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Writing a Literature Review

What Is a Literature Review?

A literature review is a review of relevant prior work on a topic of significance in order to find out what is known and not known about the topic and what can be done with the findings. It is not an annotated bibliography; nor is it just a summary of prior scholarship. Rather, a literature review involves objective synthesis and critical analysis of the existing research. Its goal is to detect emerging trends or patterns in a domain of scholarly inquiry, assess contributions of prior work, identify areas that deserve further investigation, and/or provide implications for policy, research, or practice. A literature review is often part of a longer article, such as an empirical research paper (see Chapter 9). It can also be an independent essay on its own.

Jalongo and Saracho (2010) identified four different types of stand-alone literature reviews that are commonly found in scholarly publications. These are integrative reviews, systematic reviews, meta-analytic reviews, and qualitative reviews. An integrative review synthesizes and critiques a diverse body of literature related to a topic of significance to the field. A systematic review synthesizes and appraises a narrower but reasonably well-defined body of literature in order to yield evidence-based decisions. A meta-analytic review conducts quantitative analysis of data (e.g., results, effect sizes) reported in previous studies in order to generate patterns and guidelines for future work. A qualitative review, which is perhaps the least common of all literature reviews, provides "one person's narrative interpretation of a diverse body of literature to promote further reflection and accept multiple perspectives" (p. 97).

In writing a research paper, a literature review is needed for one of the two reasons noted below. First, as indicated in Chapter 3, you need to situate what you want to do with a topic in the context of what has been done on the topic so that you can be sure you are not merely repeating what others have already done on the topic or generating knowledge that is already well known. This context is provided in the literature review. It allows you to build your work

on existing scholarship and at the same time extend it in some way. Second, a literature review is needed to identify what is known, not known, or uncertain about a particular topic (e.g., effectiveness of a new drug or an instructional strategy) so that you can generate evidence-based guidelines and recommendations to inform further work on the topic. In other words, a literature review provides the justification for research, policy, or practice.

Rhetorical Moves in Literature Review

A literature review typically includes (a) introduction, which describes the context in which your topic is situated and explains its importance; (b) synthesis, which summarizes key aspects of prior studies; (c) evaluation, which analyzes and appraises prior studies in terms of their theoretical underpinnings, methodologies, results, interpretations, and conclusions; (d) justification, which identifies major themes or knowledge gaps in prior studies and provides a rationale for your intended work or guidelines for future work on the topic; and (e) conclusion, which recaps the main findings from the literature review and explains how these findings inform policy, research, and practice or how your work will address the knowledge gaps. Some literature reviews, such as meta-analytic reviews and integrative reviews, require a separate section on methodology that details the process and criteria used to locate, select, and categorize the studies included in the review and when appropriate, the methods used to calculate and analyze effect sizes.

How to Go about Writing a Literature Review?

When writing a literature review, you can follow the process described below: determining the scope → locating and selecting relevant studies → reading and analyzing the studies → constructing a coherent review. This process is not linear; rather, it is recursive, as you may need to go back and forth between certain components of the process during actual writing. Each component of the process is described below.

Determining the Scope

The first task in writing a literature review is to determine the scope of the review by identifying the parameters of the topic you are reviewing. This is indeed a challenging task, as inexperienced writers often have a difficult time figuring out how broad or narrow a territory their review should cover. One way to cope with this dilemma is to think about what questions your potential readers are likely to raise in relation to the topic you are proposing to investigate.

For example, to conduct a study that investigates the effect of reading instruction in the science classroom on middle school students' science literacy (cf., Fang & Wei, 2010), one question your readers may ask is this: how is reading relevant to science? After all, reading and science seem like two separate school subjects. This means you will need to review the literature that discusses ways reading connects with science—that is, how reading is central to both the conception of science and the social practices of scientists. This can also become the theoretical framework of the study (see Chapter 9).

Another question your readers are likely to ask is this: Why do middle school students still need reading instruction? After all, haven't students already learned how to read by the end of elementary schooling? To answer this question, you will need to review relevant literature on why reading instruction is still needed for middle school students to successfully read in content areas like science. And if reading instruction is needed in secondary content area classrooms like science, then has research been conducted in this particular area? That is, what does prior research say about the effectiveness of teaching reading in science classrooms on improving students' science literacy? This means that you will need to review what kinds of reading instruction has been provided in science classrooms and what their effects are on students' science learning.

A further question to ask in relation to the topic of investigation is this: If reading instruction is needed in science, then does it mean that science teachers are ready or willing to undertake such a responsibility in their own classrooms. After all, science teachers rarely think of themselves as reading teachers and may not have the knowledge, skills, willingness, and/or confidence to teach reading. This means that you will need to include a section that reviews what existing research says about science teachers' beliefs and practices regarding reading instruction.

