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**Ten Years of Research: Achievements of
the National Center for the Study of
Writing and Literacy**

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Writing matters—for what people learn, for how they grow and develop and for how they function in society. It also matters for society as a whole—for our position in the global marketplace and for the transmission and transformation of our culture. Writing is the active side of literacy, the side that allows us to contribute to change, to protect our rights, to take control of our lives. Clearly, what we know about writing development in our schools, our communities and our workplaces is essential to our individual and cultural well-being. Over the past ten years the National Center for the Study of Writing and Literacy has focused its attention on how literacy, and in particular, writing, functions in our society and how it is taught, used, and learned in schools, communities, and workplaces. Our goal has been to contribute to higher levels of writing achievement for an increasing proportion of our population.

It is important to state from the outset that within the area of literacy, writing is a young area of study and indeed has been the forgotten of the three R's. Writing research only began to develop in the 1970s, and there was no significant federal investment in writing research until the Center was first funded in 1985. Reading and literacy are often considered synonymous terms, with writing left out of the equation. Given the newness of writing as a field of research, much remains to be done; we know much less about learning to write than we know about learning to read or learning to do mathematics.

That said, given ten years of sustained research, the Center's impact has been substantial. In particular, the Center has been able to reach large numbers of practicing teachers because from its start, the Center joined forces with the National Writing Project, an already well-established network which has trained *1,318,174* teachers of writing to date, with *163* sites representing every state in the nation and many foreign countries. Since both the Writing

Project and the Center have been based at the University of California at Berkeley, collaboration has been natural, intense, and ongoing. Writing Project teachers now depend on the work of the Center as a significant part of their professional development. The Center's research agenda was shaped from the start by what teachers wanted to know, by the knowledge that they felt would help them do their jobs better. To be certain that Center research projects remained focused on teachers' needs, the projects have involved important collaborations with teachers. In addition., the Center has reached beyond the National Writing Project network, to administrators, policy-makers, and

others interested in literacy education in general and writing in particular—from the Chief State School Officers to the national PTA, from the American Society for Curriculum Development to the National Association of Elementary School Principals, from the Council of Great City Schools to teachers' organizations such as the National Education Association, the National Council of Teachers of English, the National Council of Teachers of Social Studies, the International Reading Association, and Teachers of English to Speakers of Other Languages. Above all, the Center has aimed to fund "practice-sensitive research" while at the same time to promote "research-sensitive arch-sensitive practice."

Center research projects and activities have been tied together to address three interlocking sets of questions:

1. ABOUT WRITING: What writing demands are made upon students in key educational, family, community, and workplace settings?
 - What relationships exist between the writing practices of schools as compared to families, communities, and workplaces?
 - How do these writing practices both support and require higher-order thinking and learning across the curriculum and across the grades?
2. ABOUT LEARNING: How do students meet these demands?
 - What variation exists in students' ways of writing? How is this variation related to familial and community experiences? to language background?
 - How do students' ways of writing—their strategies—change over time? How do students adapt what they know and negotiate new literacy practices?
 - How does students' writing figure into the language life of these settings, that is, what is its interrelationship with students' ways of speaking? with their ways of reading? How do these interrelationships change over time?
3. ABOUT INSTRUCTION: How do teachers help students meet these demands? How can student progress be measured?
 - What challenges do teachers in varied settings face as they work amidst the diversity of literacy practices, of learners, and of technological tools? What is the nature of helpful teacher behavior in writing instruction across settings? What institutional structures are needed to support important instructional changes?
 - What instructional strategies promote both writing and learning across the curriculum and across the grades?
 - What purposes does writing assessment serve—at the level of the classroom, school, district, state, and nation? What is involved in creating assessments designed to fulfill varied purposes?
 - How does assessment influence instruction, both in terms of how and what students are taught and in terms of how the results affect the school site?
 - How does writing assessment relate to the assessment of reading and oral language development? (Dyson & Freedman, pp. 2-3)

Answers to these questions are designed to help teachers and public officials deal with the most pressing literacy issues we face as we strive to reach national goals and set high standards for the next generation and as we strive to advance the position of the United States in the global economy.

