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Glynda Hull and Katherine Schultz

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Literacy and Learning Out of School: A Review of Theory and Research

Glynda Hull
University of California, Berkeley
Katherine Schultz
University of Pennsylvania

In this article we review research on literacy in out-of-school settings. Our first purpose is to identify the conceptual advances in theories of literacy that have arisen from non-school-based research and to trace their evolution. We are especially interested in clarifying the historical roots of current theories. A second purpose is to highlight recent research on literacy in out-of-school settings that exemplifies the range and dimensions of current work. Finally, we call for an examination of the relationships between school and nonschool contexts as a new direction for theory and research. We ask, How can research on literacy and out-of-school learning help us to think anew about literacy teaching and learning across a range of contexts, including school?

KEYWORDS: *literacy, literacy theory, out-of-school literacy practices.*

During the last two decades, researchers from a range of disciplines have documented the considerable intellectual accomplishments of children, adolescents, and adults in out-of-school settings, accomplishments that often contrast with their poor school-based performances and suggest a different view of their potential as capable learners and doers in the world.[1] Much of this research has dealt with the practice of mathematics—for example, young candy-sellers in Brazil who, despite being unschooled, develop flexible methods for arriving at the correct answers to math problems important to their vending (Saxe, 1988; see also Cole, 1996). Worlds away, southern California suburbanites have shown a comparable competence in real-world arithmetic problem solving—figuring out the best bargain in supermarkets or calculating precise portions as part of weight-watching activities (Lave, 1988). Like the children in South America, these adults provide the illusion of incompetence in their performance on formal tests of the same mathematical operations.

In literacy research, too, there has been much interest in recent years in documenting and analyzing the writing and reading activities that take place outside school, activities diverse in function, form, and purpose. Some of these studies highlight the kinds of writing that adults do as part of everyday life (Barton & Hamilton, 1998; Barton & Ivanic, 1991). Others examine the literacy-related activities that many adolescents pursue on their own, including keeping diaries and writing plays (e.g., Camitta, 1993; Finders, 1997; Mahiri, 1998; Schultz, 2002). Some researchers, while also focusing on youth culture, include in their analyses of

literate activity a notion of "text" more broadly conceived—the graffiti produced by youth in gangs (Cintron, 1991; Moje, 2000), for example, or Internet surfing and chat (e.g., Lankshear, 1997; Lankshear & Knobel, 1997b; cf. Kolko, Nakamura & Rodman, 2000). In addition to personal literacy practices and those that flourish in friendship or peer networks, some researchers have noted the considerable literacy and language-based components that develop as part of a variety of community activities (e.g., Cushman, 1998; Heath & McLaughlin, 1993; Moss, 1994).

Others, notably Flower and Cole and colleagues (Cole, 1996; Flower, in press; Flower, Long, & Higgins, 2000) have directed their energies toward designing and organizing theory-driven after-school programs that link universities to surrounding communities. A similar structure has proved generative for researchers and teachers in the field of composition studies, who have developed "service-learning" courses in which college students volunteer their time in a variety of organizations in exchange for real-world practice in writing (e.g., Adler-Kassner, Crooks, & Watters, 1997). After-school programs have also been of interest to researchers in the field of reading, who have identified the value of children's participation in after-school book clubs (cf. Alvermann, Moon, & Hagood, 1999; Alvermann, Young, Green, & Wiseman, 1999).

Still another branch of out-of-school research on literacy has been attentive to the considerable pressures on recent immigrants to learn and put to use the literate practices of their adopted countries (e.g., Skilton-Sylvester, 2001; Weinstein-Shr, 1993; see also Norton Peirce, 1995). And finally, first spurred by worries about the economy and then inspired by features of our "new capitalism," researchers and corporate leaders alike have become interested in the role of literacy in the context of work (e.g., Gee, Hull, & Lankshear, 1996; Hart-Landsberg & Reder, 1997).

In this article we review research on literacy in out-of-school settings, research conducted from various theoretical perspectives with various populations in various contexts but with the commonality of a focus on nonschool practice. Our first purpose is to identify the conceptual advances in how researchers think about literacy that have arisen from non-school-based research, with a special focus on tracing the evolution of the research. As we shall see, accounts of literacy outside school have, in fact, played pivotal roles in the history and development of literacy research and literacy theory. The first half of this review is organized around the major theoretical traditions that have shaped various strands of work on out-of-school literacy. These are the ethnography of communication (e.g., Heath, 1983; Taylor & Dorsey-Gaines, 1988), Vygotskian perspectives and activity theory (e.g., Engeström, 1998; Scribner & Cole, 1981), and the New Literacy Studies (NLS) (e.g., Gee, 1996; Street, 1993a, 1993b). To be sure, such categories are not hard and fast; a current project, for example, might draw on methodological insights from the ethnography of communication and also on the interest in power relations made manifest by the NLS. And in some important ways, the more recent theoretical points of view are made possible by—even draw their life from—the earlier ones. However, our theoretical categories provide a useful historical lens for seeing more clearly the pivotal role played by studies of out-of-school literacy, and they serve also as a heuristic for mapping the ever-growing territory of research and practice in out-of-school settings.

A second purpose of this review is to feature recent research on literacy in out-of-school settings, research that we have selected to illustrate the range and dimensions of current work. Our primary intent here is not to critique these studies (although we do highlight certain strengths and shortcomings), nor to provide a comprehensive

summary of the elements of each. Rather, we intend in the second half of our article to present studies of out-of-school literacy in such a way as to suggest, through example and vignette, the practical and conceptual incentives and rewards for conducting such work. Finally, we call for an examination of the relationships between school and nonschool contexts as a new direction for theory and research. We ask, How can research on literacy and out-of-school learning help us to think anew about literacy teaching and learning across a range of contexts, including school?

One caveat before we begin. In some ways the distinction between in-school and out-of-school sets up a false dichotomy. By emphasizing physical space (i.e., contexts outside the schoolhouse door) or time (i.e., after-school programs), we may ignore important conceptual dimensions that would more readily account for successful learning or its absence. We may, then, fail to see the presence of school-like practice at home (e.g., Street & Street, 1991), or non-school-like activities in the formal classroom. Such contexts are not sealed tight or boarded off; rather, one should expect to find, and should attempt to account for, movement from one context to the other. In a related way, Cole (1995) calls our attention to a possible danger in treating the notion of context as a container, as that which surrounds and therefore, of necessity, causes, influences, or shapes. Writing primarily about hierarchical levels, Cole (1995) worries about the tendency to see a larger context (i.e., the school) as determining the smaller (i.e., the classroom). But his comments can be extended to apply more simply to our case of the adjacent contexts of school and out-of-school. That is, in any analysis of out-of-school programs, we want to avoid the temptation to oversimplify the creative powers of context—for example, to assume that successful learning in an after-school program occurs merely or only because it takes place after school.

Nevertheless, school has come to be such a particular, specialized institution, with its own particular brand of learning (Miettinen, 1999), that to set it in contrast with other institutions and other contexts for learning seems useful. Doing so will allow us to reconsider what we have grown accustomed to taking as natural and normal and to recognize it as an artifact of a particular kind of learning that is associated primarily with schooling.

Selection of Studies

Our review process began with the collection and systematic analysis of recent research on literacy in out-of-school settings. To identify this work we surveyed the past 10 years of publications in literacy and learning journals, including *Anthropology & Education Quarterly; College Composition and Communication;* the *Journal of Literacy Research; Mind, Culture, and Activity; Research in the Teaching of English;* and *Written Communication.* We also include works published in edited volumes and book-length studies during the same period. We looked at various aspects of this work, including the rationale that researchers gave for examining literacy out of school, types of questions and findings, whether researchers connected out-of-school literacy to in-school practice, and the theoretical traditions underpinning the work.

The next step in our process was to look at historical development, focusing especially on theoretical perspectives in order to better understand the traditions shaping current work. We reviewed the ethnography of communication, activity theory, and the NLS to understand the relationships between those traditions and empirical work in out-of-school settings.[2] It was here that we made our most

important discovery: that empirical, field-based research on out-of-school literacy has led to some major theoretical advances in how we conceptualize literacy. We are not suggesting that studies of literacy in school were unimportant in this regard. But as we will illustrate below, when researchers examined literacy in out-of-school contexts, they often arrived at new constructs that proved generative for literacy studies. As part of our historical research, we identified central studies and researchers in each tradition.

The last stage of our review process was to return to current work on literacy in out-of-school settings and to inductively generate categories that captured the dimensions of this work. We noted, for example, the relationship of the studies to theoretical traditions, their conceptions of literacy, connections made or not made to schooling, communicative mode and primary medium, the age of participants and its significance for the research, types of out-of-school contexts, languages, and geographic locations. Such categories also helped us to see gaps in current research and to envision possible new directions for future work.

The Ethnography of Communication

We turn first to a series of studies that take what is now known as a sociolinguistic perspective on literacy and schooling. These studies reflect the conceptual leap made by bringing anthropological and linguistic perspectives and research methods to the study of literacy. In the 1960s and 1970s, scholars from traditions outside education—such as anthropology and linguistics—looked beyond schools to family and community settings to understand how urban schools might reach students from cultural, socioeconomic, and linguistic backgrounds that differed from the mainstream. Educators were concerned that students of color, and especially those from low-income families, were not doing well in school. Until that time, the prevalent explanations had been deficit theories that blamed the students and their families for poor performance in school. Anthropologists interested in the study of language and literacy in schools brought to the study of classrooms a view of culture as "patterns in a way of life characteristic of a bounded social group and passed down from one generation to the next" (Eisenhart, 2002, p. 210). This view of socialization and culture prompted them to look to settings outside schools to understand patterns of school success and school failure across groups of students.

