Research on Writing

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In the decade that has passed since the last *Handbook of Research on Teaching* was published, research on writing and writing instruction has proliferated. Writing research has been girded by national reform movements such as the Annenberg Challenge, Schools for Thought, and Accelerated Schools, which recognize writing as a key factor in students' academic lives; by the National Writing Project, the one major professional development movement that continues after more than 25 years to influence writing curriculum, instruction, and evaluation internationally; and by the establishment of the National Center for the Study of Writing, which from 1985 to 1995 focused on conducting writing and literacy research. During this time, increasing attention has been paid to a range of writers from preschool to adulthood in varied in-school and out-of-school contexts. Not least, theories about writing and learning to write have evolved as social and cultural perspectives on teaching, learning, and language have achieved prominence and become integrated with the cognitive perspective that dominated writing research in the 1970s and early 1980s. The research that we review in the body of this chapter reflects these changes.

As is the case for research in general, the questions writing researchers have asked, the methods they have employed, the theoretical conceptions they have brought to their work, and, perhaps most important, the way their research has been perceived, interpreted, and valued in the writing and literacy research community have reflected the social and political climate in which the research has been conducted (see Calfee & Drumm, 1986). An important characteristic of the climate surrounding writing research has been the recognition of the growing diversity of the student population, from kindergarten through university. In the context of student diversity, we have witnessed mounting academic and popular concern for the writing and literacy skills of students from varied linguistic, cultural, and ethnic backgrounds. Fueling this concern have been National Assessment of Educational Progress (NAEP) writing achievement data, which revealed that bottom-performing schools in writing achievement were characterized by an ethnic and racial diversity not seen in top-performing schools and that white students outperformed students of color on most writing tasks (Applebee, Langer, Mullis, Latham, & Gentile, 1994). Such statistics have raised questions about who or what to blame for disparities in both teaching and learning in contexts of student diversity and have pointed to critical instructional needs as yet unmet and, frequently, contestably defined.

Researchers have also worked amidst a hovering political anxiety about the United States' educational standing in the international community. With implications especially for the place of the United States in the global economy, being first and best in academic skills and knowledge has been a national goal, energized by the popular media. With a general apprehension that the United States is lagging behind in the international race with respect to writing and literacy, concerns have been voiced about whether U.S. educators are teaching writing well compared to their counterparts in other nations. Often missing from this conversation have been the questionable means of making comparisons. In fact, the one major research project to emerge in the past decade that tried to compare students' writing achievement cross-nationally, initiated by the International Association for the Evaluation of Educational Achievement, was deemed a failure by one of its directors because of the difficulty in obtaining reliable cross-national judgments of writing (Purves, 1992).

Not least in the social-political climate has been the ongoing...
technological revolution, which has considerably upped the ante on the writing and literacy skills deemed necessary for students to participate fully in private, academic, and civic life. Computers have continued to introduce not only new ways of generating and organizing written text but, through the electronic “superhighway,” have also introduced a new textual component to human relationships. The popular and academic urge to predict the long-term effects of this technology on the teaching and learning of writing and literacy along with an academic push to understand the place of advancing communications within larger theories of language, literacy, and culture have been strong.

While certain core questions have always motivated writing research in the current research climate—in particular, how different students learn to write, how best to teach writing in different situations, how students’ writing stands up evaluatively in different contexts—writing researchers have been challenged to incorporate as central to these issues the perspective that the acts of writing and writing instruction reflect broader social and cultural processes at work. In a related way, this decade of writing research has witnessed an exciting conceptual evolution, marked by theories of writing and learning that integrate more fully than in previous decades the cognitive and social-cultural perspectives on writing and learning to write. Such integrated perspectives have helped researchers to understand writers not only as individuals but also as members of broader social and cultural communities. Indeed, during the past decade it has been difficult not to speak of writers’ individuality and their social-cultural communality in the same breath.

Research Coherence

Given the fact that just ten years ago writing was newly recognized as a serious area of study in education (see Dyson & S. W. Freedman, 1991; S. W. Freedman, Dyson, Flower, & Chafe, 1987; Langer & Allington, 1992; Nystrand, Greene, & Wiemelt, 1993), few are surprised that the last Handbook was the first to include a review on the topic of writing and that this review pointed to a lack of coherence in the field (Scardamalia & Bereiter, 1986). Although writing remains a relatively new field of study, a growing coherence has marked the past decade.

This coherence is reflected, in part, in the shared assumption of most writing researchers that writing is inseparable from broader linguistic, communicative, and literate processes. Moreover, whereas ten years ago researchers wondered about the theoretical principles that guided research on writing and discussed the lack of a guiding theoretical base (e.g., Gere, 1986), one of the more defining developments of the past ten years has been the growing consciousness and explicit airing among researchers of the situated nature of their own work and of the parallels between their motivating theories and broader intellectual tendencies.

Nystrand et al. (1993) have charted an intellectual movement in writing research from the 1940s to the present day that parallels similar evolutions in the study of language and in critical theory. This movement flows from formalist epistemology and an associated focus on issues of text to structuralist theories and a focus on underlying processes to, presently, more dialogic theories and a focus on text and process intertwined with social and cultural contexts. This intellectual progression—and the sociocultural frameworks for writing and learning that have emerged in its wake—reflects, in large part, the demographic changes that have occurred in the United States in the latter part of this century. The progression also reflects a more general shift in educational theories and research to postmodern ideologies. The desirability and need to recognize writing’s embeddedness in the broader literate-communicative system also accounts for writing research’s often diverse family of researchers, who have followed different disciplinary roads to study writing and who come mainly from anthropology, education, English, linguistics, psychology, and rhetoric.

With the growing number of researchers interested in issues of writing and literacy, a number of reviews of writing research have been written in the last ten years, not surprisingly to establish coherent perspectives on particular areas of the field. While different reviewers with different purposes for writing their reviews have found a variety of points of entry for examining writing research, they have generally developed two related assumptions about writing: (a) writing is a cognitive and social process and (b) critical relationships exist between writing and other language processes. When emphasizing these assumptions, reviewers have reflected interests in broad-based instructional philosophies, especially variations of “writing process” curriculum and instruction (e.g., Hillocks, 1986) and particular practices to promote students’ writing and learning such as using computers (e.g., Cochran-Smith, 1991) or peer response groups (e.g., DiPardo & S. W. Freedman, 1988). Research reviews of this sort also have allowed researchers to address notions of generalizability in writing research, with the position ascendant—influenced largely by socially cast theories of thinking and learning—that one can fully understand neither an instructional philosophy nor a method apart from the ways particular teachers work in particular instructional contexts. One research trend has been for comparisons of control and experimental classes to be supplemented by, if not often replaced in favor of, ethnography, case study, and teacher research.

Overview

The rest of this chapter is divided into two main sections, which correspond to the two critical assumptions about writing and writing pedagogy that have developed in the field. In the first section, we discuss writing as a cognitive and social process. We begin this section by discussing cognitive perspectives on the writing process, which gave much of the initial impetus to writing research and to process-oriented instruction. We summarize what we know about composing and pedagogy from these perspectives. We then explore social and cultural perspectives, which have helped to expand our conceptions of writing. This discussion serves in part as a theoretical base for the second section. In the second section, we discuss connections between writing and other communicative and literate processes. We focus specifically on connections between writing and speaking and reading, and we explore what is known about these connections in relation to students’ learning and classroom practice. We end the chapter with some thoughts on the next decade of writing research.
Writing Processes

Beginning with Cognition

Encapsulating the strong cognitive perspective on writing that dominated in the 1970s and 1980s, Flower and Hayes asserted in 1981 that "the process of writing is best understood as a set of distinctive thinking processes which writers orchestrate or organize during the act of composing" (p. 366). This perspective on writing reflected the general "cognitive revolution" that has continued to motivate much educational research over the past 2 to 3 decades and that established a cognitive paradigm for understanding teaching and learning. This paradigm continues to prevail in many domains—teaching students how to think and how to engage in problem solving through reasoning and critique remains, after all, a central concern of the schooling enterprise in diverse subjects such as literature, mathematics, biology, and history.

In writing research, cognitive perspectives on learning and performance yielded models of writers' thinking during composing, which have critically guided both research and classroom practice. The most enduring and influential of these models, created by Flower and Hayes (e.g., Flower & Hayes, 1981; Hayes & Flower, 1980), suggested that writing does not progress through linearly ordered stages but, rather, flows recursively through a set of subprocesses that includes planning (generating ideas, setting goals, and organizing), translating (turning plans into written language), and reviewing (evaluating and revising). Writers routinely interrupt one subprocess to cycle into another, with the interruptions coming and the subprocesses occurring in no fixed order (Hayes & Flower, 1980). This composing process is constrained by what Hayes and Flower called the writer's task environment (topic, audience, rhetorical exigencies, and evolving text) and the writer's memory. Above all, according to the Hayes and Flower model, the composing process is a goal-directed, problem-solving process. Writing proceeds as writers create and change their goals in the act of writing and solve various rhetorical problems related to their goals.

One sees the links between this model and process-oriented writing pedagogy, especially in approaches that serve students' planning—for example, through brainstorming ideas and strategies—and that serve students' reviewing—for example, through teacher and peer feedback. Important for research, both the Hayes and Flower model and other cognitive models of the composing process have served as objects of study in their own right and as frameworks for research on the composing process and how that process is taught and learned among different writers.

WRITERS' COMPOSING

To elaborate on the Hayes and Flower model and to explore its implications for teaching and learning, early researchers of the writing process examined how expert writers compose—with the goal of teaching novices the processes that experts use. Mainly, they studied the various rhetorical problems that various types of native-speaking writers attempt to solve and found that adult novices and experts tackle different problems. In particular, experts think about their readers more than novices, who think more about themselves (Flower, 1979); when revising, experts reorganize and reconceptualize large chunks of text while novices tend to revise at the word and sentence levels (Hayes, Flower, Schriver, Stratman, & Carey, 1987; Sommers, 1980); and experts make global plans while novices make local plans, thinking most about what comes next (Bereiter & Scardamalia, 1987; Flower & Hayes, 1981). Although these studies explain expert processes, they do not provide information about the route writers travel as they learn to attain those abilities—the journey from the state of being and behaving like a novice to the state of being and behaving like an expert.