In light of the discussion above, it is clear that your literature review for the proposed study needs to include at least four sections, which are (a) the relationship between reading and science, (b) the role of reading in secondary content area (especially science) learning, (c) research concerning the effectiveness of reading instruction on students' science learning, and (d) science teachers' beliefs about and preparedness for reading instruction. Including these areas in your review answers potential questions your readers may have about your topic and provides a reasonably comprehensive literature base on which you can identify what is known and not yet known about teaching reading in science, thus justifying your focus on the topic and informing your choice of research design and methodology for the study.

Locating and Selecting Studies

Once you have narrowed down the scope of the literature review, it is time to look for studies that belong to each of the areas you are about to review.

You can do this by searching university library catalogues (e.g., books, monographs, journals) using classification numbers for the subjects you are searching or looking for work by specific authors. You can use search engines such as Google or Baidu, online encyclopedias such as Wikipedia, and databases such as Academic OneFile, ProQuest, Google Scholar, JSTOR, EBSCO, Project Muse (for humanities and social science), EconLit (for economics), Medline (for life sciences and biomedicine), Inspec (for physics, engineering, and computer science), and Academic Search Complete. You can start your search with a general descriptor and refine the descriptor as needed, focusing on work by noted scholars and from reputable books and journals. The studies selected for review need to be not only relevant but also current and important. They may include unpublished conference papers or graduate (master or doctoral) theses (especially when your searches yield a small number of items), but these sources should perhaps be kept to a minimum. This search process is often, albeit not always, described in the methods section of a literature review article.

Getting back to the reading-science study mentioned earlier, you can look for research-based publications in books by noted scholars who have done work that crosses science and literacy/reading (e.g., Larry Yore, Jonathan Osborne, Jay Lemke, Michael Halliday), in quality science education journals (e.g., *Science Education*, *International Journal of Science Education*, *Journal of Research in Science Teaching*, *Journal of Science Teacher Education*), in respected reading/literacy education journals (e.g., *Reading Research Quarterly*, *Journal of Literacy Research*, *Journal of Adolescent and Adult Literacy*), or in top-tier general education journals (e.g., *American Educational Research Journal*, *Journal of Educational Psychology*, *Journal of Educational Research*). Searching for work in reputable journals or by respected scholars ensure that the studies you identify are of high quality and well regarded in the academic community.

Reading and Analyzing Studies

The next step in the literature review is to read and analyze the studies that have been found from your literature searches. These studies, often numbered in dozens, need to be (re)read and then organized into categories that make the most sense in light of the focus of your study. They can be organized by chronology. For example, you can group studies published before or after the release of the Common Core State Standards or the No Child Left Behind Act, with the intention to find out whether certain instructional practice or student educational outcome is impacted by the landmark document or legislation. You can also group studies by time (e.g., per decade or quarter of a century), with the intention to find out, for example, whether academic writing has become more informal over the past 50 or 100 years. Studies can also be grouped by the methodology employed (e.g., quantitative, qualitative, mixed), the population

examined (e.g., young children, adolescents, adults), the context of investigation (e.g., day care, elementary, secondary, college, out-of-school clubs, summer camps), theoretical frameworks used (e.g., sociocultural, linguistic, cognitive, critical), or key findings (e.g., studies that show positive effects of intervention, studies that show negative effects of intervention, studies that show no effects of intervention, studies that show mixed effects of intervention).

Once the studies are grouped, you can then identify key findings, themes, strengths, weaknesses, emphases, similarities, and discrepancies in these studies, as well as major patterns, trends, gaps, and relationships among the studies, in each group, and across groups. At this time, it is also a good idea to select quotes or statistics that you think may be useful when writing the review. The results from the analysis are then summarized in a table or concept map that allows for better visualization (see, for example, Table 7.2 later in the chapter).

In the sample reading-science study mentioned earlier, you can, for example, group the studies that examine the effects of reading instruction on science learning into two broad categories—those reporting on the use of one single reading strategy (e.g., concept mapping) and those reporting on more systematic integration of reading (e.g., weekly reading of science texts plus instruction on the use of multiple reading strategies). Within each of these two groups, you can further differentiate studies that took place in elementary classrooms and those that were conducted in secondary (middle/high school) classrooms. Alternatively, you can group the studies by research setting first (e.g., elementary school vs secondary school) and then differentiate how reading is taught within each setting (e.g., teaching a single reading strategy vs more systematic infusion of reading). Themes and limitations within and across studies are then identified, with the goal of informing the design and focus of your proposed study.

