Content literacy: A definition and implications

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In the past century, the word literacy has undergone numerous changes in the broad array of concepts it has denoted (e.g., see Purves, 1984; Stedman & Kaestle, 1987; Venezky, 1990). Some changes, such as the generalization of the term to denote mere knowledgeability of a specific subject (as in computer literacy, cultural literacy, etc.), have been unfortunate and continue to make consistent usage difficult. Other changes, such as a multidimensional conceptualization of literacy (Guthrie & Kirsch, 1984; Taylor, 1989) and the necessity that it embrace both situational demands (Guthrie, 1983; Mikulecky, 1990) and cultural considerations (Kazemek, 1988; Levine, 1982) have reflected a growing appreciation for the complexity of literacy processes.

One especially important advance in our understanding has been the recognition that both reading and writing are constructive processes in which information is organized and accommodated into memory structures (see Squire, 1983). Accordingly, the writing-to-learn movement has stressed that writing, like reading, is a means of clarifying, refining, and extending one's internalization of content (Myers, 1984). Writing as well as reading therefore becomes a tool for acquiring content. These realizations together suggest the following further expansion of the concept of literacy.

Content literacy can be defined as the ability to use reading and writing for the acquisition of new content in a given discipline. Such ability includes three principal cognitive components: general literacy skills, content-specific literacy skills (such as map reading in the social studies), and prior knowledge of content.

This definition has significant implications for content area teachers—implications that may add to the arguments used to encourage these educators to view matters of literacy with an open mind.

Content literacy is not the same as content knowledge.

Content literacy represents skills needed to acquire knowledge of content; the terms are in no way synonymous, as popular usage might suggest. Nor is content literacy a prerequisite of content knowledge, for it is
certainly possible to acquire knowledge of content without recourse to reading or writing. On the other hand, content knowledge is a prerequisite of content literacy. In a cyclical pattern, the more prior knowledge one possesses, the more such knowledge will facilitate reading and writing as activities leading to the integration of still more knowledge, and so forth.

Teaching content automatically makes students more content literate.

Whether they know it or not, content area teachers enhance the ability of their students to read and write about content simply by teaching it. There is an irony in this notion, for even those teachers refusing to embrace the ideas of “reading in the content areas” and “writing to learn” have nevertheless improved their students’ ability to read and write within their disciplines whenever their instruction has been successful. This is because enhanced knowledge enhances any subsequent reading and writing germane to that knowledge. What is unfortunate is that many teachers, by providing high-quality direct instruction, set the stage for even greater levels of content acquisition—through reading and writing—but never realize this potential with appropriate assignments.

Content literacy is content specific.

To be literate in, say, mathematics is not to know mathematics per se but to be able to read and write about the subject as effective means of knowing still more about it. While the general ability to read and write obviously bears on one’s success in this process, prior knowledge of the specific topics involved is a vital variable of content literacy. Thus, an individual who is highly literate in math may have a far lower level of literacy in history or economics. This circumstance is largely the result of differences in prior knowledge and is true even though the individual brings the same general literacy skills to all reading and writing tasks.

In content literacy, reading and writing are complementary tasks.

While reading and writing can serve well enough as alternative means of enhancing content learning, the greatest gains can be expected when the two are used in tandem. When printed materials are assigned to be read and when written responses are also required, students are placed in the position first of constructing an internal representation of the content they encounter in print and next of refining that representation through such processes as synthesis, evaluation, and summarization.

Content literacy is germane to all subject areas, not just those relying heavily on printed materials.

Teachers of subjects such as art, music, physical education, and other fields tending to involve little use of prose materials have frequently objected that content area reading coursework, now compulsory for teachers in at least 36 U.S. states (Farrell & Cirrincione, 1986), does not apply to their instructional situations. Certain states have in fact excluded such groups from these course requirements. The notion of content literacy, however, suggests that students’ understanding of the content presented in all subjects could be substantially enhanced through appropriate writing assignments or through supplemental reading.

While the primary presentation may comprise lecture and demonstration rather than reading, and while the principal domain involved may be psychomotor rather than cognitive, content acquisition nevertheless invariably includes an understanding of key concepts and their interrelationships. Such understanding can always be fostered through literacy activities.

Content literacy does not require content area teachers to instruct students in the mechanics of writing.

A longstanding misinterpretation has hampered the effort to encourage content area reading techniques. It is that such techniques call for subject matter specialists to teach the minutiae of decoding, requiring them in consequence to master a new and very different curriculum and, worse, to take class time away from subject matter instruction. This false notion has lingered tenaciously despite widespread efforts to overcome it. It is therefore important in elaborating the idea of content literacy, which embraces writing as well as reading, to make clear that it includes no responsibility for developing the mechanical skills of writing.

As Myers puts it, “Writing to learn is not learning to write” (1984, p. 7). It is true that mechanical aberrations severe enough to distort meaning may require a teacher’s attention, especially in disciplines like mathematics, where precise usage is an absolute necessity (Orr, 1987). However, the focus of such follow-up should be meaning, not mechanics.

Content literacy is relative to the tasks expected of students.

The literacy requirements of a classroom, like those of a workplace or of an entire culture, readily define who is literate and who is not (Guthrie, 1983; Mikulecky, 1990; Wedman & Robinson, in press). In an effort to reduce or eliminate the “illiterate” subpopulation in their classes, teachers all too frequently resort to slashing lit-
eracy requirements. Reading assignments may be circumvented or minimized while writing may never be seriously considered. Although students consequently meet the literacy demands of the instructional setting—so that all are technically literate—the opportunity to enhance content learning through reading and writing is in effect waived. Students at even a rudimentary level of general literacy are equipped to advance their understanding through literacy activities, provided that reading materials are commensurate with ability (or steps are taken to facilitate comprehension of more difficult material) and writing assignments are within the range of student sophistication.

New potential
Little more than a decade ago, the principal message of content area reading courses was a simple one: Because students may find assigned materials difficult, teachers should take steps in advance to facilitate reading. Improved understanding of how literacy processes operate in content classrooms now suggests a constructive role for writing and a more complex view of reading. The potential of these processes for improving content acquisition is actually increased by the knowledge-building effects of day-to-day instruction.

Consequently, the message to content teachers is being revised, and the considerations discussed here, when properly described and advocated, should make the incorporation of content literacy activities a possibility to be pursued rather than shunned.

References