In 1962, Dell Hymes and John Gumperz organized a panel for the American Anthropology Association that brought together researchers from the fields of linguistics and anthropology. In his introduction to the proceedings, Hymes (1964) urged linguists to study language in context and anthropologists to include the study of language in their description of cultures. Hymes proposed the concept of an "ethnography of communication," which would focus on the communicative patterns of a community and a comparison of those patterns across communities. Although Hymes intended the ethnography of communication to include writing and literacy, the early focus on speaking led many to believe that his emphasis was solely spoken language (Hornberger, 1995).

Just a few years later, in 1965, a group of scholars representing a range of disciplines—including linguistics, anthropology, psychology, and education—were brought together by the U.S. Office of Education to examine the relationship between children's language and school success. In the midst of President Lyndon B. Johnson's expansive Great Society programs, researchers were asked to consider

why schools were failing "low-income and minority" children (Cazden, 1981). The conclusion reached by the group was that many school problems of minority students could be explained by discontinuities, and specifically by differences in how language was used, between a child's home and school communities (Cazden, John, & Hymes, 1972, p. vii). Thus the National Institute of Education funded a number of studies to examine these issues. A major finding from the initial work was that children who have been socialized in diverse contexts come to school differentially prepared and positioned to respond to the demands of school. Therefore, they experience school differently; the result is success for some and failure for others. Hymes's (e.g., 1974) notion of the communicative event, which included a range of components that characterize language use—setting, participants, norms, and genres—became a helpful framework for the documentation of language use in and out of school settings.

Following this initial work on language and speaking, Keith Basso (1974) suggested that an ethnography of writing should be the centerpiece of ethnographies of communication—in particular, writing as it is distributed across a community rather than just a classroom. He introduced the term *writing event,* describing it as an act of writing, and characterized writing, like speaking, as a social activity. Building in turn on Basso's work and prefiguring the theory behind the NLS (e.g., Gee, 1996; Street, 1993a), Szwed (1981), a folklorist by training, argued for an ethnography of literacy and proposed that, rather than a single continuum or level of literacy, we should imagine a variety of configurations or a plurality of literacies. Whereas Basso's description of writing events seemed to arise from an academic interest in bringing together sociolinguistics and anthropology, Szwed's focus on an ethnography of writing was a response to the "literacy crisis" of the 1980s. Szwed suggested that, despite the claims of a crisis of "illiteracy," we had yet to conceptualize literacy; moreover, we did not know how literacy or reading and writing are used in social life. He linked his research interest directly to schools and explained that the definitions of reading (and we can add writing) that schools use may not take into account the reading (and writing) that a student does out of school. He called for a study of the relationship between school and the outside world and specified that the focus should be an inventory of one community's needs and resources. Szwed's call for the cataloguing of how and where literacy occurred in the community was the basis for many studies that sought to document empirically this new concept of multiple literacies (cf. Hornberger, 1995; Shuman, 1986, 1993; Weinstein-Shr, 1993).

Around the same time, Shirley Brice Heath (1981) suggested the importance of documenting the social history of writing, which she termed the "ethnohistory" of writing. Like Szwed, Heath made explicit the links between writing in social or family settings and methods of writing instruction in school. Using preliminary data from what would become her groundbreaking ethnography (1983), Heath described ethnographic research begun in response to complaints made by junior and senior high school teachers that it was impossible to teach students to write. According to the teachers, their classrooms were filled with students who planned to work in the textile mills where reading and writing were unnecessary. Heath concluded that although there was a debate about how to teach writing in school, there was little systematic description of the functions of writing for specific groups of people. Her study revealed the potential for using ethnographic studies of writing to reorganize

schooling with dramatic results. This early work, followed by her well-known study (1983) detailed below, supported the notion of teacher and student research and prompted both teachers and students to research the functions and uses of literacy in their communities in order to inform classroom practice.

Likewise, Hymes's ethnographic research (1981), funded by the National Institute of Education and including Heath as a team member, used conversations with teachers about their difficulties in teaching language arts as its starting point. Researchers worked with teachers to uncover the dimensions of their difficulties with students and to understand students' perspectives on their school experiences. The researchers were quickly convinced that any investigation of school phenomena would require the study of classroom and school structures as well as those in the children's homes and wider communities. This work became the core of Gilmore and Glatthorn's (1982) collection of educational ethnographies, *Children In and Out of School.* Throughout the studies reported in that volume, schools were portrayed as cultures organized around a set of values and beliefs that frequently were not shared by the students and the surrounding communities. This argument is now known as continuity-discontinuity theory (see Jacobs & Jordan, 1993). Heath explained in the Gilmore and Glatthorn volume (1982) that if education is seen as a process of cultural transmission, then formal schooling is only a part of the process. She thus made an early argument for the need to study schools and classrooms in relation to the broader community or culture and called for comprehensive, broad-based community studies.

Heath's (1983) long-term study of three contiguous communities over a decade in the 1960s and 1970s illustrated how each community—a Black working-class community, a White working-class community, and a racially mixed middle-class community—socialized their children into very different language practices. Heath documented each community's "ways with words" and found, for instance, that members of the White working-class community rarely used writing and generally viewed literacy as a tool to help them remember events and to buy and sell items. Although parents in this community collected reading and writing materials so that children were surrounded by print, the parents rarely read, themselves, and used reading and writing for mostly functional purposes. In contrast, although residents of the Black working-class community did not accumulate reading materials, reading was more seamlessly integrated into their daily activities and social interactions, and literacy was accomplished jointly in social settings. Heath concluded that "the place of language in the life of each social group [in these communities and throughout the world] is interdependent with the habits and values of behaving shared among members of that group" (p. 11). When children from these communities entered school, only the middle-class students whose language use was similar to that of the teachers were successful. Heath thus demonstrated how children from different communities were differentially prepared for schooling that promoted and privileged only middle-class ways of using language. This study engendered other research projects, which documented both the functions and uses of literacy practices in various communities and the differential preparation that children from various communities brought to school. These projects included Taylor and Dorsey-Gaines's (1988) study of the literacy practices in urban homes, Cochran-Smith's (1986) description of story reading in a private nursery school, Fishman's (1988) study of an Amish community, and

Skilton-Sylvester's (2002) documentation of the literacy practices of Cambodian girls in the urban United States.

Begun as a turning away from schools and toward communities, Hymes's conception of the ethnography of communication gave researchers and educators a framework for noticing the resources that students bring to school and provided teachers with a way to imagine changing their pedagogy and curriculum instead of assuming that only students needed to change. Subsequently, many researchers began to catalogue and describe the ways that young people used language in competent and, indeed, exciting ways out of school, in a manner that teachers have not traditionally been primed to acknowledge or build on.

Vygotskian and Activity Theory Perspectives

If the ethnography of communication grew from the union of two fields—linguistics and anthropology—activity theory was born of the need to re-imagine a third discipline, that of psychology. As is richly documented in several accounts (e.g., Cole, 1996; Engeström, 1998; Wertsch, 1991), this effort has centered on theorizing and investigating not the mind in isolation or the mind as automaton, but the mind in society or culture in mind. Whereas ethnographies of communication took and continue to have as their main focus the role of language in learning, with a special emphasis on language differences in and out of school, activity theory chooses a different centerpiece: learning and human development. To be sure, activity theory had its origins in the work of the Soviet scholar Vygotsky (1978, 1986; see also Wertsch, 1985), who placed a premium on the role of language as the premier psychological tool; he gave pride of place as well to written language. But many researchers who adopt an activity theory perspective get along quite well without directing their research toward language or writing per se (cf. Engeström, Miettinen, & Punamäki, 1999). This is because they are interested instead in honoring "activity" as a unit of analysis, an enterprise that might or might not include sign-mediated communication per se as a principle concern.

Thus our discussion in this article of Vygotskian perspectives and activity theory represents but a small, if significant, slice of the pie: those pivotal activity theoretical studies that have examined literacy—literacy, that is, as part of integral units of human life, motivated by human goals and enacted in the course of everyday activities, especially beyond the school. We begin by briefly revisiting Vygotsky's ideas about the importance of writing, move next to attempts to test his claims empirically, and turn finally to a few projects that embody present-day formulations of activity theory. We ask, all the while, Why have these researchers been interested in examining literacy out of school, and what thereby have they learned?

Vygotsky (1978, 1986) believed that human sign systems, such as language, writing, and mathematics, have significant consequences for how we think and how we interact with the world. As products of human history that emerge over time and vary in their nature and their use from culture to culture, such sign systems, or psychological tools, as Vygotsky called them, structure mental activity, mediating between thought and action and interaction. Writing, Vygotsky reasoned, is a sign system that is especially noteworthy for its far-reaching effects on thinking. The effects of psychological tools such as writing will vary, he also wagered, depending on the nature of the symbol systems available at particular historical junctures and their uses in particular societies.

In the 1930s, with the help of Alexander Luria (cf. Luria, 1976), Vygotsky saw the opportunity to test this theory by investigating empirically how intellectual functioning might be affected by cultural change. Mounting a major field-based research project, Luria traveled to Central Asia, where vast and rapid reforms were at that time in progress—reforms requiring nonliterate farmers to take part in collective ownership, for example, to use new agricultural technologies, and to acquire literacy through schooling. Luria found that the participants in his research did indeed respond differently to a variety of experimental tasks related to perception, classification, and reasoning, depending on their exposure to literacy and schooling. This he took as confirmation of Vygotsky's theory that cultural change affects thinking. But, given the complexity of the setting, we might ask exactly which change affected thinking—was it literacy, or schooling, or collective farming, or other big shifts in the organization of everyday life? It is impossible to say. Furthermore, Luria seemed to put too much stock in certain culturally biased test materials, in particular the syllogisms that were for a long time a standard part of the cross-cultural researcher's experimental arsenal. He did not, that is, take into account that such materials might merely measure people's familiarity with school-based types of tasks rather than their ability to think abstractly or logically.