Constructing the Review

The first step in constructing a literature review is to develop an outline, or bullet points, based on the results from the analysis discussed above. The outline sketches out the different sections of the literature review and key information (e.g., context, methods, findings, quotes, comments) to be included in each section. These main points are then developed into sentences and paragraphs, using a variety of connecting devices to help craft a logical, coherent review that flows. As discussed in Chapter 4, links between sentences and between paragraphs can be established through the use of subheadings (e.g., *locating and selecting studies*, *reading and analyzing studies*), references (e.g., *it*, *this*, *they*), conjunctions and conjunctive adverbs (e.g., *although*, *therefore*), nominalizations (e.g., *this conception*, *the process*), repetition (e.g., *Bolton [2017]—the researcher—the study*), metacommentaries (e.g., *in other words*, *for example*, *taken together*, *in essence*), and other connectives (e.g., *for these reasons*, *similar to Yore [2004]*). Listed in Table 7.1 are some transition devices used in Fang and Wei (2010) that help stitch their literature review together.

Table 7.1 Sample Transition Devices Used in Fang and Wei (2010)

Types of Links	Examples
Links between sections	• Subheadings: *theoretical framework, reading in second content area of science, reading instruction and science learning, science teachers and reading instruction* • Preview statement: *We review three areas of research that inform the design and implementation of the present study: reading in secondary content area of science, contributions of reading instruction to science learning, and science teachers' attitudes toward and knowledge about reading.*
Links between paragraphs	• Given the nature and character of science, it is not [...]. • Another way to improve [...]. • Similar to Romance and Vitale's (1992) study, Guthrie et al. (1998) [...]. • The research studies reviewed previously support the [...]. • Building on Yore's work, DiGisi and Willett (1995) surveyed [...]. • In summary, although [...]. they often report [...].
Links between sentences	• On one hand, science is [...]. On the other hand, science is also [...]. • For these reasons, science has been characterized [...]. • For example, Romance and Vitale (1992) studied [...]. • In short, developing a rich store of domain knowledge [...]. • However, adolescents engage in very little reading [...]. • Taken together, the existent research suggests [...]. • In other words, combining reading and science [...]. • Thus, it is important to know [...]. • Instead, the teachers reported [...]. • First, reading [...]. Second, the infusion of [...]. Third, the overall school climate [...]. • Content areas provide [...]. They also provide [...]. • CORI also had a positive [...]. It increased the students' ability to [...]. • They integrated the teaching of science, reading, and writing processes in a concept-based, problem-centered unit on a simple machine. This 10-week unit featured text reading, experiments [...]. • According to Eccles et al. (1993), middle schools [...] than do elementary students [...]. These factors make the integration of reading [...]. • Guthrie et al (1998) designed a year-long [...]. The researchers compared third and [...]. The study found that [...].

A Sample Literature Review Essay

The rest of the chapter presents and annotates a systematic literature review essay (see Text 7-1). The essay is a slightly modified version of Fang (2012), which was published in a top tier journal (*Journal of Adolescent and Adult Literacy*) in the field of literacy education. Additional examples are provided in Chapter 9, where literature review is again discussed as part of an empirical research article. Text 7-1, with the References section omitted in order to save space, was written to provide a state-of-the-art assessment of what we know and do not yet know about literacy instruction in academic content areas, with the goal of informing future work in the domain and providing classroom teachers with evidence-based guidelines for practice.

Text 7-1: A Sample Literature Review

Approaches to Developing Content Area Literacies: A Synthesis and a Critique

Adolescent literacy has emerged as a "very hot" topic in literacy education over the past few years (Cassidy, Valadez, Garrett, & Barrera, 2010). Its ascendency to the national spotlight reflects the growing recognition among policy makers, researchers, and educators that a continuing emphasis on literacy and literacy instruction beyond the elementary grades is key to ensuring that students are college and career ready by the time they graduate high school (CCAAL, 2010). A major concern in the United States is that more than 70% of students in grades 4–12 lack the skills to read and write proficiently in academic content areas (National Center for Educational Statistics, 2011; Salahu-Din, Persky, & Miller, 2008). An array of national reports (e.g., Biancarosa & Snow, 2006; Deshler, Palincsar, Biancarosa, & Nair, 2007; Graham & Perin, 2007a; Short & Fitzsimmons, 2007) and other professional resources (e.g., Bean, Readence, & Baldwin, 2011; Fang & Schleppegrell, 2008; Tovani, 2004) have offered many pedagogical recommendations for addressing this concern. These recommendations reflect four distinct approaches—cognitive, sociocultural, linguistic, and critical—each with its own epistemological assumptions, set of practices, and evidence base. Existing literacy programs for adolescents typically combine these approaches in various ways, with some adopting a more cognitive or linguistic orientation and others placing a greater emphasis on the sociocultural or critical dimension. This paper provides a brief synthesis and critique of these four approaches, suggesting that efforts to develop adolescents' content area literacies must recognize the strengths and limitations of each approach, as well as their complementarities.