Recently, studies of writers' cognitive processes have begun to focus on nonnative speakers of English, although the scope of extant second language (L2) studies is still limited. Krampel (1990) reviewed a number of such studies, finding mostly case studies, which altogether included a hundred subjects—many of whom were subjects of convenience, usually the researcher's students, and usually competent writers at the university level. These studies, which focus on intermediate and advanced learners rather than on students initially learning their second language, emphasize the similarities of the processes of native and nonnative speakers and, essentially, repeat, for a population that speaks a second language, the findings about those writing in their native language.

Differences when composing in a second language begin to emerge, however, when light is trained on the differences between unskilled L1 (native language) and L2 writers or between unskilled and skilled L2 writers. Ramies (1983), for example, found that unskilled, L2 writers, that is, those who scored poorly on a holistically scored university-administered writing sample, wrote more and showed more commitment to their writing tasks than L1, basic-level writers. These L2 writers did not worry about making errors when they were composing and were not inhibited by error correction once they had written, unlike their native speaking counterparts. For L2 writers, a critical part of the writing process may be the way in which they use their own native languages. Evidence shows that differences among writers using native languages correspond to students' writing proficiency in second languages. In her review, Krampel found stronger L2 writers to be more skilled at using their native languages when composing; increased native-language usage in L2 writing correlated with stronger writing, not weaker writing. In these studies, a native language was often used during planning, especially when the topic was culture bound and related to situations the writer normally experienced in the native language. Writers, writing in a second language, also found their native languages useful when they needed vocabulary in the second language that they did not have; the native language allowed a writer to move forward with the flow of the writing and find the word later. In spite of these observations about different L2 writers, however, the research on writing processes in a second language has barely touched the great variety within populations using second languages.

WRITERS' COGNITIVE PROCESSES: IMPLICATIONS FOR THE CLASSROOM

In the early 1970s, simultaneous with the initial L1 studies of the writing process, many people in the teaching profession
were rethinking the nature of writing and the teaching of writing. In 1972, the Bay Area Writing Project, soon to become the National Writing Project (NWP), began bringing together teacher leaders to share their skills and to develop workshops for other teachers. The NWP, which was destined to become a major force in teacher professionalization efforts and which has influenced and continues to influence millions of writing teachers around the world, embraced the writing process studies early on. The NWP, especially in the beginning, focused mostly on writing for native speakers. The L2 community, independently of the NWP, began to make important changes in their classrooms by the early 1980s as research on L2 writing processes began to emerge (Krapels, 1990).

As the results of research on the writing process reached both L1 and L2 teachers, they began not only to assign more writing but also to restructure their classes to support their students through an elaborate writing process, taking into account the fact that their students would benefit from help with planning, writing, and revising. This change in research and teaching was so monumental that, borrowing from Kuhn (1963), Hairston (1982) called it a "paradigm shift," suggesting that old conceptual models were overturned in favor of new ones. Just one year later, Hairston's language of a paradigm shift was picked up by Raimes (1983) for the L2 community.

In spite of the changes that were occurring inside classrooms, studies of the changes revealed that although the research on the writing process was being widely implemented, it was often misinterpreted and misapplied. Taking a different view of the changes than Hairston, Applebee (1986) argued that the new research findings were being transformed to fit old paradigms for teaching. The difficulties in implementing writing process research seemed related to the realities of teachers' and students' lives inside schools, which forced compromises that researchers had not anticipated. With larger classes, increased numbers of assignments, and more extracurricular duties, teachers had little time to support individual students' thinking or to explicitly guide them in solving their particular writing problems. Yet once teachers assigned more writing, they had to figure out how to handle the load. So although teachers stressed the writing process, it was rarely taught as recursive but rather as a set of ordered stages—first plan, then write, then revise. Help with planning often involved students in whole-class brainstorming activities, after which everyone would write and then revise whether they needed to or not. The problem-solving focus of the research often seemed to get lost in the translation.

Further, what went under the label of writing process pedagogy could be vastly divergent from one classroom to the next for both L1 students (Applebee, 1986) and L2 students (Gutierrez, 1992; Reyes, 1991). Finally, the process received so much attention, fears grew that the quality of students' written products was being neglected (see review in S. W. Freedman et al., 1987).

As teachers experimented with new classroom practices, researchers began to compare the effectiveness of varied kinds of instruction on writing improvement. Looking primarily at classrooms serving native speakers, Hillocks (1986) conducted a meta-analysis in which he examined all experimental studies conducted between 1963 and 1982 that compared the effectiveness of different classroom practices on the quality of student writing. Using statistical procedures to cumulate the results across studies, Hillocks presented the first comprehensive look at the effectiveness of the new emphasis on process. He included only studies in which there was some control for teacher bias, for the validity and reliability of ratings of student writing, and for differences in students in control and treatment groups. He compared four approaches: (a) a natural process mode, in which teachers have general objectives, students write freely for the response of their peers on topics that interest them, and teachers provide opportunities for students to revise; (b) a traditional presentational mode, in which teachers have specific objectives and present information to students about grammar or about model texts, assign writing that generally involves imitating a pattern that has been taught, and give feedback on the writing; (c) an environmental mode, designed by Hillocks himself, in which teachers have clear and specific objectives and in which they help students solve writing problems in small groups; and (d) an individualized mode, in which teachers provide students with programmed instruction or with one-on-one writing conferences. The environmental mode, which was mostly the subject of Hillocks' own studies, proved to be the most successful, followed by a tie for the natural process and individualized modes. The presentational mode was relatively ineffective.

These findings are interesting in relation to the research on the writing process and its applications in the classroom. The most successful environmental mode, with its clear attention to guided problem solving, not the natural process mode, follows most consistently from the writing process research. In contrast, the natural process mode, as defined by Hillocks, seems like a typical misapplication of writing process research, similar to the misguided instruction that Applebee observed. Unfortunately, to interpret findings regarding the third-ranking individualized mode is difficult, because it included two disparate practices, one that should theoretically promote the findings of the process research—one-on-one conferences—and the other that would likely not promote the findings—programmed instruction.

**Social and Cultural Perspectives**

Over the past decade, newer—or newly recognized—social and cultural perspectives on language and learning have forced many writing researchers to extend or offer alternatives to the cognitive theories of composing that attracted so much research attention in the 1970s and 1980s (see Durst, 1990; Dyson & S. W. Freedman, 1991; S. W. Freedman et al., 1987; Nystrand et al., 1993; Sperling, 1996). In particular, scholars have attempted to bring together cognitive, social, and cultural strands of research on writing and literacy to suggest sociocognitive (social cognitive) and sociocultural (social cultural) theories that may better explain the writing and learning experiences of diverse students working across diverse literacy and learning contexts (S. W. Freedman, 1996). The general acceptance of social and cultural accounts of writing and literacy was foreshadowed, in large part, by Scribner and Cole's accounts of literacy in Liberia (e.g., 1981), which showed that literacy and the thinking associated with literacy was closely linked to the functions and purposes of literacy in different contexts.

In fact, scholars have been pushed to elaborate existing cog-
native theories by research that was conducted in a broad spectrum of social and cultural contexts wherein writing served varied functions and purposes, ranging from communicating among family members to conducting business in the workplace and community and from reflecting privately on personal experience to reporting publicly on civic events. Such research has been important for exploring how writing is learned across varied populations and for understanding the roles and relationships of writers and readers in different contexts, including the norms, assumptions, values, and beliefs that influence them. Theories of writing have needed to account for the extent to which writers act as individual agents, executing their own goals and visions for what and how to communicate in written language, and the extent to which their literate practices are shaped and situated within broader social and cultural contexts.

Differences in conceptualizing the writer in context mark much of the current theoretical debate. Despite their differences, however, social and cultural perspectives on writing and learning to write generally have owed in common a debt of thanks to the language theories of Lev Vygotsky and Mikhail Bakhtin, both of whom reflect a Russian scholarly tradition concerned with the links between psychological development and societal context (Forman, Minick, & Stone, 1993). In particular, for both Vygotsky and Bakhtin, language development is seen as a process rooted in and inseparable from relationships forged in the social world.

**Vygotsky's Contribution to Writing Theory**

Vygotsky's theories of learning and development have forced writing researchers to pay attention not only to individuals learning to write but also to the social interactions through which, Vygotsky argues, such learning occurs. He asserts that the social interactions between the child and others become, for the child, the raw material of thought. “Human learning,” Vygotsky notes, “presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (1978, p. 88).

To explain this process of learning and development, Vygotsky uses the metaphor of buds or flowers that, with assistance, will fruit into independent accomplishments (p. 86). These buds or flowers, Vygotsky claims, need to be nourished in the classroom through classroom interactions. Vygotsky’s theory of learning and development explains that these interactions occur within “the zone of proximal development: the distance between the actual developmental level as determined by independent problem solving and the level of potential development, as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). Put another way, by interacting with an able assistant, individuals can carry out certain tasks in the social world that they would not be able to carry out alone.

Following Vygotsky's theories, scholars have suggested that the learning process is one in which an adult or more capable peer, interacting with the learner, provides a scaffold (Bruner, 1978; Wood, Bruner, & Ross, 1976) to aid learning and development. Acting as a scaffold, the adult or peer may perform part of the task for the learner, model the task, or in other ways offer guidance. The scaffold is gradually withdrawn as the learner takes over the task. In this way, learners begin to “appropriate modes of speaking, acting, and thinking” (Forman et al., 1993) that represent their growth into the life around them.