Thus a quick foray into the Soviet landscape of days gone by illustrates the preoccupation with literacy that was at the heart of Vygotsky's work, as well as aspects of his theorizing that still hold sway, especially his focus on writing as a mediational tool, or the power of written language as an instrument for thinking. But the excursion also allows us to introduce a first important rationale within this tradition of research for juxtaposing school and nonschool environments—that is, as a means (albeit often flawed) for ascertaining the effects of literacy and schooling on thought or cognitive development. If literacy is acquired in school, the reasoning went, and if adults and children differ in the amounts of schooling to which they have been exposed, then whatever differences appear on tests of mental activity can be attributed to literacy—or at least to literacy coupled with schooling. A great deal of cross-cultural research during the 1960s was driven by just such reasoning (cf. Cole & Means, 1981). Although the majority of this work was limited by methodologies with a Western cultural bias, not to mention what now appears to be a naïve faith in the efficacy of schooling, one within-culture comparison stands out for both its methodological savoir-faire and its contribution to current conceptions of literacy: the monumental analysis of literacy among the Vai conducted by Scribner and Cole (1981).

In the early 1970s, at the same time that linguists and ethnographers had begun to apply the approach called the ethnography of communication to problems of language difference in and outside school in the United States, psychologists Sylvia Scribner and Michael Cole were organizing a research project in Liberia. Hoping to pick up where Vygotsky's theorizing had left off, they devised an ambitious plan to investigate the cognitive consequences of literacy but to avoid the methodological problems that marred Luria's work. In particular, Scribner and Cole drew on local cultural practices in designing the content of their experiments, and they also decoupled the effects of literacy from the effects of schooling. The latter they could accomplish handily, since the Vai boasted the unusual distinction of having invented an original writing system, the learning of which took place out of school. Government-sponsored schools were taught in English, and

Qur'anic study was conducted in Arabic, but the Vai used their indigenous script for specialized purposes such as record keeping and letter writing. This unusual patterning of languages, scripts, and acquisition practices made it possible to find people who were literate but had become so outside school or who were literate through school and biliterate in two scripts acquired informally, and so on. Scribner and Cole's research team gathered ethnographic and survey-based descriptions of language and literacy use, and they also administered a complex battery of experimental tasks designed to tap the cognitive processes traditionally believed to be connected to literacy—abstraction, memorization, categorization, verbal explanation, and the like.

In a nutshell, Scribner and Cole did not find that literacy was responsible for great shifts in mental functioning of the sort that the Soviets had looked for and many policymakers and educators expect even today. But they did demonstrate that particular writing systems and particular reading and writing activities foster particular, specialized forms of thinking. For example, Qur'anic literacy improved people's performance on certain kinds of memory tasks, whereas Vai script literacy gave people an edge in certain varieties of phonological discrimination. In addition to sorting out the specialized effects of particular literacies, Scribner and Cole identified the equally specialized effects of schooling in and of itself apart from literacy—namely, the enhanced ability of schooled people to offer certain kinds of verbal explanations.

It should be noted that in scaling down the grand claims often made about the effects of literacy on cognition, Scribner and Cole took care to note that Vai literacy was a restricted literacy; it served relatively few, and a noticeably narrow range of functions. Scribner and Cole also made clear that in societies where economic, social, and technological conditions converge to warrant the increased use of literacy, the potential exists for literacy to serve many more functions and therefore to be more deeply implicated in thinking processes. The current moment, we would point out, is just such a time, as communication through the Internet for economic, social, and personal purposes becomes ubiquitous for many people. Yet if we have learned anything from Scribner and Cole, it should be that literacy is not literacy is not literacy. Specialized forms of reading and writing, both in school and out, have specialized and distinctive effects, even in an information age. Scribner and Cole were the very first to teach us this.

In fact, they were the first, to our knowledge, to introduce the now omnipresent term *practice* as a way to conceptualize literacy. Recently Cole (1995) wrote about the current popularity of terms such as practice in studies of cognitive development. He attributes this popularity, as well as that of related terms such as *activity, context,* and *situation,* to a widespread desire these days to move beyond a focus on the individual person as a unit for psychological analysis. Cole has also traced the theoretical origins of this new language (1995, 1996). Looking back to Marx, for example, he explains that the notion of practice was a way to get around the separation of the mental and the material. Consulting post-Marxist social theorists such as Giddens (1979), he reminds us that practice has also been offered as a construct that avoids the impasse of agency versus determinism.

In *The Psychology of Literacy,* Scribner and Cole (1981) did not reveal the theoretical etymology of their use of the term practice. But they did explain in some detail the framework that they had constructed to interpret their data, a framework

centered on the notion of practice. They defined a practice as "a recurrent, goal-directed sequence of activities using a particular technology and particular systems of knowledge" (p. 236). Literacy, as a socially organized practice, "is not simply knowing how to read and write a particular script but applying this knowledge for specific purposes in specific contexts of use" (p. 236). It follows that, "in order to identify the consequences of literacy, we need to consider the specific characteristics of specific practices" (p. 237).

The notion of practice—with its emphasis on purpose within context and the patterned interplay of particular skills, knowledge, and technologies—is also central to a plurality of literacies. Within the Vygotskian tradition, research on out-of-school literacy sprang from the desire to contrast the schooled, and their presumed literacy-enhanced cognitive capabilities, with the nonschooled, who were suspected of thinking differently and less well. Aware of the pitfalls of the tradition of cross-cultural research, Scribner and Cole redirected such efforts through a complex and culturally sensitive—especially for that decade—research design, and thereby also changed our thinking in literacy studies. Like ethnographers of communication, they helped the field understand literacy as a multiple rather than a unitary construct, calling attention to the distinctive literacies that can exist beyond the schoolhouse door.

Scribner and Cole's project is an example of early research within a then-burgeoning activity theory perspective.[3] In subsequent years Scribner (cf. 1987) turned her attention to a major nonschool endeavor, that of work, while Cole became invested in establishing sustainable after-school activity systems for children that juxtapose learning and play (e.g., Cole, 1996). In both of their new research agendas, Scribner and Cole were interested in studying not the isolated mental tasks that were thought (erroneously) to be elicited by means of laboratory experiments, but thinking as part of activity. Activities, we learn from the theory by the same name, serve larger goals and life purposes rather than being ends in themselves.

Thus it makes sense from this theoretical perspective to study thinking as part of a dominant life activity—such as school—but more significantly, for our purposes in this essay, as part of play or work. As Scribner (1997) pointed out, we would be very remiss were our accounts of human development to ignore entire realms of activity. For example, she observed, "While we are certainly not wholly defined through our participation in society's labor, it is unlikely we can fully understand the life cycle of development without examining what adults do when they work" (p. 358). At its very core, then, activity theory reminds us to look not just in school and in research laboratories but outside them, always with the goal of capturing "human mental functioning and development in the full richness of its social and artifactual texture" (Cole, Engeström, & Vásquez, 1997, p. 13). For literacy, this perspective opens the door to studies of reading and writing within the context of a panoply of activities, activities themselves motivated by larger purposes and aims than literacy itself.

The New Literary Studies

Located at the crossroads where sociolinguistic and anthropological theories of language and schooling meet ethnographic and discourse analytic methodologies is the recently conceptualized field of the NLS (Gee, 1996; Street, 1993a).[4] Like

the perspectives on literacy that come out of the ethnography of communication and activity theory, the NLS is noteworthy for its emphasis on studying literacy in out-of-school contexts. However, while building on the ethnographic tradition of documenting literacy in local communities and the characterization of literacy as multiple and situated, the NLS also often makes central an analysis of the interplay between the meanings of local events and a structural analysis of broader cultural and political institutions and practices. It does so in large part through the construct of *discourses.* As compared with the focus on language and learning, writing, and development in the studies reviewed in the previous two sections, NLS research could be said to investigate literacy and discourse and to place a special emphasis on revealing, understanding, and addressing power relations.

According to James Gee, a linguist who has been a central figure in the NLS, "discourses are intimately related to the distribution of social power and hierarchical structure in society, which is why they are always and everywhere ideological" (1996, p. 132). Gee situates the NLS, as well as the ethnography of communication and studies based on activity theory, within a group of movements that have taken a "social turn," moving from a focus on the study of individuals to an emphasis on social and cultural interaction (Gee, 2000b). He points out that although all of these movements claim that meaning (or writing or literacy) is always situated, they often fail to articulate the mutually constitutive nature of their contexts (Gee, 2000b).

Although most of the studies in the field of the NLS use the term *literacy,* Gee popularized the broader term *Discourse.* He defines Discourses as "ways of behaving, interacting, valuing, thinking, believing, speaking, and often reading and writing that are accepted as instantiations of particular roles (or 'types of people') by specific *groups of people.* . . . [Discourses] are, thus, always and everywhere *social* and products of social histories" (1996, p. viii). When Gee writes about Discourse, we hear echoes of Foucault's (cf. 1972) use of the term, as well as Bourdieu's (cf. 1977) related coinage, *habitus.* However, Gee's distinctive contribution has been to use the notion of Discourse to reframe understandings of literacy, especially in relation to identity. He explains that people use Discourses to affiliate and display their membership in particular social groups. Discourses are, in effect, an "identity kit," or a group of behaviors, activities, and beliefs that are recognizable by others. Inherently ideological and embedded in social hierarchies, they reflect the distribution of power. By virtue of training our gaze on the larger construct of Discourse and insisting that literacy is always about more than literacy, Gee's framework draws our attention away from a solitary focus on learning and language use in school settings and positions us to understand learning, literacy, and identity construction in and out of schools and across the life span. His discussion of Discourses provides, then, a frame for understanding the connections between literacy, culture, identity, and power (cf. Maybin, 2000).