The Cognitive Approach

The cognitive approach derives its theoretical support from cognitive psychology, a branch of psychology that studies how people perceive, understand, think, reason, remember, and learn. It advocates systematic, explicit teaching of mental routines or procedures for accomplishing cognitive goals such as understanding a text, writing an essay, or solving a problem. These routines or procedures are referred to, broadly, as cognitive strategies (Dole, Nokes, & Drits, 2008). They include strategies commonly used in content area reading/writing, such as predicting, inferencing, monitoring, summarizing, visualizing, concept mapping, and note taking. The approach assumes that the cognitive requirements for reading/writing are essentially the same regardless of content areas. It promotes the use of generic cognitive strategies before, during, and after reading/writing to help students comprehend and compose texts across all content areas.

Prominent since the 1970s, the cognitive approach has been operationalized or packaged in many ways, including collaborative strategic reading (Vaughn, Klingner, & Bryant, 2001), peer-assisted learning strategies (Fuchs, Fuchs, & Kazden, 1999), reciprocal teaching (Palincsar & Brown, 1984), transactional strategies instruction (Schuder, 1993), the self-regulated strategy development model (Graham & Harris, 1993), concept-oriented reading instruction (Guthrie, Wigfield, & Perencevich, 2004), and the strategic instruction model (Deshler, Schumaker, & Woodruff, 2004). These programs show that cognitive strategy instruction improves student reading, writing, and learning and that teaching a combination of strategies is more effective than teaching individual strategies in isolation from one another and from content (see Dole, Nokes, & Drits, 2008 and Gersten, Fuchs, Williams, & Baker, 2001 for reviews). Using the evidence standards established by the What Works Clearinghouse, Kamil, Borman, Dole, Kral, Salinger, and Torgesen (2008) concluded that the evidence base for cognitive strategy instruction is "strong".

Despite the solid evidence base, there are still questions regarding the nature and workings of cognitive strategies. Conley (2008) spotlighted a lack of understanding about how cognitive strategies can be meaningfully integrated into our overall efforts to improve adolescents' content learning. Catts (2009) questioned whether cognitive strategies are

indeed comprehension strategies. To him, cognitive strategies such as summarizing are the product, rather than the cause, of comprehension, as providing a summary of a passage is possible only when the reader has comprehended the passage. He noted that it is possible that cognitive strategies "are not essential skills necessary for reading comprehension but rather activities that focus readers' attention on what is important in comprehension" (p. 180). Hirsch (2003) argued against an overemphasis on cognitive strategies in literacy instruction, suggesting that few school-age children have trouble using them in their daily listening comprehension. He recommended that instructional efforts be channeled instead to building students' knowledge of "words and the world". Clearly, there are serious doubts regarding whether implementing cognitive strategy instruction for adolescents would, as Conley (2008) has claimed, actually "pay big dividends in learning" (p. 103).

The Sociocultural Approach

The sociocultural approach recognizes that literacy is a complex process involving not just the cognitive dimension but social and cultural dimensions as well. The extent to which readers/writers are able to construct meaning with texts is influenced not only by background knowledge and strategy use, but also by factors such as purpose, interest, motivation, and identity. This new understanding of literacy led scholars to call for a reconceptualization of what it means to be literate and what can be done to promote academic literacy in the context of secondary schooling (Bean, 2000; Elkins & Luke, 1999). A common thread in this line of scholarship is that teachers should value the out-of-school literacies that adolescents bring to school and use their everyday funds of knowledge and cultural practices as both a bridge to and a resource for promoting the development of content area literacies.

Adolescent literacy projects that draw on the sociocultural approach include funds of knowledge (Moll, Amanti, Neff, & Gonzalez, 1992), third space (Gutierrez, 2008; Moje, Ciechanowski, Kramer, Ellis, Carrilo, & Collazo, 2004), youth media (Goodman, 2003), and cultural modeling (Lee, 2001), among others. These projects not only sought to build connections between home/community and school but also explored ways to meaningfully and strategically integrate the multiple funds of knowledge and literacy practices that students bring to school with the academic practices of disciplinary learning in content area classrooms. They reported positive impacts on adolescents' motivation, engagement, and learning (see Hull, 2012 for a brief review). However, because research involving these projects is primarily qualitative (Hull, 2012), the evidence base for the sociocultural approach is considered "moderate" at best by the What Works Clearinghouse standards (Kamil et al., 2008).