The implication of Vygotsky’s theory for writing pedagogy is that to learn and develop as writers—to “appropriate” the information, skills, and values associated with writing—students need to be engaged in social interactions. These interactions center around aspects of the task of writing (including generating ideas, selecting language, shaping and reshaping text) that they cannot accomplish alone but that they can accomplish with assistance.

Over the past decade or so, the metaphor of scaffolding has caught on, particularly for presenting a vision of classroom practice. One likely reason for its acceptance is that, conceptually, the construct matches general curricular and reform goals of socializing students into the critical writing life of both school and civic culture. However, the metaphor is limited insofar as it does not convey the subtleties of the teaching and learning process that followers of Vygotsky, closely studying instructional interactions, have identified. One criticism is that the scaffold metaphor tends to highlight the teacher’s role more than the student’s in the learning interaction (see Cazden, 1988) and to suggest that the student somewhat magically internalizes teacher-student interchanges (Stone, 1993). According to Stone (1993), the metaphor ignores the multiple communicative mechanisms that learners, along with teachers, employ in order for teaching and learning to take place. In particular, Stone singles out the linguistic and semiotic mechanisms of inferencing through which learners come to share teachers’ perspectives, the nature of teacher-student interpersonal relations, and, relatedly, the social value teachers and students attach to particular learning situations.

In spite of sometimes poorly realized interpretations, Vygotsky's interest in the interaction between learner and other in the “zone of proximal development” has, perhaps more than any other single influence over the past decade or so, attracted writing researchers to study specific interactive contexts of writing life in classrooms in order to understand their potential for students’ learning and development as writers. These interactive contexts include teacher-writer interactions as seen in teacher-student writing conferences and peer-writer interactions as seen in various peer collaborations around students’ texts. Unlike other domains that draw on Vygotsky’s theories, writing research frequently has assumed that, as student writers interact with others to explore and get feedback on their writing, they in effect make explicit the relationship between writer and reader that is implicit in and critical to the composing process. Put another way, when the student writer interacts with a capable reader regarding a writing activity, the expectations and assumptions of the reader are exposed and made available for teaching and learning (S. W. Freedman, with Greenleaf & Sperling, 1987).

How effective such interactions are for all students’ learning, however, has been the topic of some debate. The theoretical ideal is not always realized, especially in cross-cultural situations where teachers and students may bring different assumptions and values related not only to writing and literacy but also to the instructional process itself (see, e.g., Au, 1980; Cazden, 1988; Delpit, 1986, 1995). Indeed, attention to the range of stu-
dents who work with a single teacher in any classroom has forced researchers to address what kind of learning interactions teachers and different students coconstruct. Highlighting the social, cultural, and political-historical threads of which this teaching and learning fabric is woven, Forman et al. (1993) assert:

... [E]ducationally significant human interactions do not involve abstract bearers of cognitive structures but real people who develop a variety of interpersonal relationships with one another in the course of their shared activity in a given institutional context. Within educational institutions, for example, the sometimes conflicting responsibilities of mentorship and evaluation can give rise to distinct interpersonal relationships between teachers and pupils that have important influences on learning. For example, appropriating the speech or actions of another person requires a degree of identification with that person and the cultural community he or she represents. Educational failure, in this perspective, can represent an unwillingness to subordinate one’s own voice to that of another rather than an inability to learn. (1993, p. 6)

Insofar as appropriating the information, skills, and values of a particular written language is tantamount to appropriating a particular sociocultural voice, extending Vygotsky’s theories has been critical to incorporate more strongly a sociocultural perspective. Bakhtin extends these theories; he suggests the need to situate such learning events within cultural, institutional, and historical contexts (Wertsch, 1991).

BAKHTIN’S CONTRIBUTION TO WRITING THEORY

Like Vygotsky, Bakhtin (1986) assumes the centrality of social interactions in language and thought but emphasizes the overlapping, intertwining, and “interpenetrating” nature of these interactions in a broader sociocultural structure:

Our thought itself—philosophical, scientific, and artistic—is born and shaped in the process of interaction and struggle with others’ thought, and this cannot but be reflected in the forms that verbally express our thought as well. ... The utterance proves to be a very complex and multiplanar phenomenon if considered not in isolation and with respect to its author (the speaker) only, but as a link in the chain of speech communication and with respect to other, related utterances. (1986, pp. 92–93)

Addressing, in particular, the way language is learned, Bakhtin adds:

We know our native language—its lexical composition and grammatical structure—not from dictionaries and grammars but from concrete utterances that we hear and that we ourselves reproduce in live speech communication with people around us. We assimilate forms of language only in forms of utterances. [emphasis added] (1986, p. 95)

In other words, language, by its nature, comprises the social and cultural history of its users: Language is nothing if not connotative, and it is learned as such. This linguistic premise forms the basis for Bakhtin’s term “voice.” As Cazden (1993b) explains,

Voice is Bakhtin’s term for the “speaking consciousness”: the person acting—that is, speaking or writing in a particular time and place to known or unknown others. “Voice” and its utterances always express a point of view, always enact particular values... [while] taking account of the voices being addressed, whether in speech or writing. (p. 198)

In this sense, words are laden with the voices of exight contexts.

In this sense, too, language is, in Bakhtin’s view, dialogic. According to Morson (1986), who explains this dialogic quality,

Bakhtin understands discourse to be not an individual writer’s or speaker’s instantiating of a code but, instead, the product of a complex social situation in which real or potential audiences, earlier and possible later utterances, habits and “genres” of speech and writing, and a variety of other complex social factors shape all utterances from the outset... The only way in which the individual speaker can be sole author of an utterance, according to Bakhtin, is in the purely physiological sense. (1986, p. 83)

For Bakhtin, then, each piece of writing is composed of the writer’s past interactions with the thoughts of others and of anticipated future interactions.

Taking Bakhtin’s theories to the writing classroom, we may assume that students’ speech and writing are imbued with the viewpoints and values of multiple and sometimes competing voices. For example, as Cazden (1993b) points out, student writers are always faced with negotiating the “dual audience” of teacher and peers (p. 204), with the teacher being the usual primary audience and therefore the student’s main addressee but with peers playing the role of what Cazden calls “ratified audiences” (p. 204). Students, in both their speech and writing, choose language that asserts their relationships to and acknowledges both of these influences. Similarly, Dyson (1993) identifies three “social spheres of interest” (p. 13) for students communicating in classroom contexts: the official school world, the unofficial peer world, and the sociocultural community as realized in the classroom—“each world with its own social beliefs and language values” (p. 13). Looking beyond the classroom, Brandt (1992), by implication, extends the notion of ratified auditorship and suggests additional spheres of interest for student writers when she indicates that all writers relate not only to readers’ needs and expectations but also—and, Brandt suggests, perhaps primarily—to their “affiliations with the sense-making practices of a particular group, say, feminists, the Roman Catholic Church, or AT & T” (p. 330). Sperling (1995, 1998), accounting for these embedded social and cultural worlds in language and learning, suggests that students as writers participate in a “role complex,” their voices reflecting the multiple stances they assume in relationship to multiple others both inside and outside of school.

A major implication of Bakhtin’s theories for classrooms is that, in the theoretical ideal, students’ thinking and their written texts move inexorably toward reflecting the voices valued in that context. It follows that students’ thinking and texts will be richer in learning contexts where multiple voices and multiple ways of voicing are welcomed (see S. W. Freedman, 1994; Knoeller, 1998).
To achieve such a learning context, teachers may need to open up their classrooms both to conventional academic texts and to texts that conventionally do not get fostered in academic settings—incorporating various literary and nonliterary discourses from western and nonwestern cultures, ranges of genres reflecting students' social and cultural diversity, and nonverbal symbolic media (including gesturing, drawing, and signing). Toward this end, research in nonacademic contexts helps us to see beyond classroom genres, to define discourses and texts broadly, and to see both younger and older writers using combinations of verbal and nonverbal signs to make meaning (see, e.g., Witte, 1992). In the next decade, writing research needs to press on the implications for communication, teaching, and learning and on the implications of incorporating broadly defined discourses into the established literate meaning-making practices of school. As Delpit (1995) argues, teachers will need to lead students to acquire the dominant discourse but, in the process, to find their own place within it. Teachers must "saturate the dominant discourse with new meanings, must wrest from it a place for the glorification of their students and their forebears" (p. 164). Research not only needs to probe the value of such practices across students but also to explore how to implement them to advantage in different school settings. Such exploration is important if writing curriculum and policy are to keep pace with the social and cultural diversity of our students and with rapidly expanding technologies, both of which are adding new and varying discourses to social intercourse.

Research and Theory: Bringing Together the Cognitive with the Social and Cultural

Flower's (1989, 1994) recent work has become a widely cited illustration of one kind of sociocognitive position. In this work, Flower has extended her early composing model to better account for (a) the influence on writers of their social and cultural contexts and (b) the reader's role in contributing to the meaning of writers' texts. Flower presents not a model of "composing" but rather of "discourse construction" and, in doing so, recognizes that no composing or meaning making occurs apart from the way writers function in different sociocultural contexts (Figure 21.1).

A critical difference between this model of discourse construction and earlier cognitive models of the composing process lies in the data sources that led to them. Whereas earlier models of composing were based on relatively homogeneous groups of mainstream writers composing under laboratory conditions, Flower's model of discourse construction is based on the reading and writing activities of diverse students working in natural reading and writing situations. As such, it emphasizes both individual diversity and the contexts in which individuals function.