While Gee illustrates how the term literacy can be limiting, Brian Street (e.g., 1993a, 1995; Street & Street, 1991), often recognized jointly with Gee as the founder of the NLS, has argued that schooling and pedagogy constrain our conceptions of literacy practices. Street defines literacy as an ideological practice rather than a set of neutral or technical skills, as it has traditionally been conceived in schools, adult literacy programs, and mass literacy campaigns (Street, 1984, 1993a, 1993b, 1995). Rather than treating literacy as consisting of neutral bits of

information, his conception highlights its embedded or social nature. Thus, according to Street, Western notions of schooling or academic literacy are just one form of literacy among many literacies.

Street's theoretical conceptualization of the NLS is derived from his fieldwork in Iran in the early 1970s (Street, 1984, 1995). Through a careful examination of and participation in village life, Street identified three different kinds of literacy practices used by youth and adults in the village where he resided. These included what he termed *maktab* literacy, or literacy associated with Islam and taught in the local Qur'anic schools; *commercial* literacy, or the reading and writing used for the management of fruit sales in the local village; and *school* literacy, associated with the state schools more recently built in the villages and located in the urban areas as well. Teaching and learning in the religious schools was based on memorizing portions of religious texts and involved traditional teaching methods. By contrast, in local reading groups connected to the maktab schools, participants gathered at each other's homes to read passages from the Qur'an and its commentary to generate discussions and interpretation. Street's close examination of literacy and learning in the context of village life and culture painted a portrait that differed from the conventional descriptions of religious training in Islamic schools as consisting exclusively of rote memorization.

Street described the ways in which the skills that students learned through this maktab literacy were hidden in relation to Western notions of literacy. Children and adults educated in this manner were considered "illiterate" as compared with those educated in the state schools designed to prepare youth for jobs in the modern sector. However, according to Street, the skills connected with maktab literacy were actually a preparation for the commercial literacy that turned out to be key to economic success during the early 1970s, when economic expansion resulted from oil production. During that period many students who went to the state-run schools in urban areas found themselves without work, while their peers educated in the "backward" villages and drawing from their maktab literacy practices prospered from their work selling fruit.

This study and others in the NLS tradition connect micro-analyses of language and literacy use with macro-analyses of discourse and power. They also point to the dangers of reifying schooled notions of literacy. As scholars in the field contend and as Street's ethnography exemplifies, literacy must be studied in its social, cultural, historical, economic, and political contexts, both in school and out (Gee, 1996, 2000b). In so doing Street could articulate a conception of literacy as tied to social practices and ideologies, such as economic, political, and social conditions, social structures, and local belief systems. He thereby was able to connect literacy practices with social positions in a manner that contrasted sharply with then-dominant characterizations of literacy as a neutral skill. Street used theoretical perspectives grounded in anthropological research to argue for research that makes visible the "complexity of local, everyday, community literacy practices," or literacy outside school settings (Street, 2001, p. 22).

Over the years, Street (e.g., Street & Street, 1991) has repeatedly raised this question: When there are so many different types of literacy practices, why is it that school literacy has come to be seen as the defining form of reading and writing? In an article written with Joanna Street, he describes the "pedagogization" of literacy, or the phenomenon of defining literacy solely by means of reference to

teaching and learning, while other forms of literacy are marginalized. Such a stance contrasts historical evidence suggesting that in the past literacy was associated with social institutions outside school (Street & Street, 1991; see also Cook-Gumperz, 1986). Educated middle-class women in 17th-century China, for example, wrote poems as a way to construct a community of women (Yin-yee Ko, 1989, in Street & Street, 1991). Historically, and across cultural contexts, women have used literacy in informal, nonreligious, and nonbureaucratic domains (Heller, 1997; Rockhill, 1993; Street & Street, 1991). Street and Street (1991) argue that such uses of writing have been marginalized and destroyed by modern, Western literacy "with its emphasis on formal, male, and schooled aspects of communication" (p. 146). One conclusion from this analysis is that rather than focusing on the continuities and discontinuities between home and school in ethnographic research, there is a need to focus on the ethnographies of literacies more broadly and to document, as do these authors, the ways that school can impose a version of literacy on the outside world (Street & Street, 1991).

Extending Street's framework, Barton and his colleagues (e.g., Barton, 1991) demonstrated the importance of carefully documenting literacy in everyday lives. Conducting their work primarily in Lancaster, England, they illustrate how everyday literacies involve various media and symbol systems, and they document how various literacies are associated with particular cultures and domains of life within those cultures. Rather than locating literacy solely within the lives of individuals, they emphasize the ways in which families and local communities regulate and are regulated by literacy practices (Barton, 1994; Barton & Hamilton, 1998; Clark & Ivanic, 1997). In a similar vein, Prinsloo and Breier (1996) draw from the theoretical perspectives lent by the NLS to look for the meanings of everyday literacy practices in a wide range of contexts in South Africa. Like Street's early study in Iran (1984), these studies point to the disjuncture between local practices and the new adult literacy programs begun in the post-Apartheid era. In addition, they describe the literate practices undertaken by people who might be considered illiterate by school or state standards. Consonant with the NLS, this work documented what people actually accomplished with literacy rather than beginning with an assumption of deficiency (Street, 1996). Prinsloo and Breier concluded that there needs to be a reconceptualization of literacy that takes it out of the context of school and into the context of local practices.

Most recently, Barton and colleagues have emphasized the interplay of structure and agency, focusing on insiders' perspectives on what constitutes local practices and the ways in which these practices reflect and shape social structures (Barton, Hamilton, & Ivanic, 2000). This focus on the term *literacy practices* draws from the anthropological tradition to describe ways of acting and behaving that reflect power positions and structures. Street (2001) makes a distinction between practices and events, explaining that one could photograph an event but not a practice. Literacy practices, according to Street, embody folk models and beliefs, whereas events might be repeated occurrences or instances where interaction surrounds the use of text (cf. Barton & Hamilton, 2000). Hornberger (2001) likewise offers a useful distinction between literacy practices and literacy events, explaining that bedtime story reading in U.S. middle-class homes is a literacy event (Heath, 1982), whereas these individual and repeated events are explained and undergirded by a set of literacy practices or conventions and beliefs about the value

of reading to young children, assumptions about parent-child relationships, normative routines around bedtime, and the like.

It is important to note that although studies growing from an activity theory tradition and those taking the NLS as a starting point both use the term practice, their usage differs. In Scribner and Cole's early work (1981), for example, practice explicitly includes notions of skill, technology, and knowledge as well as patterned activity. In the NLS, on the other hand, the focus is clearly on the ways in which activity is infused by ideology, and there is little interest in specifying the cognitive dimensions of social practices. Thus, more recently, literacy theorists often employ the term practice in a narrower sense that is consonant with their focus on culture, ideology, and power, although their specialized use of the term usually is not made explicit.

Whereas literacy theorists have worked to conceptualize the NLS, there has been a parallel and, at times, overlapping focus by researchers and practitioners in a field captured by the term *critical literacy.*[5] Predating the work in NLS, much of this field is directly related to schools and pedagogy rather than to everyday practice out of school. The two fields share a commitment to defining literacy in relation to power and identity, but critical literacy has a stronger focus on praxis—action based on reflection—as well as schooling. Luke and Freebody (1997) recently defined the critical literacy movement as "a coalition of educational interests committed to engaging with the possibilities that the technologies of writing and other modes of inscription offer for social change, cultural diversity, economic equity, and political enfranchisement" (p. 1). This explicitly political agenda of course has strong ties to Paulo Freire (e.g., 1970; Freire & Macedo, 1987), whose teaching methods and politically and ethically alert conception of literacy have been pivotal for national literacy campaigns around the world. Freire's focus was on the ways in which education and literacy should support people in questioning and shaping their worlds. "Reading the world," he famously wrote, "always precedes reading the word, and reading the word implies continually reading the world . . . [and] transforming it by means of conscious practical work" (Freire & Macedo, 1987, p. 35). Although many critical literacy projects have been school based, such work has clear implications for thinking about (and rethinking) writing out of school. Lankshear and Knobel (1997a), for example, propose a rereading and rewriting of our impoverished notions of citizenship to produce a new discourse of active citizenship that enables students to understand their social positionings in relation to their identity formation and subjectivities. Such an idea can surely inform learning broadly construed as well as learning within an English class. Thus, although most research that is part of the NLS is descriptive in nature, researchers and educators have also used the framework of multiple literacies to delineate possibilities for teaching and learning.

In 1996, a group of scholars from the United States, England, and Australia met and spent more than a year in dialogue to develop a way of talking about the social context of literacy learning, including the content and the form of literacy pedagogy. They built their dialogue in part on notions developed by researchers and practitioners identifying themselves with the critical literacy and NLS movements, as well as researchers from a range of disciplines. Calling themselves the "New London Group" (after the site of their first meeting in New London, New Hampshire), their findings can be summarized by a key term that they chose to

use—*multiliteracies*—which signals multiple communication channels, hybrid text forms, new social relations, and the increasing salience of linguistic and cultural diversity (Cope & Kalantzis, 2000; New London Group, 1996). As they explain, "Multiliteracies also create a different kind of pedagogy, one in which language and other modes of meaning are dynamic representational resources, constantly being remade by their users as they work to achieve their various cultural purposes" (New London Group, 1996, p. 64). Furthermore, in their discussion of multiliteracies and the implications of what Gee and his colleagues have termed "fast capitalism" (Gee, Hull, & Lankshear, 1996), Luke and Freebody (1997) raise the persistent questions about who will gain access to the new forms of writing and representations and how the traditional fractures of race, culture, class, gender, and sexuality will be reinscribed. In their words,

> The challenge then is not just one of equity of access (or lack of access) to such technologies and institutions, but also of the possibilities of using discourse and literacy to reinvent institutions, to critique and reform the rules for the conversion of cultural and textual capital in communities and workplaces, and to explore the possibilities of heteroglossic social contracts and hybrid cultural actions. The challenge is about what kinds of citizenship, public forums for discourse and difference are practicable and possible. (p. 9)

Gee, Hull, and Lankshear (1996) take up this challenge in their recent book, *The New Work Order*. They extend the notion of literacy as social practice to include their concept of sociotechnical practices, which they describe as "the design of technology and social relations within the workplace to facilitate productivity and commitment, sometimes in highly 'indoctrinating' ways" (p. 6). They go on to write that whereas old forms and organizational structures of work may have been alienating, new workplaces are asking workers to invest themselves in their work, merging public and private lives, in ways that might be considered coercive. They raise a number of questions that blur the lines separating literate practices in and out of school, including this one: "How should we construe learning and knowledge in general in a world where the new capitalism progressively seeks to define what counts as learning and knowledge in a 'knowledge economy' made up of 'knowledge workers' doing 'knowledge work'?" (p. 23).