In its efforts to leverage students' knowledge, language, and literacy practices for academic learning, the sociocultural approach demystifies academic language and academic literacy, blurring the distinction between the academic and the everyday. In so doing, however, it also tends to downplay real and significant differences between academic language and everyday language that research has shown to exist. According to Halliday (2004), for example, "The discourses of science gain their theoretical power precisely because they are not translatable into commonsense terms. … There is bound to be a certain disjunction between the grammar of scientific writing and the commonsense grammar of daily life" (p. 49). This difference is a major cause of reading and learning difficulties for many adolescents. Failure to take serious account of the difference makes language the "hidden curriculum" of schooling, further hindering the learning of disciplinary knowledge and ways of using language, which is a key goal of content area learning. Another concern with the sociocultural approach is that it requires reconceptualization of existing school structures as integral to, rather than separate from, students' home and community, a feat that may be challenging, albeit not impossible, to accomplish in the current socio-political climate.

The Linguistic Approach

The linguistic approach believes that students must master the lexical and grammatical resources of language that construct the knowledge and value of content areas to be successful in school, college, and workplace (Fang & Schleppegrell, 2008). It recognizes that the texts students read and write in early grades lack the richness, depth, and complexities found in the texts that present the more specialized, abstract, and advanced knowledge in later years of schooling (Fillmore & Fillmore, 2012).

Traditional foci of the linguistic approach have been on decoding, fluency, vocabulary, and text structure. However, there have been calls for greater attention to other grammatical elements in literacy instruction. For example, Scott (2004, 2009) noted that the syntactic properties of sentences can make a text difficult to understand. She recommended using strategies such as paraphrasing a difficult sentence periodically while reading, having students generate questions after reading a complex sentence, manipulating the structure and meaning of short sentences, and teaching students to write more complex sentences as ways to help

students cope with syntactic complexity. Fillmore and Fillmore (2012) proposed a short daily instructional session in which teachers engage students in analyzing the structure of a "juicy" sentence from a content area text under study and discussing the information presented in these structural elements. The focal sentence is usually grammatically complex but interesting and conveys an important point in the text. Moats (2004) reported on a structured, systematic language curriculum that teaches the structure and use of all language systems (e.g., phonology, orthography, morphology, semantics, syntax) to poor adolescent readers. Fang and Schleppegrell (2008, 2010) described a more functional model that provides teachers with a set of practical tools for engaging students in systematically analyzing the language patterns and discussing the meanings of these patterns in a segment of text that is challenging but important for developing disciplinary understanding. These tools enable students to learn about how language is used as a creative resource for constructing different sorts of knowledge and value across different disciplines at the same time they are building disciplinary content knowledge and developing disciplinary habits of mind through language.

The evidence base for the linguistic approach is mixed. Kamil et al. (2008) determined the level of evidence to be "strong" for explicit vocabulary instruction. There is also some, albeit limited, evidence suggesting that teaching sentence complexity, text structure, and functional grammar analysis can improve reading and writing (Graham & Perin, 2007b; Locke, 2010; Moats, 2004; Schleppegrell, Greer, & Taylor, 2008; Scott, 2004). A key issue in the implementation of the linguistic approach is to make sure that language is not taught as isolated drill-like exercises devoid of functionalities and content contexts. Another concern is that many teachers lack deep knowledge about language to make the linguistic expectations of content area learning explicit to students (Schleppegrell, 2004). A lack of linguistic know-how can prevent teachers from effectively developing the language resources students need for full participation in content area learning and disciplinary socialization.

The Critical Approach

The critical approach views all texts—written, spoken, linguistic, visual, and multimedia—as inherently ideological and value-laden, suggesting that text meaning is neither natural nor neutral and must therefore be understood in relation to both the intention of the writer/designer and the social-historical-political contexts that govern its production. From this perspective, then, content area texts are both "positioned and positioning" (Janks, 2005, p. 97): They are positioned by the author's values and viewpoints, and the verbal and other semiotic choices made by the author create effects that position the reader in particular ways. The approach foregrounds the situated, constructed, and contested nature of meaning, emphasizes the development of critical consciousness about texts and language use, and promotes thoughtful critique and eventual disruption of existing social relations and hegemonic power structures (Cervetti, Pardales, & Damico, 2001). As such, it has a strong social justice agenda that goes beyond the government and business sanctioned goals of college/career readiness and workplace productivity.