As seen in Figure 21.1 and according to Flower,

... both writers and readers construct meaning within the broader context of a social and cultural context, of language, of discourse conventions (a trio that was meant to be suggestive, rather than exclusive). These form an outer circle of influence in conjunction with and often produced through a more immediate circle of gen-

![Figure 21.1. A model of discourse construction (from Flower, 1990).](image)

eral purposes, specific goals, and activated knowledge linked to the task at hand. In the model, both readers and writers build socially shaped, individually formed meanings. (1994, pp. 52-53)

In the discourse construction process, writers and readers build internal representations of text, and, according to Flower, these internal representations are linked to differences among writers in their interpretations of such influences as social expectations, the task, conventions, or teacher's response. Writers' and readers' internal text representations, moreover, also include questions, dilemmas, contradictions, and alternative strategies that they either are considering or have discarded—in Flower's words, "forces in conflict and roads not taken" (1994, p. 53). In this way, "outer forces translate themselves into inner voices" (p. 54) that writers and readers must negotiate as they attempt to produce or make meaning of text. The "awareness" box in Figure 21.1 indicates that writers and readers can be more or less aware of this discourse construction process.

One of the criticisms levied against the earlier Hayes and Flower composing model (Flower & Hayes, 1981; Hayes & Flower, 1980) was that, as Bizzell (1986) asserted, the writer's context (or "task environment") was depicted as merely a frame for the activities inside the writer's head, which composed the main interest. The same cannot be said for the more current model of discourse construction in which writing does not exist apart from the circumstances surrounding it, including its eventual reading. Yet the model does not dismiss or even downplay individual cognition. Rather, it emphasizes how context cues cognition—note the multiple arrows leading from context to writer, which in turn lead to the writer's mental representation in Figure 21.1. The model emphasizes, too, how cognition—the writer's mental representation—mediates between context and text. Critical to this conception of discourse construction, then, are the dilemma-driven, goal-directed writer and reader who
are working together to make meaning happen. Key to instruction is making these writers and readers explicit and available for students to consider.

Flower's model includes elements that have become key in current theoretical debates, namely, context, the relationship of context to writer and reader, and the nature of the writer-reader relationship itself. A central question encompassing all these elements (see, e.g., Nystrand et al., 1993) is whether context is an exterior influence that acts upon writers and readers or whether it is accomplished by writers and readers working dialogically (see Brandt, 1992). In contrast to Flower's conception that context cues cognition, some theorists emphasize the dialogical relationship between writer and reader as the central contextualizing act. Criticizing Flower's sociocognitive theory, which she sees as cognitive theory somehow made "context sensitive," Brandt (1992) asserts that the social world (i.e., context) should not be "treated as something that is taken in as a kind of raw material, mixed with the ingredients of long-term memory and rhetorical purpose, and put through the recursive mental operations of goal setting, planning, organizing, and so on" (p. 324). Rather, context should be seen to be "created and justified" (Nystrand et al., 1993) in writing and reading. What these theorists suggest, then, is that written discourse is not just "situated" but is also "situating" (Brandt, 1992; Nystrand, 1986; Nystrand et al., 1993). This dialogic perspective on discourse begins to reveal the fuzzy boundary between sociocognitive and sociocultural views. From a sociocultural perspective, too, writing is situating, helping to shape and maintain roles and relationships that are ratified in the broader social and cultural world.

With social and cultural perspectives on writing and writing processes well established in shaping current theoretical debates, some writing researchers have recently articulated shortcomings of these perspectives and have called for a theory that integrates material factors into cognitive, social, and cultural factors to account for the writing process and its teaching and learning (Bracewell & Witte, 1997; Witte, 1992). According to Bracewell and Witte (1997), critical for understanding the influences on and development of the literate mind is perceiving how writing is "grounded in the material world" (p. 1). They suggest three ways in which writing may be so grounded: (a) the writer communicates using material objects (letters, pen, paper, word processor, internet) which in turn shape the writing; (b) the product of writing—that is, the text—is a material object in itself; and (c) the text also influences events in the material world (p. 1). This material aspect of writing—and what it may mean for the teaching and learning of writing in classroom contexts—has as yet been studied little empirically. However, a theory that considers the material either as a separate factor in writing or as an aspect of social or cultural context, may be particularly useful in the coming years and may shed light on the ways that writing technology changes the significance and meaning of writing in school and is linked to students' acquisition and development of the information, skills, and values associated with written language.

What all these scholars illustrate is the intense focus in recent years on writing as a meaning-making process undertaken by writers in conjunction with others in the social (cultural and material) world and, perhaps, especially including readers (we note that the reader is sometimes also the writer). Both writers and readers are bound to the contexts that give meaning and significance to texts and to the acts of writing and reading them. As differing perspectives on this process indicate, how best to think of writing as a literate act—what a literate act is and how we might best teach and learn it—may not be a question that has one grand solution. Still, social and cultural perspectives on writing are critical to conceive of students' diverse experiences as writers and, in turn, to develop ways that foster those experiences in various social arrangements within classrooms and schools.

Writing Connections

Over the past decade, the tendency has been to extend the list of broader literacy and learning processes of which writing is seen as an instantiation. Just as cognitive studies focus on writing as an instantiation of problem solving, for example, so sociocognitive and sociocultural perspectives focus on the way writing instantiates such processes as literate action, symbolic performance, and sense making. Evolving theories have put the spotlight on this bigger language and learning picture, often demanding that we know just what the bigger picture is or needs to be if our work is to help teachers teach and children learn. How writing fits into this bigger picture is what we now turn to.

Writing and Speaking

The connection between writing and speaking has been a topic of interest not only for educators but also for linguists, psychologists, and anthropologists who have sought to understand the nature of language, processes of language acquisition and development, and the ways language functions in the social world (see, e.g., reviews by Chafe & Tannen, 1987; Horowitz & Samuels, 1987; Sperling, 1996). These interests have fueled the question that asks how teachers can connect their knowledge of oral and written language processes to the teaching of writing.

We know that while writing and speaking are each modes of communication, speakers customarily have the advantage of communicating with others who are present while writers, in contrast, usually work in relative physical isolation. Speakers and their interlocutors can help one another shape messages as they unfold, but for writers, the burden to shape messages lies within themselves as they—without contingent and present help—in effect, communicate with "absent others" (on the cognitive ramifications of these differences, see review by Scardamalia & Bereiter, 1986; and on the limitations of the cognitive perspective see Gee, 1990; Street, 1984). Thus, writers and speakers operate within often differing cognitive constraints and cultural conventions for communicating in one mode or the other. We do not mean to imply that a variety of communicative circumstances do not exist in which speakers find themselves relatively isolated (for example, when radio announcers speak to unseen audiences), when writers' audiences are physically present (for example, when individuals write out answers to spoken questions), or in which a host of variations occur on the speaking and writing continuum. However, the physical absence of an interlocutor or audience customarily distinguishes writing from speaking.
These conditions of writing and speaking have helped to establish two general conceptions of writing and speaking connections, both of which can motivate writing research and practice: (a) writing and speaking are distinct though sometimes comparable discourse modes; and (b) speaking to others who are present can support writing in practical learning contexts. These perspectives lead to two corollary questions: (a) When students shift from speaking to writing, what do they need to learn and unlearn about language? and (b) What spoken language experiences in the classroom foster students' development of written language?

**WRITING AND SPEAKING AS DISTINCT DISCOURSE MODES**

Over the last several decades, a prodigious body of research has accumulated that distinguishes spoken from written language or that considers one with reference to the other (see review in Chafe & Tannen, 1987). Until relatively recently, however, much of this research has focused on formal features of oral and written texts, with particular attention paid to the features of spoken and written syntax. Research comparing spoken and written syntax generally shows how writing is syntactically more complex than speaking. Writing, for example, is characterized by more subordinations, clausal elaborations, embeddings, passive verb forms, and a variety of sentence-combining transformations. Mastery over these forms has been seen to distinguish mature from immature writing (Hunt, 1965; Loban, 1976).

As the focus has shifted from describing the syntactic features of writing and speaking to understanding the social contexts in which writing and speaking are used, however, it has become clear that language features do not exist independent of these contexts. Not only syntax but also other aspects of language such as what is said and what is taken for granted or what is developed and in what ways reflect speakers' and writers' purposes and listeners' and readers' expectations for how and what to communicate in particular situations (see, e.g., Gee, 1990). Even very young children learn without formal instruction to distinguish the demands of certain written from spoken contexts, in particular, producing either oral- or written-like stories when it is appropriate to do so (see review in Sperling, 1996).

What is not so clear, and what we have yet fully to understand, is how individuals over the course of their development learn to distinguish the range of written-like from spoken-like strategies that they encounter both inside and outside school, especially when formal schooling influences what and how students think about writing and speaking. We also do not know fully how this learning process might differ for those who develop mastery over written strategies in academic settings and for those who do not.

We do know that students at all levels demonstrate, if not mastery, at least a certain acquaintance with the distinct nature and function of written academic discourse, and evidence to this effect has kindled questions about the role of social and cultural knowledge in the process of learning how to write. For example, basic writing students, deemed to have few viable skills for producing academic papers, have demonstrated, nonetheless, some understanding of written discourse, as Shaughnessy (1977) found in her now-classic examination of 4,000 placement essays written by open-admissions freshmen at the City University of New York. These writers attempted a number of characteristically written-like forms (e.g., nominalizations, passive verbs, and complex, integrated syntax) and, in many cases, appeared to use such language in an attempt to convey learned perspectives on everyday topics, a stance consistent with writing in university settings. However, in contrast to skilled writers, these writers often mixed into their writing strategies that are natural to speech (e.g., redundancy, fragmentation, and loose sequencing). It appears that even when basic writers have mastered few written discourse skills, they may, nonetheless, demonstrate an approximate sense of how written discourse conventionally appears and sounds (see reviews in Goen, 1997; Sperling, 1996).