The NLS thus focuses our attention on the shifting landscape of home, community, work, and schools and gives us a language and set of theoretical constructs for describing the close connections between literacy practices and identities. Perhaps more than any other theoretical tradition, NLS has embraced out-of-school contexts, almost to the exclusion of looking at schools, and has unabashedly valued out-of-school literacy practices as distinct from those associated with schools.

Vignettes from Home, Community, and Workplace

Thus far in this review we have traced the ways in which examinations of literacy in out-of-school settings have provided pivotal theoretical moments, pushing the field toward new understandings of "literacies" and into new lines of research. Indeed, we have argued that many theoretical advances in the field of literacy studies over the last 25 years have been made from discoveries about literacy and learning outside classrooms. To talk about literacy these days, both in school and out, is to speak of events, practices, activities, ideologies, discourses, and identities—and at times to do so unreflectively, so much a part of our customary thinking have these

categories and terminologies become. Conceptual advances in literacy studies have of course also arisen from school-based research, and we do not mean to slight such contributions. But we do want to call attention to the fact that much of our current theoretical vocabulary has sprung from examinations of the uses and functions of literacy out of school.

Having traced the ways in which examinations of literacy in out-of-school settings have provided pivotal theoretical moments, we turn next to examples of current research. Drawing from multiple traditions and methodologies, set in a variety of contexts and representing various cultures and geographies, these studies suggest the range and dimensions of current work located in out-of-school contexts (see Table 1). As stated earlier, our primary intent here is not to critique the studies, although we will point to certain strengths and weaknesses. Nor do we provide a comprehensive summary of each; rather, we refer readers to the original texts for detail. Our purpose is to bring to the foreground the practical and conceptual incentives and rewards for conducting such work, and we want to raise the questions that yet remain for literacy education and research.

As centerpieces of this section, we offer four vignettes of children, youth, and adults engaged in literate activities outside of school, vignettes adapted from recent reports of research growing out of the three theoretical traditions reviewed above. We have chosen to construct vignettes—short descriptive sketches, moments, or scenes—in order to highlight representations of real people and their activities in what, thus far in this article, has been a very theoretical journey. One strength of the research conducted from all three traditions is bringing literacy activities to life through ethnographic and qualitative, fine-grained accounts of particular lives, contexts, and historical moments. Through such field-based research we come to know a panoply of individuals, families, networks, communities, organizations, and institutions. We also begin to understand some of the multifaceted ways in which literacy connects with learning, doing, and becoming outside school. By constructing vignettes we hope at least to hint at this richness. We begin with a page from down under, an account of a cool teenager, reluctant writer, and budding businessman in urban Australia.[6] And we ask, How might we draw on the out-of-school worlds that engage youth, even as we attempt to foster school-based expertise?

"I'm not a pencil man."

Jacques is thirteen years old and lives with his parents and siblings in a White, affluent neighborhood of Brisbane. A disengaged student in the classroom, one who often "loses" his homework and would die a thousand deaths before volunteering an answer to a teacher's general query, he nonetheless provides a running sotto voce gloss on classroom activity, waxing in turn ironic, humorous, or dramatic. This self-designated joker has "great difficulty with literacy" according to his teacher. But he is quite good at derailing attempts to involve him in the classroom milieu. No "writing process" pedagogy for this young man. Rather than use the "Writer's Centre" to produce and publish a story, Jacques spends days stapling together a miniature book in which he writes, to his teacher's dismay and his peers' delight, a mere ten words. Made to repeat first grade, Jacques now patiently measures time until he can leave school for good. Neither professing nor demonstrating an interest in reading and writing, he explains, " 'I'm like my dad. I'm not a pencil man' " (Knobel, 1999, p. 104).

TABLE 1
Analytic dimensions of recent research on literacy out of school

Study	Primary theoretical traditions	Age group	Contexts	Communicative modes and primary medium	Languages	Geographic location
Knobel, 1999	New Literacy Studies, discourse analysis	Adolescents	Home and community	Everyday literacy, including computer-generated fliers and religious tracts, juxtaposed with school literacies	English	Australia
Cushman, 1998	Social theory, critical ethnography	Youth and adults	Home and community	Talking, reading, and writing about institutional gate-keeping encounters and artifacts such as parking tickets	English	United States
Hull, 2000b	New Literacy Studies, sociocultural perspectives on writing	Adults	Workplace	Writing, reading, and talking about teamwork, with overheads for oral presentations	Primarily English, also Tagalog, Vietnamese, Cantonese	United States
Gutiérrez et al., 1999	Activity theory	Youth	After-school program	Writing and reading e-mail in interaction with "El Maga"	English/Spanish	United States

Outside school, Jacques participates in two worlds valued in his family: work and religion. A member of the Jehovah's Witnesses, he takes part ably in a variety of literacy-related religious activities—scriptural exegesis, the distribution on Saturday rounds of church literature such as *The Watchtower,* and presentations at a weekly Theocratic School. But it is being a workingman, with certain specialized ways of interacting and valuing, that offers Jacques a current identity and a future vision of the person he expects and wants to become. His father owns a successful business as an excavator, and it is Jacques' potential role in this physically palpable occupation, revolving as it does around machines and action in and upon the world, that captures the young man's attention and energy. His involvement in and apprenticeship for the adult world of work also includes a few home-based literacy activities. On his home computer he designs and publishes an advertisement for a neighborhood mowing service. This professional-looking flyer promises "efficiency" and "reliability" and even offers "phone quotes"—turns of phrase we all can recognize as ubiquitous in the world of business advertising. Sadly, Jacques' out-of-school identity as an aspiring businessman and the social practices that support it, so obvious at home, are invisible in school, where he appears disengaged and less than competent. Yet one might speculate that that he will nonetheless lead a successful adult life, finding a comfortable economic and social niche, given his cooperative immersion in valued and rewarded adult worlds.

This vignette of Jacques is adapted from Michele Knobel's recent book *Everyday Literacies: Students, Discourse, and Social Practices* (1999), an ethnographic case study of four adolescents coming of age in urban Australia. Framing her study with Gee's discourse theory (e.g., 1996) and methodological insights drawn from Green and the Santa Barbara Classroom Discourse Group (e.g., Green & Harker, 1988), Knobel poses the central question raised, but not yet answered, by years of research on out-of-school literacy. She asks, "What *is* the relationship between school learning and students' everyday lives, and what might an effective relationship between them be?" (p. 6).

Knobel's study reminds us, as does an important tradition of work in literacy theory and research, of the resources, both personal and community based, that children, adolescents, and adults bring to school. An important example is Moll's work with Latino communities in the Southwest and his generative term *funds of knowledge,* which he used to describe the networked expertise woven through community practices (Moll, 1992; Moll & Diaz, 1987; Moll & Greenberg, 1990; see also Vásquez, 1993). Moll's work provides a demonstration of how we can use funds of knowledge to bridge communities to classrooms when we acknowledge the expertise of parents and community members. Moll also offers examples of lessons in which teachers have brought community members into the schoolroom to share their knowledge and know-how, and he documents the positive effects of such activities on children's interest and investment in the curriculum.

Developing a culturally relevant pedagogy for teaching literary interpretation to African-American youth, Lee (1993) also illustrates cultural funds of knowledge, particularly language forms and discourse structures. In more recent work, Lee and her colleagues (Lee, 2000; Majors, 2000; Rivers, Hutchinson, & Dixon, 2000) examine language practices across contexts, identifying community participation structures in, for example, African-American hair salons, and using those structures to inform ways of conducting classroom discussions about texts. This research

shows the potential for engaging students in high levels of reasoning about literary texts by drawing on their tacit knowledge of cultural forms found outside school.

Dyson's long-term studies of early writing development acknowledge especially well the resources that young children bring to their writing from their social worlds, including linguistic and symbolic tools appropriated from popular culture (Dyson, 1997, 1999, in press). Dyson has argued for the permeability of the curriculum, where teachers imagine their classrooms in such a way as to continually welcome the diverse resources that children of necessity bring to their writing. Dyson's research is situated physically within classroom walls, but her conceptual framework embraces children's out-of-school lives. Thus we see here two ways to bridge the home and school worlds. Moll and Lee literally go into homes, community centers, and other places outside school to learn about social and cultural resources; they then bring people and linguistic and cultural knowledge back into the classroom. Dyson, on the other hand, suggests the ways in which children themselves bring their outside worlds into the school through their writing and the oral performances that encircle literacy events.

Work in the vein of Moll, Lee, and Dyson provides persuasive examples of the necessity of attending to, building on, and incorporating the social, cultural, and linguistic resources that students bring to school, and it offers models of how to do so. Such studies thus helpfully extend the agenda first outlined through the ethnography of communication. We believe it is crucial that this kind of research continue, especially research that addresses those most alienated from school. Disaffected adults and youth such as Jacques are legion—individuals and groups for whom alienation from school-based learning seems sadly confirmed. For them, perhaps, community-based, out-of-school, or after-school opportunities are especially key. At the same time, we believe it equally important for school-based teachers to continue to ask, How might out-of-school identities, social practices, and the literacies that they recruit be leveraged in the classroom? How might teachers incorporate students' out-of-school interests and predilections but also extend the range of the literacies with which youth are conversant? And in what ways must our ways of thinking about what constitutes curriculum and pedagogy be modified to appeal to students who do not fit the common mold? How, to ask the hardest question, do we keep youth involved in school when their adult lives hold small promise of work or civic activity or personal fulfillment that draws strongly on school-based literacy?