To address these questions Center research projects have been broadly conceived to cover many areas and represent varied constituents and points of view. Projects have first of all focused on a range of settings—the schools from kindergarten through twelfth grade, community colleges, universities, community centers, home and family settings, workplaces. Center projects have also focused on the learning of varied types of

writing—from academic arguments to writing pamphlets for community distribution; from stories, poems, and plays to historical narratives to learn about history and logs to learn about science; from personal autobiographies and college admissions essays to instructions in a manufacturing plant. Projects further have examined how computer technology affects writing and also how writing growth is related to growth in reading and oral language. Center researchers have studied the work of prize-winning college students, students labeled "remedial" at the high school and college levels, young children just learning to put pencil to paper, and second language learners—from child immigrants to immigrant workers. Center researchers also have looked comparatively at how writing is learned in Great Britain, where there is a long history of writing in the schools. In addition, Center projects have focused on how to assess writing, determining how to get reliable scores for something as inherently subjective as judgments of writing quality, and at the same time projects have explored the movement toward portfolio assessment, from both practical and policy angles. To conduct our research we have relied on the expertise not only of teachers in the schools but also of an interdisciplinary team of scholars—from education, linguistics, English, history, anthropology, and psychology. And we have designed many types of studies—large-scale projects that look nationally and internationally at how writing is taught and learned, longitudinal studies of individual development across time, and case studies to understand how writing functions in the workplace. Our methods have included ethnographies and other forms of descriptive research to develop theories, traditional experiments to test theories, and large-scale surveys to provide information about the status of the field.

Results from ten years of research on writing, learning, and instruction have led us to conclude that written language, which is fundamentally active in nature (compared to the usually more reactive quality of reading), has the potential to have significant effects on performance in most areas of the curriculum, in many community-based endeavors, and in the high performance workplace. Through conducting our research, we have located five areas in which writing and knowledge about writing are essential: (a) in communities of teacher researchers, where writing and reflection can help build a professional teaching force; (b) in multicultural and multiracial learning communities where writing can provide the base for motivating student achievement; (c) in the increasing range of settings populated by large numbers of non-native speakers of English; (d) in the high-performance workplace, if employees are to become maximally productive; and (e) in the variety of settings where evaluating written language is essential. In the following sections, we provide examples of the impact of our work in these five critical areas.

TEACHER RESEARCH, TEACHER REFLECTION: BUILDING A BASE FOR THE ACHIEVEMENT OF LEARNERS

In the Center's projects that involve teacher research, we find a striking role for writing in the professional development of teachers, based on reflection and inquiry that grows out of various forms of teacher research. This includes Freedman and Simons' M-CLASS (Multicultural Collaborative for Literacy and Secondary Schools) project, Dyson's project with elementary teachers, Schecter's project with Writing Project teacher researchers, Flower's MTV (Making Thinking Visible) Project, and also efforts of the National Writing Project (NWP) through the Urban Sites Network and other teacher

research activities. The national teacher research agenda has mobilized a teacher movement, creating a new cadre of professional teachers who better understand their students and their students' learning needs and who are well positioned to serve as leaders in the educational reform movement. Writing offers these teachers the necessary tools for inquiry and reflection and makes this proactive form of teacher development and educational reform possible. Reform projects such as the Coalition of Essential Schools, as well as other major reform efforts that rely on teacher leadership, report that the teacher leaders are usually those who have developed their skills of reflection and inquiry through writing; many have been involved in teacher professionalization programs that stress writing and teacher research.

The central purpose of the Center's M-CLASS teacher research project was to explore what's involved in literacy learning and using literacy to learn in eighth-, ninth-, and tenth-grade, urban, multicultural classrooms.¹ The twenty-four participating English and social studies teachers, six from each of four sites (Boston, Chicago, New Orleans, and San Francisco), worked for two years to think through and articulate the underlying tensions in their schools, classrooms, and communities; to explore their theories of teaching and learning; and to understand the opportunities before them. In the course of their work, the teacher researchers discovered the importance of writing in helping them reflect on and better understand their students. By writing about and reflecting on their students and their teaching, this multicultural group of teacher researchers delved into the issues that make life in their classrooms both challenging and interesting.