In contrast to the textual evidence from basic L1 writers, text data on L2 writers of different ages suggest that these writers often fall back on spoken-like English strategies when they write in English as their second language (for example, using much coordination, shorter T units [an independent clause plus all its dependent structures], unmodified nouns and verbs, and fewer prepositional phrases) and apparently do not attempt counterpart written-like forms, even though such forms are more appropriate to the writing tasks (see review of text data in Silva, 1993). A commonsensical explanation for this situation is that some L2 writers who lack sufficient mastery over English written-like strategies may draw on those English spoken-language strategies that they are certain of. However, we do not know what strategies L2 writers use when their written language development is more advanced than their oral language development. We also do not fully know how beginning L2 writers might contrast to L1, basic-level writers, for whom much social currency appears to come from sounding written-like and academic, even when they have little mastery over such language themselves. Comparative studies of L1, basic-level writers and beginning L2 writers could help reveal the kinds of knowledge this range of writers leans on, including not only knowledge of text features that can be gained from exposure to books but also the kinds of social and cultural knowledge that fosters linguistic strategies in academic settings.

How students might acquire and develop social and cultural background knowledge along with the written language features that reflect this knowledge is the topic of some debate among both researchers and practitioners. A growing, though not always empirically based, perspective among many language educators is that when dominant mainstream discourses appear particularly congenial for certain students (usually white, middle-class students), these students can implicitly acquire writing strategies valued in academic settings. This implicit learning process is largely one of acculturation and occurs, in part, as students are immersed in reading and writing different kinds of mainstream texts (Berkenkotter & Huckin, 1993; Gee, 1990). In contrast, students whose social or cultural backgrounds are linked to languages or discourses different from those favored by mainstream groups may need more explicit instruction in the text structures encountered in school and other mainstream settings (Cope & Kalantzis, 1993; Delpit, 1986; A. Freedman, 1993). Delpit (1986), for example, protests what she sees as the neglect of students' explicit learning of
mainstream written language structures by many process-oriented writing teachers and calls for direct and explicit instruction of standard written or edited English to be provided for students who, because of their social, cultural, or ethnic backgrounds, speak a dialect of English (e.g., African-American English vernacular) that does not form an easy springboard for acquiring standard written or edited forms.

Genre-based pedagogy, which more strongly reacts against process approaches to writing instruction, is popular especially in Australia and Canada and emphasizes the importance of making written language structures explicit to students as part of teaching them to write different kinds of texts. Scholars of this approach (see reviews in Cope & Kalantzis, 1993) argue that knowledge of written language, in contrast to knowledge of spoken language, does not develop naturally but, rather, develops through instruction in formal learning settings. The function of schooling is to make such knowledge explicit to students as they learn to read and write.

The focus of genre-based pedagogy is on the nature of texts to do things in the world and on the ways in which these texts reflect what they do in their forms. Genre, then, is defined as the relationship between textual features—ranging from global rhetorical to sentence-level syntactic features—and a text's social function and purpose (Cope & Kalantzis, 1993). In the theoretical ideal, genre-based teaching explicates the links among form, function, and social context, helping learners to develop mastery over a range of text types. In Australia, especially, this ideal extends to teaching genre critically, leading students to challenge cultural assumptions found in different mainstream texts, for example, the tendency to evacuate the author's voice or presence in certain kinds of scientific writing. Thus literacy instruction as socialization is balanced with literacy instruction as critique (Cazden, 1993a).

One problem with genre-based pedagogy is that scholars themselves are still debating what it is or should be. This problem is reflected in the concern for whether actual teaching can be true to the theoretical ideal. If, for example, text structures are taught in relationship to social and linguistic context, one might question the value of explicating these structures out of context. Relatively, we do not know whether genre-based instruction gives students transferable knowledge of language structures, a question that has been raised for both L1 learners (see review in Smagorinsky & Smith, 1992) and L2 learners (Widdowson, 1993). In practice, too, teaching that is genre based has been seen often to focus more on formal text characteristics such as global rhetorical structures or lexical and grammatical features than on the sociocultural assumptions linking such features to contexts (see review in Hynon, 1996).

Unfortunately, little empirical research—and no large-scale studies—show the impact of genre-based pedagogy in writing classrooms (see review in Hynon, 1996). Some English as a Second Language (ESL) research suggests that explicit teaching of rhetorical structures benefits ESL writing development (Swales, 1990). Similarly, evidence from interview data and writing samples in an examination of socially and culturally heterogeneous fifth- and sixth-grade students' writing showed that focusing teaching on the rules and patterns of global discourse characteristics was effective when students also learned about the broader contexts of writing audiences and purposes (Raphael, Englert, & Kirschner, 1986; Raphael, Kirschner, & Englert, 1986). Flower (1994), however, has complicated this picture with case-studies of college freshman writers, concluding that while teaching about written text structures in the context of their broader academic functions is possible, learning in the academy is strongly shaped by each student's own prior knowledge and goals, immediate competing social realities, and the constraints of doing writing for a teacher.

At this point, we do not adequately understand how much explicit knowledge about structure at any level is helpful, to which writers explicit knowledge would be helpful, or under what circumstances it might be helpful. In the coming years, writing researchers will need to address the value of explicit instruction to foster students' acquisition and development of standard edited English. For example, the issues of explicit teaching likely differ depending on what language structures are being learned, that is, whether students are learning about rhetorical structures, syntactic structures, or lexical structures. Teachers always run the risk of formulating teaching when explicating features and rules, but the danger seems greater as one teaches increasingly higher levels of discourse. One complication is that at higher levels of discourse, structures become less stable over contexts. Spelling, for example, is relatively stable over differing writing situations. Syntax is not so stable, and global rhetorical structures are (ipso facto) the least stable of all. We need research that addresses these distinctions. We also need research that can test explicit teaching methods over diverse learning settings and that can allow for examining how and if students' structural knowledge and skills build and grow across semesters and years under different teaching methods. More importantly, we need continually to ask how we might create learning contexts that, over time, will foster diverse students' acquisition of written language structures.

Some lessons can be learned about teaching formal structures from an already-solid research base in the teaching and learning of spelling and of sentence-level grammar and syntax. A substantial research base has developed in particular on the nature and development of spelling knowledge and skills, especially among preschoolers and primary-grade students. Young students' acquisition of spelling appears to follow a developmental trajectory, as students who are learning to read and write can, without formal spelling instruction, produce spelling forms that increasingly come to match English spelling conventions (see seminal work by Read, 1971; see review in Hodges, 1991). These invented spellings reflect children's attempts to organize sound and letter correspondences and are seen to be an important part of the spelling acquisition process as children discover, through their own spellings, the ways that sounds map onto written words. In this process, the spelling errors that writers make can provide clues to their personal system of phonographic rules, which teachers can use to help students acquire standard forms. Generally, the studies suggest a balanced teaching approach that recognizes students' invented spellings while leading them in the direction of standard forms. Most of this research, however, is with culturally mainstream students and L1 students. We do not have as much information on culturally diverse writers and L2 writers.

The research on grammar instruction is almost as unequivocal as that on spelling, yet as with research on spelling, much
of what we know we have learned from white, middle-class students and L1 students. For example, we have been told from years of research on the teaching of sentence-level grammar that a focus on teaching formal grammar and usage apart from meaningful contexts does not improve students' writing (see meta-analysis by Hillocks, 1986). Grammar instruction has often been associated with worksheet exercises and memorizing rules, thereby displacing other kinds of practice with extended writing. Sentence-combining—the practice of revising two or more short declarative sentences into one larger compound or complex structure—often stresses that students compose their own sentences rather than work with those from a worksheet, yet this practice, too, emphasizes writing at the sentence level, divorced from the context of students' extended pieces. In contrast, teaching that links grammar to students' genuine communicative needs as they attempt to write for real readers appears to benefit students' writing and learning (see review in Sperling, 1996). However, researchers, over time, have not tested any kind of systematic grammar instruction through empirical studies that builds on this assumption. Nor have researchers systematically addressed issues of cultural or language diversity.

WRITING AND SPEAKING INTERTWINED

Dyson and S. W. Freedman (1991) remind us that "in the schools, writing is taught as teachers and students talk about writing" (p. 757). In fact, talk can be an integral instructional support for writing and is widely recognized as such, largely because through talk writers have the opportunity to discuss ideas and strategies with others. Some supportive talk of this sort occurs in one-on-one or small group conversations, as seen in teacher-student writing conferences (private conversations between the teacher and student about the student's writing or writing process) and in student pairs or peer groups designed around a collaborative goal (see reviews in DiPardo & S. W. Freedman, 1988; Sperling, 1996). Dynamics in such configurations can reflect almost prototypically Vygotsky's notions of learning through social interaction: Dyadic or small group contexts allow students and their interlocutors to build on one another's input and help shape writing ideas and strategies through the conversational process. The interactions also reflect Bakhtin's notions that texts are multivoiced, as ideas and strategies for writing become imbued with the collaborative efforts of the writer in dialogue with others (see Dyson & S. W. Freedman, 1991; Nystrand et al., 1993; Sperling, 1996). While they are theoretically appealing, however, the effectiveness of such conversations for students' writing development can be mixed (see reviews in DiPardo & S. W. Freedman, 1988; Sperling, 1996).

Teacher-student writing conferences, rather than conventional classroom I-R-E exchanges (in which the teacher initiates by asking a question or providing a prompt, the student responds, and the teacher evaluates the response), appear to be the most valuable, especially for students to explore and develop their ideas. In Sperling's (1990) case study of writing conferences among ninth-grade students and their teacher, conferences became more conversationally interactive and less like teacher-led classroom exchanges over the course of the semester, in part, because students in this classroom had many opportunities to confer with their teacher and got used to doing so. In these conferences, too, instructional purposes varied, from planning unwritten texts to revising already-written drafts to clarifying the teacher's written comments, which gave individual students opportunities to interact when the purpose was important to them. Such multiple and varied teacher-student conversations, however, do not always occur in writing classrooms. Further, writing conference conversations can be marked by miscommunication and "missed opportunities for learning" (see review of college-level conferences, Prior, 1998) or more resemble teacher monologues than dialogues, especially when teachers press to get across their own agendas for students' work (see review in Sperling, 1996).

Taken together, the studies on writing conferences suggest that problems occur in conferences when certain conversational conditions are not met: when teachers and students assume the kinds of conventional classroom roles that allow teachers to dominate conference talk; when, for experiential or cultural reasons, students and teachers follow inconsistent rule systems for teacher-student interaction; and when conferences do not take place within otherwise supportive classrooms.