"You gotta pay."

Marquis (aged 11 years), Delilah (10), and Samson (9) are at a community center when Ellen arrives, parking ticket in hand. A volunteer at the center and a friend of the children, she asks what to do with the ticket. Marquis asks where she found it, and Ellen answers, "On my windshield." "Oooo, you got a ticket for parking where you shouldn't have!" Delilah quickly chides, while Samson teases that she'll surely go to jail. Marquis states with the wisdom of his years, "She ain't going to jail for no ticket. She gonna pay somen." And then Marquis and Delilah set about problem solving, analyzing the ticket and sorting through strategies for dealing with it.

Delilah suggests that Ellen will need to go downtown to pay it, but on reexamining the ticket Samson concludes that it can be mailed and that the ticket itself, once folded over, will serve as an envelope. Marquis recommends simply putting

it on someone else's car. "Yeah, on another Mazda," Delilah adds. But once the children deduce that Ellen's license number is recorded on the ticket, that plan seems less than ideal. "They got a copy of the ticket at the office, and if she don't pay she'll go to jail," a sober child concludes. Marquis and Delilah have the final say: "You gotta pay." And they commiserate over the steep fine of $25. "You got it?" Delilah asks. The problem-solving moment ends with a story. Marquis tells how his little brother once gave him a ticket for parking his big wheel in front of the house, a ticket for a hundred dollars. "Said I had to give it to him too, or I was going to jail!" Everyone joins in the laughter.

And so we see a group of African-American inner-city children turning a parking ticket this way and that, holding it up to the light, both literally and metaphorically. They draw on various literate and discursive strategies to find a way to obviate its influence—trying out scenarios, studying the artifact for information and directives, enumerating and questioning options. In other words, the children employ their developing language skills to solve a material problem in a resource-scarce community. Their negotiation of the traffic ticket thus lays bare a host of literate and problem-solving practices and also reveals the ways in which urban youth learn to hone their abilities to understand, function within, and circumvent the powers that be.

We are introduced to these children in Ellen Cushman's recent ethnography *The Struggle and the Tools* (1998), a book that celebrates inner-city residents' "institutional" language—those oral and literate skills crucial for daily negotiations with gatekeeping institutions. Taking issue with critical scholars who too quickly resort to notions of hegemony and false consciousness when they theorize the "underclass" or the "marginalized," Cushman takes as her project redefining critical consciousness. She demonstrates, and pays homage to, the ways in which the individuals she came to know as part of her research navigate the social structures that constrain them, both accommodating and resisting and even undermining such constraints through everyday language and literacy activities. In so doing, Cushman adopts what she calls an "activist methodology," one that lays bare her role as a participant in the research and the community (notice her presence in the vignette above) and one that makes possible reciprocally beneficial relationships with the people who took part in her study.

Cushman's study vividly illustrates the communicative competence displayed by people in their everyday lives. She examines youths' conversations and finds, for example, not just chitchat but the deployment of a particular kind of strategic oral language in service of analyzing that most common of local literacy artifacts, the dreaded parking ticket. Indeed, much of the work on out-of-school literacy has had as its starting place a respect for and acknowledgement of people's abilities. As McDermott (1993) has noted, the stance that people are okay, that they are competent within their cultural milieu, is common within the field of anthropology—but expecting people to fail is often an artifact of schooling. Nowhere in the out-of-school research is an expectation for success more evident than in Shirley Heath's recent, long-term work in a multitude of out-of-school youth organizations around the United States (e.g., Heath, 1994, 1996, 1998a, 1998b; Heath & McLaughlin, 1993). Heath has documented young people's participation in arts-based organizations, among other community-based efforts, and offers this description of their important features:

> Within the organizations that host these arts programs, opportunities for young people to learn derive primarily from an ethos that actively considers them to be resources for themselves, their peers, families and communities. These programs thus engage the young in learning, both for themselves and for others, through highly participatory projects that encompass listening, writing and reading, as well as mathematical, scientific and social skills and strategies. (Heath, 1998a, p. 2)

To be sure, one of the most important lessons to be gleaned from research on literacy and out-of-school contexts is the benefits that can accrue from assuming competence. As Griffin and Cole (1987; see also Cole & Traupmann, 1981; McDermott, 1993) have discovered in their work with after-school programs, competence becomes most apparent when we allow many starting points for learning and many paths to progress.

In response to Cushman's study, we ask what we must do to cultivate such attitudes about children's and adults' competence in formal classrooms. The competence that often is assumed in after-school settings must too often, it seems to us, be proved in classrooms. How can we support educators in developing the habit of mind that students are variously able? And what have after-school settings to teach us in this regard? Furthermore, what special skills are required of teachers to nurture students whose critical consciousness as members of oppressed groups is finely honed and who may not be predisposed to display the competence they possess? Finally, how can teachers and researchers learn about and participate in communities apart from school in a respectful and reciprocal manner? The metaphor of journey is often invoked as part of much research on literacy out-of-school, as researchers voyage into less familiar communities and cultures to collect information and artifacts for their scholarship and the classroom. These studies have been valuable as ways of unveiling and emphasizing language and literacy practices that differ from those of the mainstream. Yet we would argue that it is time to find a different metaphor and another reason for traveling, one that facilitates the sharing of projects with participants and that directs research toward the amelioration of problems that community members, with researchers and teachers, find compelling. Work that Flower and colleagues have begun in Pittsburgh (Flower, 1997, in press; Flower, Long, & Higgins, 2000; Long, Peck, & Baskins, 2002; Peck, Flower, & Higgins, 1995) and work that Engeström (1987, 1993, 1998) and his colleagues are carrying out in Finland, are illustrative in this regard.

Of Mice and Managers

In a high-technology workplace in the Silicon Valley of northern California, frontline workers, most of them recent immigrants, participate in a sortie of literacy-rich activities, activities that accompany their participation in "self-directed" work teams, their documentation of their own productivity and quality scores, and the oral presentation of problem-solving data. Literacy is everywhere in this factory, serving some eighty-odd functions and ranging from simple copying and decoding to marshaling reading and writing to argue points of view. Managers and supervisors have quite definite ideas about the purposes that literacy activities should serve in this workplace. Yet the most carefully scripted plans of mice and managers often go astray. Here is Mr. San, one of several frontline workers at the factory who is taking his turn in front of supervisors and co-workers to practice the

computation and reporting of quality and productivity numbers. He begins innocently enough:

> Okay [puts transparency on the overhead projector]. Our team name is Turbo, Team number 31, and the area is First Mechanical and Handload. Shift—day, and my coach is Engineer Kartano.

But it soon becomes apparent that Mr. San is about to seize the moment, having chosen not merely to participate in a practice exercise on oral reporting. Instead, he demonstrates that it is actually impossible to calculate productivity scores correctly because workers have been given incorrect "standard times," or the times allotted for accomplishing the multitude of assembly tasks required throughout the workday. In a dramatic "voilà" moment, Mr. San unveils on the overhead projector a virtually unreadable chart, so thickly packed it is with numbers. Although its details are obscured, the import of the chart is as clear as can be: Mr. San has managed to requisition a new set of standard times:

> This is, now I just got this, that's why we are delayed in entering our data [puts a new transparency up on the overhead projector], here is the Standard Time. Wow! [laughter]. . . . They're trying to modify the Standard Time because I complained all the datas that we got on the actual time that we finish one board doesn't count in the Standard Time.

The issue of speed at work is of course a theme that runs throughout the history of labor relations; how fast work gets done, or the "standard time," as it is called in Mr. San's factory, has been contested over and over again. In this most recent example of that long history, Mr. San appropriates a company meeting at which workers were expected just to practice, merely to get their feet wet, with public presentations of data by reading off their responses to prefabricated questions in rote fashion. Mr. San chose not to be part of the dog-and-pony show, just as he had refused even before the meeting to complete elaborate graphs and charts and provide a discursive rationale for his team's quality and productivity goals. "How can we write goals," he had argued, "if our Standard Times are incorrect?" Pressing his point with an engineer, he eventually succeeded in having the company's time-study experts recalculate the Standard Times. Only after all of this did Mr. San consent to learn how to perform—and to encourage his team members to do so as well—the considerable new literate components of work. In this case, it seems that Mr. San's willingness to participate in literacy-related activities was linked to the identity he was constructing for himself as a worker, an identity most aptly described as advocate for his team—"my people," as he liked to call them.

Hull (2000b) provides our Silicon Valley vignette from her ethnographic examination of two companies in the circuit board assembly industry (see also Hull, Jury, Ziv, & Katz, 1996). She and her research team asked what kinds of workers the companies were seeking to hire or to fashion and what kinds of literacies the new forms of work, such as self-directed work teams, seemed to privilege. Frameworks drawn from the NLS (e.g., Gee, 1996; Street, 1993a) and sociocultural perspectives on writing (e.g., Freedman, Dyson, Flower, & Chafe, 1987) primed Hull to link literacy and identity, calling attention to how particular work identities can recruit or repel certain literacy practices. Like much of the NLS, this research traced the connections between literacy and power, revealing how opportunities to engage in particular literacy practices were distributed and constrained, as well as

how new structures for participation created unexpected spaces for the exercise of new literacies and literate roles.

