examined whether teaching for understanding suits their instructional goals and after they have defined their role in facilitating understanding can they consider how the principles and practices of reading-to-learn and writing-to-learn might support their instruction.

Teachers might begin by discussing what they are already doing with reading and writing and their reasons for doing so in light of their purposes for students’ learning. Frequently, teachers will discover that they are already making good use of strategies characteristic of reading- and writing-to-learn. The framework suggested here can help teachers integrate reading-to-learn and writing-to-learn strategies into content-area instruction more systematically to support their students’ development of understanding.

References


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