The critical approach has gained growing recognition in literacy education since the 1990s, as critical consumption of texts becomes even more important in an era of information explosion and technological revolution. The approach, as exemplified in projects such as critical academic literacy (Morrell & Duncan-Andrade, 2002), critical language awareness (Janks, 1993), and critical media literacy (Alvermann, Moon, & Hagood, 1999), engages students in analyzing texts and interrogating the values, prejudices, and ideologies underpinning these texts, helping them better understand the politics of representation and the constructedness of knowledge. It encourages teachers and students to collaboratively explore questions such as "who is and is not represented in the text, and why?" "whose interest is best served by the message of the text?" "how are various people positioned by the text?" "how do particular content, discourse genres, and modes of inquiry become privileged and acquire power in particular disciplines?" and "how does such privileging affect access, equity, and learning in the classroom?" Classroom practices that promote such a critical orientation to texts include (a) reading supplementary texts that cover social issues glossed over or avoided by traditional or canonical texts, (b) reading multiple texts on the same topic to gain insights into author subjectivities, (c) reading the same text from a different perspective based on gender, race, ethnicity, sexuality, religion, or political affiliation, (d) producing texts that counter the perspective of the author, and (e) taking social action aimed at making a difference in students' or others' lives (Behrman, 2006).

In essence, the critical approach aims to empower students to read both "the word and the world" (Freire & Macedo, 1987) through analyzing, evaluating, problematizing, and transforming texts. However, this agenda appears to be undermined by increased standardized testing and government intrusion in classroom instruction. Without a canon of texts or formulaic teaching procedures, the approach does not lend itself to standardization or commercial prepackaging. This means that ways of doing critical literacies can look rather different

from one classroom to another (Luke, 2000). In part because of this, the evidence base for the approach is considered "low" per the What Works Clearinghouse standards (Kamil et al., 2008). A further challenge in implementing the approach is that it requires both teachers and students to develop an understanding of how lexical and grammatical choices realize meaning in text. Absent this knowledge, it is not possible to conduct text analysis and see how texts mean what they mean; and without text analysis, it is not possible to do critical literacies (Janks, 2005).

Toward a Synergy of Approaches

Each of the four approaches—cognitive, sociocultural, linguistic, and critical—draws on a different theoretical and empirical tradition and privileges a particular set of teaching practices. They are, however, not mutually exclusive; they complement one another in ways that allow teachers to tailor instruction to student needs, curricular goals, and the specific tasks at hand. For example, the critical approach recognizes the importance of grammatical knowledge for critical reading. Such knowledge can be fruitfully developed or greatly enriched through a linguistic approach that offers a functional grammar framework for analyzing texts in context (e.g., Fang & Schleppegrell, 2008). Similarly, the sociocultural approach calls for inclusion of popular culture and multimedia texts in the school curriculum as a way to engage students' interests. These texts often require a critical approach that allows students to discern the insidious stereotypes, questionable values, hidden voices, unsubstantiated claims, and problematic ideologies behind the print and images.

Recent discussion about adolescent literacy underscores the need for adolescents to develop a repertoire of resources that enable them to effectively process verbal and visual signs (code breaker), participate in thoughtful conversation with text (meaning maker), use a variety of genres and registers for different purposes and contexts (text users), and critically analyze, challenge, and transform text (text critic) in a postmodern, text-based culture (Luke & Freebody, 1999). The discussion has been influential in reshaping the current thinking about the goals and practices of content area literacies. It also provides an impetus for integrating and revisioning the four approaches described in this review. This synergy must be harnessed and fully exploited if teachers are to optimize instruction that maximizes the development of content area literacies for all adolescents.

Analyzing the Sample Literature Review Essay

The literature review was written for a journal whose primary readership consists of both scholars and practitioners. It is based on Table 7.2, which summarizes the key findings from a critical analysis of existing scholarship on content area literacy instruction. The review starts with a paragraph that sets the context, introduces the topic, and states the purpose and central thesis of the review. In each of the subsequent four sections, one of the main approaches to content area literacy instruction introduced in the first paragraph—cognitive, sociocultural, linguistic, and critical—is reviewed. The same structure is followed in all of these sections. Specifically, each section begins with a discussion of, in order, the theoretical underpinning, key assumptions, and recommended instructional practices related to the approach. This is followed by a paragraph listing the instructional programs informed by the approach and the evidence base for the approach. It ends with a critique of prominent issues related to the approach. Such a consistent structure makes it easier for readers to compare and contrast the four approaches. The review concludes with caveats about and recommendations for content area literacy instruction.