Group conversations among peers work best when student writers talk as equals and do tasks that allow them to take on the natural roles that they are comfortable assuming with one another (S. W. Freedman, 1992). In case studies, Freedman found that under these circumstances, peers can provide helpful feedback that is qualitatively different from the teacher's and that peers can work especially well together when solving a jointly owned problem, as was the case when they composed collaboratively or when they generated ideas for everyone to use. This finding is consistent with more general findings on how groups function in the classroom (e.g., see work on cooperative learning groups, Sharon, 1984; Slavin, 1980). However, when peers are asked to take on roles that require them to assume power over one another or when the teacher controls the conversation in the peer group through explicit directives and evaluation of peer activity, peers have difficulty helping one another. For example, teachers commonly ask group members to evaluate one another and thereby take on the role of expert. They also commonly attempt to control the activity by asking group members to complete evaluation forms on each piece of writing and to turn in those forms to the teacher. In such cases, group members have to balance pleasing the teacher with maintaining their friendships with their peers, goals that often work at cross-purposes. These conflicting roles, not surprisingly, can create interactional difficulties. Students also run into difficulty when they are expected to act as experts in relation to one another because they often are not expert enough to provide helpful advice (S. W. Freedman, 1992; see also review in DiPardo & S. W. Freedman, 1988).

In sum, it is important for teachers to think carefully about the roles they are asking students to assume and the kinds of tasks they are asking them to perform in peer response groups. Also important is the need for teachers to align roles and tasks so they are comfortable for the students and will enable them to advance their learning. Such an environment is flexible and attentive to individual differences and fosters communication about issues of genuine significance to students—a workplace organized and guided by a teacher, but one that offers writ-
ers opportunities to solicit feedback from peers and from the teacher in support of their evolving, individual needs (DiPardo & S. W. Freedman, 1988). In such a collaborative classroom, teaching can spring free of its traditional connotations— including the urge to dominate—in favor of a less intrusive monitoring and shaping approach. It appears that if peer interactions around writing are to take root and flourish, they must be grounded in a theoretic foundation that embraces this Deweyan (Dewey, 1938) vision of the teaching and learning process.

Interational patterns in the classroom also affect what L2 writers learn in ways that are consistent with the effects on L1 learners. Gutiérrez (1992) studied whole-class interactions in 7 second- and third-grade “writing process” classrooms with large numbers of Latino students. She found that the same activity (e.g., journal writing, author’s chair, and peer response groups) differed depending on the more general interactional patterns of the classroom. In the mostly recitation classrooms, teachers kept rigid control of the conversation, giving students little room to participate meaningfully. Talk was characterized by teachers asking known-answer questions, with a focus on getting students to give the right answer and on transmitting information. The use of the I-R-E structure in classrooms predominated. This type of classroom proved least successful as measured both by student participation and by student writing. At the other pole, the more responsive and collaborative classroom, having features consistent with the kind of classroom described by DiPardo and S. W. Freedman, proved most successful for language learning, particularly for learning oral language.

Writing and Reading

Scholars have made serious calls over the last decade or so for research and practice to emphasize writing and reading connections (see, e.g., Dyson, 1986; S. W. Freedman et al., 1987; Langer & Allington, 1992; Nelson & Calfee, 1998; Tierney & Shanahan, 1991). In their review of research on writing-reading relationships, Tierney and Shanahan call specifically for integrating writing and reading under the rubric of “literacy.”

Given the prodigious body of historical and anthropological accounts of literacy in the United States and elsewhere that encompasses both writing and reading, such suggestions seem remarkable insofar as they have to be made at all. Yet, historically, writing and reading have followed different paths in both curriculum and research (for accounts of these divergent paths, see Clifford, 1986; review by Langer & Allington, 1992; Nelson & Calfee, 1998). Relatedly, pedagogical philosophies based on “integrated language arts,” an idea with a relatively long philosophical history, remain the topic of much discussion among theorists and practitioners alike, with whole language and writing process philosophies likely the most talked-about present-day examples. In fact, surveys of writing and reading practices across U.S. schools indicate that a large portion of classrooms still ignore integrated approaches (see reports of the NAEP: Applebee, Langer, Mullis, Latham, & Gentile, 1994), and research has yet to develop a comprehensive theory of writing and reading that can guide such approaches across diverse learning settings.

Still, research has been able to refine the conceptual connection between writing and reading, leading to two generalizations on this topic: (a) writing and reading are distinct but related processes, and (b) writing and reading are intertwined and interconnected in day-to-day practice. These generalizations suggest two related questions: (a) “What can we learn about writing and writers through comparisons to reading and readers?” and (b) “In what ways is writing part of a broader literate landscape?”

Writing and Reading Compared

Two common approaches to connecting writing and reading conceptually are either to compare students’ writing and reading performances or to compare students’ cognitive processes as they write and read different types of texts. The first route puts a good deal of focus on students’ writing and reading test scores or evaluations, taking these as indicators of students’ skills and knowledge, while the second depends on think-aloud protocols to trace and describe students’ thinking as they write and read. Generally, however, the research has been inconclusive (see review in Tierney & Shanahan, 1991).

Early work such as Loban’s (1976) longitudinal study of students’ writing and reading performances at multiple grade levels suggested a correlation between the quality of students’ writing and their reading comprehension. However, later studies of students’ writing and reading skills suggested that there were no easy correlations between the two. In particular, students, who on different measures were deemed good readers, were not necessarily deemed good writers—an observation that, from a commonsensical perspective, was not all that surprising. What was surprising, however, were those studies that showed good writers were not necessarily good readers. Unreliable measures and cross-study inconsistency mars many of these findings, however, and such research raises one question: Do we help students by relying on product-based measures while ignoring students’ underlying thinking processes as they write and read (see review in Tierney & Shanahan, 1991)?

Unlike performance-based research, explorations of cognitive processes not only are able to capture writing and reading comparatively but also can test and contribute to cognitive models of the writing and reading process (e.g., de Beaugrande, 1984; Flower et al., 1990; Kucer, 1985; Martin, 1987; Square, 1984; Tierney & Pearson, 1983; Wittrock, 1984). As Tierney and Shanahan point out, these models, with their focus on writing and reading as meaning-making activities, generally suggest that writing and reading can be defined in terms of the same general cognitive processes. For example, the Tierney and Pearson model includes for both writing and reading the strategies of goal setting, knowledge mobilization, projection, perspective-taking, refinement, review, self-correction, and self-assessment; the Martin model includes monitoring, phrasing content, invoking knowledge of content and text form, rereading, questioning, inferencing, and making connections. In such models, differences between writing and reading are said to reside in the extent to which students invoke various strategies at different times in the writing and reading process. However, after studying the story and report writing and reading of 67 third-, sixth-, and ninth-grade students, Langer (1986) concluded that although writers and readers may share certain
strategies, writing and reading are each too complex, with patterns of cognitive behavior differing substantially within each, to assume they are similar activities.

Considering writing and reading within real instructional contexts helps to reveal this complexity and to highlight the connection between literate processes and contextual variables (see review in Greene & Ackerman, 1996). The consideration of context, in fact, highlights the ways writing and reading are intertwined as thinking processes and interwoven in everyday practice.

**WRITING AND READING INTERTWINED**

The many ways writing and reading are intertwined are revealed in the research laboratory and observed in classroom activity. From research, especially, we know that writers must read their own texts in the process of writing and revising and that writers must anticipate and incorporate the reading of others as they make their texts sensible in particular literate contexts. By observing what occurs in classrooms, we know that students often are asked to read and interpret others’ texts in order to create their own—a process that Flower and her colleagues (Flower et al., 1990) call “reading-to-write”—and writing is often used to foster students’ learning from others’ texts (see review in S. W. Freedman et al., 1987). Given these various connections between writing and reading, how these relationships play out for different students in different school contexts is of particular interest.

**READING AS PART OF THE WRITING PROCESS**

A major component of both early and recent models of the writing process (e.g., Flower, 1994; Hayes & Flower, 1980; Kuerer, 1983) is the influence on the writer of text already written. On the basis of their already-written texts, writers read and write or read and revise throughout the writing process.

We know that adult expert writers, when compared to adult novices, read and reflect more on their own emerging texts. The critical components in this discrepancy between novice and expert seem to be that, in rereading their texts, skilled writers are shaping their evolving texts to meet readers’ needs and to fulfill the purposes of the assignment. Through also rereading their assignment, these writers often build progressive representations of their audience, spending much time thinking about how they want to affect it (on the effects of reading representations on writing, see Flower & Hayes, 1981, 1984; Hayes & Flower, 1980; Sommers, 1980; see also, review in Scardamalia & Bereiter, 1986; on the effects of readers’ rhetorical representations on comprehension, see Haas & Flower, 1988).

Along with the generous number of L1 studies yielding information on this writing and reading connection, researchers recently have begun to put together a picture of this connection from an L2 perspective. Some evidence has been found that L2 writers less frequently reread and reflect on their written texts than L1 writers and that, in spite of reading their evolving texts less often, they revise them more. L2 students, unlike L1 students, appear not to revise based on how their texts sound, but, rather, by invoking rules of grammar, surely a more arduous and self-conscious reading and reviewing process (see review in Silva, 1993; see also, Perl, 1979). Hull (1987) found a similar pattern among less skilled college writers. These observations should not suggest that, as L2 writers read and reflect on their writing, they are no different from the novice L1 writers seen in earlier studies. Yet to fully understand this distinction, we need to investigate how the special circumstances of and constraints on reading while composing in a second language may alter the writing process for L2 writers such that the process becomes a more laborious undertaking.