Other researchers who have recently examined the literacy demands of entry-level work in ethnographic detail include Gowen (1992) in her account of hospital workers, Darrah (1996) in his analysis of the electronics industry, and Hart-Landsberg and Reder (1997) in their examination of auto accessory manufacturers. More studies, however, have focused on the work and writing lives of college graduates who enter managerial or technical positions in which writing mediates work in quite visible and powerful ways. (For a review of the particular tradition of such work that draws on activity theory approaches, see Russell, 1997.) These studies help us to look critically at how college writing courses, writing across the curriculum programs, and training in technical communication do and do not prepare students for professional lives in which the mastery of written genres is central. They also give us detailed understandings of the literacy requirements and literacy-related social practices of a variety of workplaces, often making the case that writing at school and at work are "worlds apart" (Dias, Freedman, Medway, & Paré, 1999). This body of research has provided, finally, compelling portraits of the struggles of competent writers engaged in high-stakes, real-world activity through which they become professional wordsmiths (e.g., Beaufort, 1999).

In addition to research exploring the functions of literacy in workplaces, much recent research catalogues literacy in a range of contexts, often where we might least expect it—among taxi-drivers in South Africa (Breier, Taetsane, & Sait, 1996); at a cattle auction in Wales (Jones, 2000); in youth basketball leagues in the American Midwest (Mahiri, 1998); as part of household accounts and horse racing in Lancaster, England (Barton & Hamilton, 1998); and in a women's group in the San Francisco Tenderloin, a down-and-out part of the city associated with drugs and crime, not literacy (Heller, 1997). Collectively, this work illustrates Geertz's observation that "man's mental processes indeed take place at the scholar's desk or the football field, in the studio or lorry-driver's seat, on the platform, the chessboard, or the judge's bench" (quoted in Cole, Engeström, & Vásquez, 1997, p. 13). And it denotes as well the enlivened interest of current-day researchers from a range of fields in everyday practical activity (see the review and discussion in Cole, Engeström, & Vásquez).

This variety of literate forms in the workplace and elsewhere raises for us the broad question of what the relationship should be between the literacies taught at school and the literacies practiced in other contexts. How much, for example, should the workplace influence the curriculum? Research on literacy at work, such as that by Hull (1999, 2000b), argues for a broadening and rethinking of school-based literacy, especially the standard curricular fare for non-college-bound youth. Rather than the restricted literacies often associated with vocational tracks, schooling for such youth needs to more closely approximate the increased expectations of a working world where one must excel at literate activities and develop a working identity that involves a sense of oneself as a proficient user of multiple semiotic systems. This research also calls for, in the Freirean sense, an education for reading the world as well as reading the word—for example, the ways in which literacy practices can be implicated in the maintenance of the status quo, even in those workplaces striving to reinvent themselves around high performance models.

Evidence of the abundant, diverse forms of out-of-school literacy—crossing class, race, gender, culture, and nationality—enrich our definitions, making us think again of school-based, "academic" literacy and causing us to ask, What is or might be the value of essayist texts? The Tenderloin women writers group described by Heller (1997) wrote in many of the genres generally associated with school—essays, poems, short stories, other fiction, and imaginative writing. These longer texts contrast sharply with the lists, letters, notes, and advertisements that make up much everyday reading and writing in terms of form and purpose. They suggest, in fact, the permeability of the borders between in-school and out-of-school. We suggest that, in our efforts to document and validate the plethora of personal and local literacy practices, we should not abandon the opportunities that school historically has provided to develop particular forms of text-based expertise, forms that may provide a power absent in many everyday literacies. Although Damon (1990) notes that "children will adapt intelligently to their worlds" (p. 34), he also acknowledges the tension between youths' perceptions of what it is useful to know about the world and adults' understandings. Calling attention to the tendency to valorize out-of-school "skills" and to put them on equal footing with schooled knowledge (perhaps, he speculates, in reaction to the long-standing tendency among academics to denigrate the nonacademic), he asserts that

> it serves no useful purpose to imbue unschooled forms of knowledge with a sentimental gloss. Just as we should not lose sight of the remarkable adaptiveness of some unschooled abilities, we also must guard against expecting more from them than they can deliver. (p. 38)

We ask, then, what forms of schooled literacy are powerful intellectual tools, appropriate for these new times, and what forms are mere conventions or historical artifacts?

Kalantzis and Cope (2000) argue persuasively for pluralism as an organizing concept for education in new times, and similarly, they suggest that in imagining new work orders, we must work toward "productive diversity," wherein people are valued in their difference, and expertise at work centers on the ability to engage and negotiate difference. Gee (2000a) wonders whether the new capitalist rhetoric and practice—flexibility, teamwork, communities of practice—can be reclaimed for more radical social and educational ends. For our own part, we see promise in new coalitions of community organizations, schools, and universities that are attempting to sponsor job training for older youth and young adults, technology-rich after-school programs for children, and technology access for the wider community (Hill, 2001; Hull, 2000a), all in an effort to close the "digital divide," develop local expertise, and assist residents of low-income communities in laying claim to current economic opportunities. Documenting the development of such coalitions and assessing their influence on individuals and communities are important focuses for research.

We ignore at our students' peril the close connections that exist between economic change, the material conditions of people's lives, and literacy and literacy learning. Yet these connections have not often been acknowledged in school-based research on literacy. Brandt (1999) provides a cogent warning:

> Downsizing, migrations, welfare cutbacks, commercial development, transportation, consolidation, or technological innovations do not merely form the

> background buzz of contemporary life. These changes, where they occur, can wipe out as well as create access to supports for literacy learning. They also can inflate or deflate the value of existing forms of literacy in the lives of students. Any of these changes can have implications for the status of literacy practices in school and for the ways students might interact with literacy lessons. (p. 391)

In our theorizing, Brandt's concerns direct us to place at center stage a historical awareness of the relationship between literacy, the economy, and work and to determine "what enhances or impedes literacy learning under conditions of change" (Brandt, 1999, p. 391).

"Yo no sabia que era bilingue"
(I did not know that you were bilingual)

A bilingual Latina in the third grade, Martha likes to tell jokes and show her wit when she interacts with people she knows and trusts, such as friends at Las Redes, their after-school program. During the program, children not only collaborate with each other and UCLA undergraduates as they play and master a variety of computer-related games and puzzles but also venture into cyberspace. A centerpiece of the children's activities is an e-mail exchange with a mysterious entity named "El Maga," whose identity and gender are objects of great speculation but ultimately remain unknown. Children recount to El Maga their progress in completing various computer games and related activities and report any difficulties they encounter. El Maga, for his or her part, is known to ask a lot of questions, as well as to initiate quite personal dialogues with individual children. The intent of these e-mail exchanges is fostering children's participation in and affiliation with Las Redes—socializing them, if you will, into the culture of an after-school activity system.

Martha begins her correspondence with El Maga by referencing the, at times, frustrating experiences she has had playing a computer game that has as its central character a frog. Martha writes in one early message,

> dear El Maga, are are you? The pond was little bit harder. I couldn't understand the game and Christina [UCLA undergraduate] helped me figure it out. In the end, I passed the first level and I was surprised. thanks for writing to me.

And El Maga responds,

> Dear Martha,
>
> I am doing pretty good, thank you for asking!!! How are you?? I hope you still have that big smile!!! The pond was difficult to figure out, huh? That frog causes many of us problems. It has a mind of its own and sometimes it does not want to do what we program it to do. Que ranita . . . [That mischievous little frog].
>
> I am glad that Christina helped you figure out the game. What kinds of things did you both do?? Did the frog do every thing you told it to do???
>
> Write back,
>
> El Maga

The next time Martha writes an e-mail message to El Maga, she composes in Spanish. She professes her surprise that El Maga is bilingual, presses El Maga for

information on his/her gender, and reports her recent computer game activities. In so doing, Martha demonstrates certain Spanish literacy skills, such as knowledge about formal register, and she indicates as well, through her more familiar salutation and closing, that she is ready to establish a more intimate relationship with El Maga:

> Querido/a
>
> Yo no sabia que era bilingue. Usted es mujer or hombre? Haora juque boggle, y un rompe cabesas de batman, y Bertha nos ayudo armario.
>
> Adios, Martha
>
> (Dear
>
> I did not know that you were bilingual. Are you a man or a woman? Today I played boggle, and a Batman puzzle. And Bertha helped us put it together.
>
> Goodbye, Martha.)

Soon, Martha's correspondence with El Maga exhibits not just her proficiency in Spanish, but her "bilingual, bicultural, and biliterate knowledge and skills" (Gutiérrez, Baquedano-Löpez, Alverez, & Chiu, 1999, p. 91), including an interest in cross-cultural language play. Consider the following message:

> Dear La Maga
>
> Don't you like tortillas? Today I played *La Corrida de Toros.* The game was too easy for me, but in the hard level I was too confused because I didn't read the word list because I was too *floja* [lazy]. My brother gave me some candy. The candy was so delicious. *Quiere probar* some candy? [Would you want to try some candy?] You could . . . buy it in the store! Ha, ha, ha. . . . La Maga, I decided that you are a girl to me because I am a girl and Oscar de la Hoya told me El Maga is *mi admirador preferido* [my biggest fan]. . . . see you later alligator! Ha, ha, ha. I'm soooo happy . . . because I'm scooby-doooooooooooooooooo! Where are you?*** I'm right here** ha, ha, ha,
>
> Martha

Over the next weeks, Martha continues to demonstrate through her e-mail exchanges with El Maga her fluency in both English and Spanish and a certain sophistication in her choices of language and register. Code-switching words and clauses, she also draws playfully on assumed shared cultural knowledge, alluding in the example above to the well-known Mexican-American boxer, Oscar de la Hoya, as well as to elements of children's popular culture, such as cartoons. A happy, outgoing, playful child at Las Redes, Martha soon begins, in collaboration with the undergraduates and El Maga, to use an array of written language skills to represent these facets of herself in print as well as in speech.