The review is tightly knit not only in terms of the macro organization across sections and paragraphs but also between sentences within each paragraph. In addition to the use of obvious transition markers such as *however*, *for example*, *another*, *also*, *despite*, and *in essence*, more subtle linking devices are also used. For example, the second sentence in the first paragraph begins with *its ascendency*, which is a concept distilled from the idea presented in the first sentence (i.e., adolescent literacy has become a very hot topic). Later in the same paragraph, *these recommendations* refers to *many pedagogical recommendations* in the preceding sentence. In the cognitive approach section, *these routines* (first paragraph) refers to *mental routines or procedures* in the previous sentence and is referred to as *they* in the sentence that follows.

In the sociocultural approach section, *this new understanding* (first paragraph) refers to the ideas presented in the two sentences immediately preceding it. The phrase that begins the next sentence, *a common thread in this line of scholarship*, picks up an idea from the previous sentence (i.e., *to call for…*). Under the critical approach section, *from this perspective* (first paragraph) connects with the viewpoint presented in the previous sentence. As a whole, these devices contribute to the shaping of a text that is tightly woven, suggesting that nominalization is often used as an effective device in crafting cohesive texts for academic purposes.

In this literature review, summaries of prior work (see Chapter 3) are typically short and concise, perhaps due to the space limitation. However, there are also articles that are summarized in greater detail, such as *Catts (2009)* and *Fang and*

Table 7.2 Notes on Instructional Approaches to Content Area Literacy

Approaches	Theoretical Grounding	Research Tradition	Key Assumptions	Recommended Practices	Example Projects or Programs	Evidence Base
Cognitive	Cognitive theories	Primarily quantitative (e.g., experimental studies)	The cognitive requirements of reading and learning from texts are similar across all content areas. Cognitive strategies help with the extraction of information from texts, as well as the remembering and retention of content in school subjects.	Conduct systematic, explicit teaching of a combination of cognitive strategies with content-area texts	Collaborative strategic reading (Vaughn, Klingner, & Bryant, 2001); Peer-assisted learning strategies (Fuchs, Fuchs, & Kazden, 1999); Reciprocal teaching (Palincsar & Brown, 1984); Transactional strategies instruction (Schuder, 1993); Self-regulated strategy development model (Graham & Harris, 1993); Concept-oriented reading instruction (Guthrie, Wigfield, & Perencevich, 2004); Strategic instruction model (Deshler, Schumaker, & Woodruff, 2004)	Strong
Sociocultural	Sociocultural theories	Primarily qualitative (e.g., ethnographic studies)	Literacy is a complex process involving not only cognitive but also social and cultural dimensions. Students' out-of-school literacies can be both a bridge to and a resource for promoting the development of content area literacies.	Build connections between home/community and school by strategically integrating students' prior knowledge and cultural practices with the academic practices of content area learning.	Funds of knowledge (Moll et al., 1992) Third space (Moje et al., 2004) Youth media (Goodman, 2003) Cultural modeling (Lee, 2001)	Moderate
Linguistic	Linguistic theories	Primarily quantitative (e.g., experimental studies)	Content area texts are constructed in language patterns that differ significantly from those that construct everyday texts. Students must learn to cope with the specialized language that constructs the specialized knowledge of content areas to be successful in school and workplace.	Explicitly teach vocabulary and other grammatical and discursive patterns from a functional perspective in the context of challenging but significant content-area texts.	Word Generation (Snow, Lawrence, & White, 2009) LANGUAGE! (Greene, 1996) Juicy sentence (Fillmore & Fillmore, 2012) Functional language analysis (Fang & Schleppegrell, 2010)	Moderate to Strong

(*Continued*)

Approaches	Theoretical Grounding	Research Tradition	Key Assumptions	Recommended Practices	Example Projects or Programs	Evidence Base
Critical	Critical theories	Primarily qualitative (e.g., case studies)	All texts are inherently ideological and value-laden. Knowledge is neither natural nor neutral. Literacy should empower people to challenge social inequalities and promote social justice.	Engage students in critically analyzing, interrogating, evaluating, problematizing, and transforming all forms of text based on issues of, for example, power, gender, race, ethnicity, class, sexuality, religion, or political affiliation.	Critical academic literacy (Morrell & Duncan-Andrade, 2002) Critical language awareness (Janks, 1993) Critical media literacy (Alvermann, Moon, & Hagood, 1999)	Low