**ANTICIPATING AND INCORPORATING THE READING OF OTHERS**

Students who are taught to consider their readers have been found to write better than those who are not, and writing that reveals reader-directed adaptations has generally been perceived to be of higher quality than writing that does not (see reviews in Sperling, 1996; Tierney & Shanahan, 1991). Adaptations are usually gleaned from features such as syntactic complexity and rhetorical structuring, including strategies such as elaborating and giving orienting information through which writers establish a shared background and perspective with their readers.

Generally, older and more proficient writers control such strategies differently than younger or less proficient writers. For example, basic writers, even at the college level, often make implicit and erroneous assumptions about the kinds of information and language that their readers will be able to follow when reading their texts. As a result, writing that is fully comprehensible to the writer may seem, in one way or another, elliptical to readers. Such writing is said to reflect the writer’s difficulty in taking a point of view (the reader’s) that may differ from the writer’s. Flower (1979) dubbed this kind of writing “writer-based prose.”

The prodigious amount of research on L1 writing, especially at the college level, overwhelms the scant work as yet reported and reviewed for L2 writing. The little evidence presented on L2 strategies, however, suggests that many L2 writers may approach readers quite differently than L1, basic-level writers. One study (Scarcella, 1984) found that L2 writers produced longer reader orientations (defined as material preceding the introduction of a thesis statement), used more clarifying devices to help readers understand their themes, and, in doing so, included more obvious information that appeared to underestimate their readers’ knowledge. Another study of native Arabic speakers (Atari, 1983) found that students included introductory statements that were too broadly orienting and general for the essay. The studies do not tell us, however, the extent to which these strategies are conscious and deliberate (see review in Silva, 1993).

L1 and L2 writers may exhibit different approaches to anticipating their readers, yet a single critical aspect of the writing process likely explains the gap between them, namely the central role in their writing played by social and cultural knowledge and background. In particular, whereas L1, basic-level writers may tend to assume too readily that they and their readers share knowledge and background, thus leaving much left unsaid or implicit in their writing, L2 writers, on the other hand, may be unsure of such shared understanding and over-
compensate by saying too much. Unfortunately, we have too few studies of L2 writers to firmly support this intellectually appealing polarity.

Learning to Anticipate Readers/Students can successfully be taught to anticipate their readers as part of the writing process. One way to heighten students' sense of their readers is to manipulate assignments to specify audience; another way is to focus instruction so students discuss and learn about their readers. Much of the research in teaching audience awareness was conducted in the late 1980s on L1 writing and followed experimental designs comparing treatment groups. These studies show that (a) assignments for real audiences affect writers' composing more than assignments directed at imaginary audiences or no audiences at all, (b) the teacher-as-audience likely has less effect on writing than audiences other than the teacher, and (c) sensitivity to audience is enhanced when the writer is given information on the reader's viewpoint or has experience with the kinds of problems readers encounter. This research has tended to focus on older writers, however, and though some investigators have compared better and poorer writers, they have generally not addressed writers' experiential or cultural background in this work (see reviews in Sperling, 1996; Tierney & Shanahan, 1991).

Learning from Reader Response/Writers also develop a sense of readership by receiving response from readers to texts already completed or in various stages of planning and drafting. In classrooms, such response comes primarily from teachers but often, also, from peers. The practice of giving writers response follows from the psycholinguistic premise that feedback is key to language acquisition and development, including both written and spoken language. Response practice is also consistent with Vygotskian and Bakhtinian conceptions of the social nature of language wherein individuals learn language by using it in social contexts. In classrooms, response traditionally comes in the form of teachers' written comments on students' papers, but, less traditionally, it also emerges in conversations with teachers and peers meant to help students with their writing. Given at various stages of writing and revising, such response figures importantly in writing process classrooms. All forms of response, however, are not equally effective in all writing situations.

TEACHERS' WRITTEN COMMENTS/If given unaccompanied by other kinds of response, written comments by the teacher may be especially problematic (see review in Hillocks, 1986). In general, investigators have found that comments on mechanics and form tend to dominate or overshadow comments on ideas, knowledge, or disciplinary values; comments often carry more meaning for the teacher who is writing them than for the student who must interpret and use them; comments often function more to justify a grade than to serve students' writing development; comments tend to become formulaic, telegraphic, or full of jargon as teachers face large paper loads and have to make do with responding in the most efficient ways to the greatest number of students; and students often discount comments, seeing them as reflections of their teachers' "confused read-


Taken together, these many studies suggest that teachers' written comments cannot stand on their own in conveying to students how teachers read their work. One problem with written comments is that, as an abbreviated medium of communication, they easily accommodate conventionalized editorial or prescriptive response. Even when teachers transcribe such response, however, students may misinterpret teachers' comments or ignore them altogether, because a shared interpretive context does not always exist when teachers write and students read the comments (see review in Sperling, 1998).

Preconceptions of students' capabilities can unduly influence student performance and teachers' assessments of students' performance; this is not recent news among educators (Weinstein, 1989). Not surprisingly, such preconceptions can affect the ways teachers interpret (or misinterpret) students' texts and can result in problematic written responses. The most convincing evidence of such teacher misinterpretations comes from case studies of response, including evidence that this problem can be particularly acute for culturally diverse students whose teachers do not share their cultural backgrounds and, thus, misinterpret and respond inappropriately to their communicative practices (e.g., Hull, Rose, Fraser, & Castellano, 1991; see also, review in Prior, 1998).

Sperling (1994) extends such observations, offering a framework for describing the teacher as a reader of students' writing. According to this framework, teacher response can reflect a teacher's different social roles in relationship to different students (e.g., literary scholar, friend, editor); the different interpretive lenses a teacher brings to students' texts (personal, cultural, popular, academic); a teacher's cognitive and emotive reactions to different students and their texts; and teacher's pedagogical purposes for different students and for giving particular assignments and a teacher's evaluative stances. All these components feed into the response process, yet in Sperling's case study, the latter two, especially, dominated students' interpretations of their teachers' written comments. Students tended to see their teachers' responses as reflecting, above all, a school-based authority to exact particular writing behaviors and to reward good writing or punish poor writing through grades. This situation is corroborated in a number of other studies (see reviews in Dyson & S. W. Freedman, 1991; S. W. Freedman, with Greenleaf & Sperling, 1987; Nystrand et al., 1993).

TEACHER-STUDENT WRITING CONFERENCES/Given the constraints on reader response seen in teacher-written comments, the impetus has been strong to explore the potential of teacher-student writing conferences to provide responses to writing. These face-to-face conversations hold the promise of allowing writers and readers to establish a shared context for communication. Ideally, during conferences, students and their teacher readers can continually shape and reshape meanings and clarify meanings for one another, and the teacher's response to a student's text can evolve through this interaction (see earlier dis-
discussion of writing conferences in the section on writing and speaking).

This conceptual ideal is supported by a variety of studies from elementary level through college (see review in S. W. Freedman et al., 1987). Conferences have the effect of allowing students, especially higher achieving students, to talk about ideas rather than mechanics and of allowing students and teachers to collaborate in thinking about the students' text. However, as we indicated earlier, even in conferences, students can find it difficult to see their teacher-reader as more than a directive teacher-evaluator unless teachers and students shift their talk from conventional I-R-E routines to more fully interactive and spontaneous discussion. This shift may be particularly difficult and also culturally inappropriate when students bring diverse experiential and cultural backgrounds to such conversations.

PEER RESPONSE In part because the teacher is really only one reader and a powerful presence in the classroom, studies of peer response have sought to examine the kinds of roles peers can play in providing response, both within and outside the classroom. Peers generally are expected to broaden and emphasize the audience for writing. In most cases, when peers serve as readers and responders, the writers take their turns at responding to the writing of others. This reciprocal opportunity for response ideally allows students to take new points of view on their own writing and to see more clearly its strengths and weaknesses.

Inside classrooms, some research shows that groups work well to help students revise, leading writers to reconceptualize their ideas and focus on the substance of what they want to communicate, while other studies uncover problems with peer response. For example, Gere and Stevens (1985) found that high school students, unlike their teachers, were not inclined to ask writers to conform to an ideal of good writing but, rather, were more inclined to engage with the content of the writing. Similarly, at the college level, Nystrand (1986) found that peers engaged with what a writer tried to say, often leading writers to reconceptualize their ideas. By contrast, Newkirk (1984), also working with college students, found that the students he studied engaged with content but that they had difficulty putting aside their own idiosyncratic ideas and listening to what the writer was trying to say. Berkenkotter (1984) showed that peer feedback was confusing to writers. In the end, it seems that the ways groups are organized and the context in which they are enacted exert powerful influences on the kinds of feedback students give and on the effectiveness of that feedback. Possibly for this reason S. W. Freedman (S. W. Freedman, with Greenleaf & Sperling, 1987) found that expert teachers were deeply divided about the usefulness of peer response. More research is needed on the ways classroom structures and teachers' philosophies relate to peer structures and ultimately to the effectiveness of peer response.

In contrast to response that comes from classroom peer groups, response that comes from students outside the classroom is generally less direct and often comes as an aside to other, more central between-class activities. For example, S. W. Freedman (1994) describes writing exchanges between secondary school classes in the United States paired with secondary school classes in Great Britain. As part of the U.S.-British exchanges, the students in each country sometimes responded spontaneously to one another's writing. These responses were embedded in the students' own writing and addressed what students from the paired class had to say. Sometimes these responses were directed to individual students, but more often they took the form of comments to an entire set of papers. Students' reactions to papers written by students from the paired class influenced their attention to details such as mechanics and form in their own writing. In addition, there were times when teachers asked students in their classes to study the writing of their peers from abroad and to analyze what made writing appealing and accessible. Exchanges of this sort have also been studied by Heath and Branscombe (1985), who set up a situation in which older students responded to the writing of younger students, essentially playing the role of teacher. In this exchange, the younger students were influenced by the model letters the older students wrote and by the explicit feedback directed toward them. More research is needed on the effects of broadening the audience for response to student writing and on the role of direct and teacher-like response versus the kind of natural response that occurs as students attempt to communicate through writing.