Martha's story comes from Gutiérrez, Baquedano-Löpez, Alverez, and Chiu (1999), who bring activity theory to bear on the study of children's language and literacy development. The Las Redes after-school club operates out of an urban elementary school located near the Los Angeles International Airport and represents one instantiation of Cole's Fifth Dimension project (e.g., Cole, 1996). Combining play and learning, Las Redes provides a context where collaboration is the order of the day and where the children and their undergraduate amigos/as from

UCLA can mix languages, registers, and genres, or in Gutiérrez's terms, engage in hybrid language and literacy practices. Gutiérrez and colleagues argue the importance of creating such contexts for learning where hybridity can flourish, "particularly in a time when English-only, anti-immigrant, and anti-affirmative action sentiments influence, if not dominate, educational policy and practice" (p. 92).

The work of Gutiérrez and her colleagues (see also Gutiérrez, Baquedano-López, & Tejeda, 1999; Gutiérrez, Baquedano-López, & Turner, 1997) calls attention to after-school programs that support children's and youths' intellectual and social development by providing supplementary instruction and, as in this and other instantiations of Cole's Fifth Dimension project, constructing new, theoretically motivated learning environments or "activity systems." Such programs can serve a range of important functions, including helping us to re-imagine classrooms and students. As Gutiérrez and others have shown, children often interact and learn in very competent ways after school, despite poor records and reputations within traditional classrooms (Gutiérrez, Baquedano-López, & Turner, 1997). And as Cole points out, after-school programs can reorganize learning so that typical student-teacher relationships and participant structures are turned on their heads. He writes, "This unusually heterogeneous distribution of knowledge and skill is a great resource for reordering everyday power relations, thereby creating interesting changes in the typical division of labor" (Cole, 1996, p. 298). He emphasizes, as well, the importance of choice—children participate voluntarily—but choice balanced by discipline and learning infused with play and imagination.

One of the complexities of such programs is the need, often voiced by funders, for formal evaluations to determine whether and how such programs promote in-school academic achievement. There is little research in that area, nor do investigators frequently address the various purposes and various kinds of achievement characteristic of in- and out-of-school programs. Another important issue is sustainability. Cole (1996) and Underwood, Welsh, Gauvain, and Duffy (2000) caution that after-school programs must confront issues of sustainability at an early stage. If such programs are to last, to become viable community institutions that outlast their founders' interest, then they must be accompanied by structural changes within both community institutions, such as YMCAs and Boys' and Girls' Clubs and churches, and university partners. Documenting the development and evolution of such community institutions as well as their impact on individual and community development is an important task for research.

There is a further tension that after-school programs must continually address: To what extent should they become school-like organizations—serving essentially as arms of classrooms that extend the school day, providing assistance with homework and safe spaces for youth after school—and to what extent might they define themselves apart from schools as alternative sites for alternative learning? The push will be for the former, given the current availability of federal and local funding for after-school programs and given the tendency of textbook publishers and other vendors to provide standardized and pre-packaged materials. The danger is that we will lose a currently available creative space for doing academics differently as well as for broadening learning opportunities (Eidman-Aadahl, 2002).

When researchers such as Dyson (1987) first began to document "unofficial" literacy practices in school, such as passing notes, there was worry that bringing those forms of writing into the official curriculum would take away the interest and

delight that students found in them. In a similar vein, there is sometimes concern about attempts to import to school new literacy practices that flourish in after-school programs and other after-school settings. This concern often arises in connection with new technologies, such as multimedia composition, Web-based writing, and chat rooms and other sites for identity construction and playful writing, such as those documented by Lankshear and Knobel (1997b). The concern is that, if school appropriates these subversive forms, they may become domesticated and lose their vigor and appeal. On the other hand, an important opportunity to address the "digital divide" comes with preparing teachers to think differently about what counts as literacy in new times and to provide schools with technology, making these opportunities available to more students. We urge researchers and educators to ask, How can schools and classrooms, after-school programs, and other informal educational settings incorporate, without co-opting, children and youth's sub rosa literacy practices?

Conclusion

At the heart of the theoretical positions that we have rehearsed above, and at least implicitly the raison d'être for much of the research on out-of-school literacy and learning that we have reviewed, is the democratic impulse of inclusiveness. With the realization that so many children, youth, and adults have fared poorly at schooling came the desire to understand why, and that analysis moved forward by moving away from a sole focus on classrooms and toward a broader examination of life and learning in families, communities, and organizations. In this article we aimed to identify and salute the conceptual advances in theories of literacy that have arisen from non-school-based research, giving special attention to the historical roots of current theories. A second aim was to highlight recent research on literacy in out-of-school settings that exemplifies the range and dimensions of current work to suggest future directions for literacy theory and practice.

As we have illustrated, when researchers have looked at literacy out of school, their goals have been several:

1. Decouple the effects of literacy from the effects of schooling, asking,
   a. What are the cognitive consequences of literacy separate from the always-mediating impact of formal schooling?
   b. How are our conceptions of literacy constrained by one version of literacy—schooled literacy?
2. Develop the notion of literacy as multiple, asking,
   a. How do language and literacy practices in homes and communities differ from those valued in school?
   b. What new forms of and technologies for literacy exist out of school?
3. Account for school failure and out-of-school success, asking,
   a. What resources do children and youth from diverse backgrounds and cultures and socioeconomic groups bring to the classroom?
   b. What are the differences between contexts, conceptions of knowledge, and performance for successful learners outside school and unsuccessful learners in school?
4. Identify additional support mechanisms for children, youth, and adults, asking,

   a. What institutions can support learning in addition to our beleaguered schools?
   b. How can out-of-school learning environments serve as stimuli for rethinking schools and classrooms?
5. Push our notions of learning and development, asking,
   a. What understandings of mature versions of social practices can be found in out-of-school settings that we can connect to child or adult learning?
   b. How might we document the intersection of literacy with social identity or study the connection of ways of reading and writing to ways of talking, acting, interacting, valuing, and being in the world?
   c. How might we cultivate a long and broad view of learning, one that focuses on "human lives seen as trajectories through multiple social practices in various social institutions"? (This quotation is from Gee, Hull, & Lankshear, 1996, p. 4.)

As a future direction for theory and research, we call for an examination of the relationships between school and nonschool contexts. Surveying the recent research on out-of-school literacies, we see four categories of questions that are useful for shaping a new research agenda. First are questions about how to bridge students' worlds with classroom practice, including the following: How might out-of-school identities, social practices, and the literacies that they recruit be leveraged in the classroom? How might teachers incorporate students' out-of-school interests and predilections but also extend the range of the literacies with which they are conversant?

Second are questions about (re)conceptualizing students and communities: How can we support educators in developing the habit of mind that students are able, and what can after-school settings teach us in this regard? What special skills are required of teachers to nurture students whose critical consciousness as members of oppressed groups is finely honed and who may not be predisposed to display the competence they possess? How can teachers and researchers learn about and participate in communities apart from school in a respectful and reciprocal manner?

Third are questions that bridge theory and practice in their interrogation of the relative value and place of diverse literacy practices: What should the relationship be between the literacies taught at school and the literacies practiced in other contexts? How much, for example, should the workplace influence the curriculum, and what is the value of essayist texts? What forms of schooled literacy are powerful intellectual tools, appropriate for these new times, and what forms are mere conventions or historical artifacts?

Finally, there are numerous questions about the nature, development, and practices of after-school programs: How might we document the development of coalitions among community-based organizations, schools, and universities and assess their influence on individuals and communities? How can after-school programs be sustained? What purposes do such programs serve and what kinds of achievement do they foster, in contrast to and in complementarity with schools? How can schools and classrooms, after-school programs, and other informal educational settings incorporate, without co-opting, children and youths' sub rosa literacy practices?

Research on literacy and out-of-school learning, we have argued, can help us think anew about literacy teaching and learning across a range of contexts, including

school. Given the vast gulfs that separate and continue to widen between children and youth who flourish in school and those who do not, between the privileged and the disenfranchised, there is no better time for literacy theorists and researchers, long practiced in detailing the successful literate practices that occur outside school, to direct their energies toward investigating potential relationships, collaborations, and helpful divisions of labor between schools and formal classrooms and the informal learning that flourishes in a range of out-of-school settings.

Notes

[1] The authors gratefully acknowledge the detailed and insightful commentary provided by three anonymous *RER* reviewers. An expanded version of this article appears in Hull & Schultz (2002).

[2] A fourth theoretical tradition that we included in our early analysis was sociocultural perspectives on writing. We have not included that tradition in this article because it was primarily school based and because it drew heavily on other traditions, especially the ethnography of communication in combination with cognitively oriented studies of writing. See Freedman, Dyson, Flower, & Chafe, 1987.

[3] Later, Scribner provided an account of her literacy research with Cole in terms of contemporary activity theory (1997).

[4] Because the New Literacy Studies is new as a tradition of research in comparison with the other traditions that we review, our account of its historical development is relatively truncated.

[5] We do not review here but want to acknowledge the important scholarship associated with "critical discourse analysis," a field that, like the critical literacy area, is politically alert but uses the tools of discourse analysis to critique and challenge dominant institutional practices. See, for example, Fairclough (1995).

[6] Most of our vignettes are written in the ethnographic present. We are aware of the dangers of representing people as static and their situations as perpetual, but have chosen to write in present tense in an effort to make our vignettes more engaging.

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Authors

GLYNDA HULL is an Associate Professor of Education in language, literacy, and culture at the University of California, Berkeley. Her research interests include literacy, adult learning, and community-based education. She can be reached at the Graduate School of Education, Tolman Hall, University of California, Berkeley, CA 94720; e-mail *glynda@socrates.berkeley.edu.*

KATHERINE SCHULTZ is an Assistant Professor of Education in teaching, learning, and curriculum at the University of Pennsylvania. Her research interests include urban teacher education, literacy, and the education of girls and women. She can be reached at the Graduate School of Education, University of Pennsylvania, 3700 Walnut Street, Philadelphia, PA 19104-6216; e-mail *kathys@gse.upenn.edu.*