Schleppegrell (2008, 2010). This variation in summary length likely reflects the amount of attention the author wants to call to these studies or to the points made by these studies. The longer the summary, the more important, relevant, or complex the piece of work being summarized seems to be for the author. For example, under the cognitive approach section, *Cats (2009)* is summarized with greater length than *Conley (2009)*. This may suggest that the author intends to foreground Catts' point of view in the critique. It is conceivable that should the length limitation be relaxed, the author may choose to write longer summaries of certain studies to give them more weight. Additionally, signal verbs used in summarizing are varied so as to capture more precisely the true intention of the scholars whose work is being referenced and the author's attitudes toward those pieces of work. These verbs include *spotlighted, questioned, noted, argued, claimed, concluded, proposed, reported, described,* and *determined.*

Unlike novice writers, who tend to use quotes excessively and without clear purpose, the author of this literature review relies minimally on quotes. Quotes are carefully selected to complete, reinforce, support, or explain an argument. For example, the quote from *Conley (2008)* in the cognitive approach section (last paragraph) is used to complete the last sentence of the section. The quote itself seems fairly straightforward and thus requires no further elaboration or explanation. Using quotes this way gives the quoted idea an aura of authenticity and credibility. The *Halliday (2004)* quote in the sociocultural approach section (third paragraph), on the other hand, is used to support the argument made in the preceding sentence. It could have been further elaborated if space permits. The *Janks (2005)* quote in the critical approach section (first paragraph) is used to explain the key assumptions of the critical approach. The quote is subsequently elaborated because the terms *positioned* and *positioning* may sound too abstract and thus requires unpacking to make it more accessible to the reader.

Evaluation is an essential part of a literature review (see Chapter 3). This review is no exception. As each instructional approach is reviewed, it is also critiqued. Positive, negative, or neutral terms are used to convey the author's attitude toward each approach. The attitude is ungraded or downgraded depending on the degree of authorial commitment. In appraising the cognitive approach, for example, the author uses double boosting (e.g., *Clearly, there are serious doubts*) to raise questions about the benefits of the approach. The use of *claimed* suggests what Conley (2008) said (i.e., cognitive strategy instruction will pay big dividends in learning) lacks evidence and the author does not buy into the argument. When discussing the evidence base for the linguistic approach, the author shows caution when making the statement, *there are some, albeit limited, evidence*. Similarly, the author uses double hedges in *a feat that may be challenging, albeit not impossible, to accomplish* when discussing the sociocultural

approach. The author also uses words like *can*, *appear to*, *tend to*, and *possible* to modulate his claims and avoid sounding arrogant or overtly confident, as in *a lack of linguistic know-how can prevent teachers from*, *such knowledge can be fruitfully developed*, *it also tends to downplay*, and *this agenda appears to be undermined*.

In other instances, the author presents his points of view without any hesitation or hedges, showing confidence in what he says, as can be seen in *a key issue…is to make sure*, *the approach does not lend itself to*, *it is not possible to conduct text analysis*, and *the discussion has been influential*. When making recommendations for future work, the author uses *must*, as in *this synergy must be harnessed* to emphasize the imperative for action. When rating the evidence base for each of the four approaches, both active voice (e.g., *Kamil et al. (2008) determined the level of evidence to be "strong" for explicit vocabulary instruction.*) and passive voice (e.g., *The evidence base for the approach is considered "low" per the What Works Clearinghouse standards.*) are used to indicate the source of the rating.

In short, Text 7-1 appears to be following the typical rhetorical moves of a literature review, and the linguistic resources deployed instantiate these moves in ways that contribute to the overall purpose of the genre.

Conclusion

Literature review involves identifying, selecting, reading, analyzing, and evaluating scholarly sources on a specific topic of potential significance to a field. It is a key academic genre that students and scholars are expected to master. Writing a literature review is a daunting task, especially for the inexperienced writer. It takes both content knowledge and language proficiency to craft a well-structured, focused, critical, and smooth literature review that either stands on its own or is ready for integration into a larger piece of work.

Reflection/Application Activities

1 Find a literature review essay in your field and examine its rhetorical moves and the linguistic resources that instantiate these moves. Discuss how effective these moves and resources are in helping the author achieve the purpose of the genre and how they are similar to and different from the ones described in this chapter.
2 Write a literature review of an important topic of inquiry in your field, using the rhetorical moves discussed in this chapter and drawing on the linguistic resources presented in Chapters 2–4.
3 Take a look at a literature review paper you wrote before. In light of what is presented in this chapter, discuss what you think you did well and not so well, as well as what you can do to improve your skills in writing the genre.

References

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