READING AND INTERPRETING OTHERS' TEXTS

Writing in school contexts means, primarily, personal experience narratives at the elementary level and expository or argumentative writing at the secondary and postsecondary levels (S. W. Freedman, 1994; Vahapassi, 1988). In high school, the most frequent writing (though not necessarily the focus of writing instruction) is writing about literature as students read and interpret other authors' texts. In college, argumentative essays can be the mainstay of both composition and content area courses. Here, typical writing assignments emphasize reading and interpreting other authors' texts in order to advance one's own stance on a topic (see Flower et al., 1990).

Multiple factors distinguish writing that involves interpreting others' texts from other kinds of writing and make such text-interpretive writing especially difficult for some students (see review in Greene & Ackerman, 1996). In such writing, writers must synthesize and restructure outside text information to make it useful to their own writing purposes, the primary purpose being to connect outside texts to their own. When making these connections, they must consider the discipline's expectations for acceptable discourse content and structure. And they must decide on their abilities and rights as students to contribute unique perspectives on topics that others, usually experts, have written about. Greene and Ackerman see this process to be a critical intellectual step, marking students' entry into the kind of academic conversation that is central to postsecondary education. Not surprisingly, older students and students considered to be more mature readers have been seen in correlational studies to better succeed in this process: They write more sophisticated argumentative papers, which include incorporating greater amounts of source text information, pinpointing ideas better, and integrating and elaborating more on different levels of ideas (see review in Tierney & Shanahan, 1991).

Flower and her colleagues (Flower et al., 1990) suggest that
often students go about interpreting, synthesizing, and restructuring texts in vastly different ways. Their research examined the writing processes of 72 college writers faced with an assignment specifically asking them to advance an argument based on their interpretations of source texts. Students in only a few cases analyzed the source texts in order to make an original argument, as the assignment intended. Many opted instead to write straightforward summaries of the texts they read or to use the readings as springboards for focusing on their own ideas. Interestingly, just as students have been seen to interpret such assignments differently, instructors have been seen to represent such assignments differently in class (see review in Prior, 1998).

Taken together, the studies indicate that producing expository essays from reading is influenced only partly by reading ability or the writing task itself. This writing is also—and perhaps especially—influenced by a number of other factors, including topic knowledge, knowledge of the discourse conventions of different disciplines, and beliefs about what counts and what works when ideas are linked to those found in other texts. The latter two factors, especially, draw on culturally and experi-entially influenced notions of appropriate academic discourse.

Evidence has surfaced from a handful of studies, many of them case studies, that these factors may have particular implications for basic writers, students from diverse cultural back-grounds, and L2 writers (these groups often overlap). In a case study of one college-level basic writer, Hull and Rose (1990) found that the student's particular beliefs about what constituted plagiarism, based on years of warnings about plagiarism in lower-level writing courses, greatly constrained her strategies for writing based on reading. The student so restructured the content and wording of the source text in order to write about it that she effectively derailed her own writing. Other case studies show that basic writers and writers from different cultures are reluctant to assert their own authority on a topic when their writing draws on outside texts written by experts, even when that authority shows up in other classroom situations (Goen, 1997; Greene, 1995).

L2 students may have particular difficulties with when and how to incorporate source text information in their writing, yet evidence to this effect comes primarily from text analyses, mak-ing it impossible to tell whether the students' writing problems stem from not knowing certain written conventions such as where to include source text information and how to ground it or, rather, whether students do not know how or when to express their own ideas in relation to others in the social and cultural contexts of writing in school (see review in Silva, 1993).

**USING WRITING TO LEARN FROM TEXTS**

A widely embraced view connecting writing and reading is that writing fosters text-based learning: In particular, writing aids in comprehending and recalling text and in learning new text material. This view is motivated in part by a large body of research conducted primarily in the 1960s and 1970s showing that when students actively manipulate or elaborate on the texts they read, their text understanding increases as does their text memory (see review in Applebee, 1984). This conclusion and its companion view that, through writing, students can more thoughtfully explore text-based ideas and situations has been supported by a number of studies, including studies focused on writing about literature and studies exploring writing's connection to learning from science or social science texts (e.g., Langer & Applebee, 1987; see review in Tierney & Shanahan, 1991).

In taking this view, researchers have distinguished between different functions of writing and the ways those functions vari-ably affect learning from texts. The concept of writing functions is taken largely from the work of James Britton (1970; Britton, Burgess, Martin, McLeod, & Rosen, 1975), who suggested that writing could be classified according to writers' cognitive processes and writers' social contexts for writing, rather than according to more traditional distinctions based on the form of the finished product (narration, description, exposition, or argument). Britton offered three such categories of writing functions: (a) transactional writing—writing that serves to transact business and provide information (including essays and reports); (b) expressive writing—writing that, with formal rules relaxed, allows the writer to think through ideas much as one would in informal talk among friends (including journal writing and diaries); and (c) poetic writing—writing that functions literarily (including poetry, story, and drama).

To study the effects that different writing functions have on learning, researchers have generally focused on the transactional category: restricted school writing tasks such as short answers written to text-based questions, the kind that students typically encounter at the ends of chapters to aid studying; and different kinds of extended writing tasks, also typically encountered in school, including note-taking, text summary, and text analysis. All extended transactional writing is more effective than restricted writing for gathering, consolidating, and re-viewing relevant information and ideas. Extended analytic writing, in particular, has been associated with examining the relationships among ideas and is seen by many researchers to entail more complex subject-matter understanding than other transactional writing tasks—although analytic writing involves focusing on a generally narrower range of text content when compared to other transactional tasks (see reviews in Durst & Newell, 1989; Newell, 1998; Tierney & Shanahan, 1991).

Despite a body of research showing links between the func-tions of students' writing and their learning from texts, the picture is more complex than research sometimes suggests. For example, learning from texts also depends on individual differences among learners (see review in Tierney & Shanahan, 1991). One individual difference that matters a great deal in students' learning is the prior knowledge they bring to writing and learning tasks (see review in Newell, 1998).

Questioning claims that writing leads to learning, Ackerman (1993)—after reviewing 35 frequently cited studies—critiques the writing and learning research on a number of grounds. In particular, he questions whether writing tasks, claimed to be extended, really are; whether learning is always soundly operationalized (for example, many studies equate learning with remembering); and whether the researchers don't expect to find a writing and learning connection, thus biasing their interpreta-tions of findings which may not always support this connection. Ackerman also questions whether many writing and learning studies adequately consider the range of academic variables that can affect writing and learning connections. For example, writing-to-learn studies have often ignored the diverse ways of
knowing and doing that are associated with different academic disciplines and fields (Newell, 1998; Sperling, 1996).

Behind the writing and learning research, of course, is a fundamental belief that particular kinds of writing can be exploited for students' cognitive growth and development. Yet many scholars have suggested that cultural biases lie behind this strong claim. Writing practices (e.g., personal writing, writing that challenges authority, and writing that explores new ideas) carry cultural values, and writing cannot in and of itself lead to learning without some congruity of values between the writer and the writing task (see review in Newell, 1998). Such biases might better be understood if researchers were to study the issue of writing and learning connections across different cultural contexts and among students from diverse cultural backgrounds who may bring various approaches to literacy learning in school.

The Future: Research and Practice

Over the years, arguments surface that writing cannot be taught, that gifted writers, just as gifted orators, musicians, and visual artists, inherit their gifts. The best that the public schools can do is nurture those with special talents by providing elective creative writing classes. Just a few decades ago, before the writing process movement helped to make writing a curricular focus, sustained writing was rarely expected outside the English class; and even in the usual English class, the teacher did not attempt to teach writing beyond assigning essays to test how well students could interpret a piece of literature. The main feedback students received came in the form of teachers' corrections, usually written in red pen, usually focused on grammar, and usually formulated to justify the grade more than to teach the student (see review in Sperling, 1998). In spite of research findings to the contrary (see reviews in Braddock, Lloyd Jones, & Shoer, 1963; Hillocks, 1986), teachers also believed that students would improve their writing by studying formal grammar. Hence, writing instruction consisted largely of assigning and correcting papers coupled with grammar drills.

Important findings from writing research, combined with social pressures to include writing as a prominent part of the curriculum, however, have revolutionized classroom practices over the past several decades. In our best schools today, children write extended stories in the early grades; as they grow older, they use writing to learn across the curriculum—from social studies and English classes to math and science; and across the grades, they write in varied ways, for varied purposes, and for varied audiences. We are making progress, and classroom practice is charting out new directions. Nonetheless, we still have a long way to go before all our students have adequate and literacy skills. The need only increases for research that addresses the range of students and the range of contexts in which their writing and literacy skills will develop.

Research grounded in sociocognitive and sociocultural perspectives, which has been especially prevalent in the past decade, has gone a long way to connect our thinking about writing to this student range, especially to students' linguistic and cultural diversity, and to connect our thinking about writing instruction and learning to the range of language and literacy practices that shape students as writers and as learners in school. With the research evidence gleaned from this past decade, we have learned that trying to generalize the writing and literacy learning experience for all of our students adds little value.

In the next decade, writing researchers will have to continue focusing on issues related to writing and literacy learning in light of students' language and cultural diversity and, in doing so, will have to grapple with three challenging tasks: (a) refining principles of writing and learning to write so they transcend sociocultural and linguistic contexts, (b) understanding patterns in writing and learning to write that are influenced by particular differences in these contexts, and (c) understanding how (a) and (b) are related to and inform one another. Thus, it will be necessary continually to assess and reassess notions of writing competency across grade levels and how grade level intersects with experiential differences, with the English language, and with written discourse. Relatively, we will need to keep enlarging our notions of writing instruction and learning in ways that recognize the role of writing in the context of language and literacy practices that are valued in schools and in other social contexts. We believe that the focus of this review on the connections between writing and broader language and literacy practices provides both a reasonable and an exciting synthesis for helping to launch the next decade of writing research.

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