For example, in Boston, Roberta Logan, an experienced teacher researcher with the NWP Urban Sites Network and leader of the Boston M-CLASS site, encouraged her colleagues to write in order to reflect on their practice. Recognizing that the teachers were not used to writing about their work, she pushed them to write regularly early on in their process:

I guess the one thing I should say is, the piece of advice I can share is, try to begin to write. just write about your classroom in some way or another even if it is not focused on your particular [research] question ... Try and write about it with some amount of regularity, even if it's just a little bit just to get started, because I'm sure there are highlights or things that you want to begin to record now.

She continued by emphasizing the importance of journals and stream of consciousness writing to help ideas flow:

¹ In the first year of the four-year M-CLASS project the sites and teachers were selected and a conference, funded by the Rockefeller Foundation, was held to discuss issues surrounding multiculturalism and teacher research. The research team has gone on to work with the teachers to identify important questions arising from their classroom practice and to guide them in collecting data that would help them answer those questions and in writing reports containing answers to the questions. Besides producing a collection of individual teacher-research reports, the project is coordinating and synthesizing the national data collection. Primary data include the teachers' reports, individual conversations and correspondence with teachers about the reports, tape-recorded discussions of the teachers' meetings at each local site, and the data the teachers collected in their classrooms. In addition to Freedman and Simons, the research team has included Alex Casareno, Stan Goto, Julie Kalnin, Jackie Kersh, Catherine Leak, Cristina Santamaria, and Carol Treasure.

Once you get in the habit of writing, it will flow easier. Not everybody keeps a journal, but it's a good way to start. I'm a journal druggie. I've kept journals for a really long time just personally, but in reality, journals are really unfocused. They are real stream-of-consciousness writing.

Tom and Kathy Daniels, teacher researchers from the Chicago group, illustrate the benefits of advice like Roberta's as they explain how regular journal writing for their research projects led them to new understandings about their students:

For both of us, the act of writing a daily journal, focusing on our Introduction to H.S. English classes, was especially important. Each day we looked back at each student in the class, noted what he or she did, and looked back at interactions between students and teachers. Occasionally we re-read entries from the previous week or month. Both of us took more time for reflection than ever before. We began to see patterns ... Our students began to emerge as separate and distinct persons in a way that helped us better understand their outlook on life, their method of operating in school, their view of themselves, and how they thought others saw them. (Daniels & Daniels, p. 10)

Tom then explains that his growing understanding led him to improve his teaching:

Based on that information, I began treating each one in a way I thought would help them. I always did that before, but now I had much better information.

Kathy adds:

I don't think I have ever been so aware of individual students as I was last year. I came to know them all, not just the "stars" or the problems. Through their writing, I shared all the ups and downs of that rather chaotic freshman year, and I became acutely aware of the need to provide a kind of safe haven.

Tom next tells how the act of writing helped him clarify his thinking, leading him to a new level of awareness about his role in the classroom:

I'm the kind of person who really doesn't become conscious of his thinking until he writes it down. This year I did much more writing about what I thought. As a result, I understood my strengths and weaknesses much better. I could observe myself when I was slipping back into the old ways of teaching or thinking. (Daniels & Daniels, p. 10)

Like Tom and Kathy, other M-CLASS teachers had similar experiences: writing consistently helped them reflect on and then improve their classroom practice.

Using another approach to teacher reflection, Dyson collaborated with skilled primary teachers in urban schools to examine the language resources for literacy learning that young children bring to school, particularly as members of various ethnic and cultural communities.² She worked with the teachers to examine the ways those resources

² This two-year study is based on an earlier three-year intensive ethnographic study of one primary (K-3) urban school (see footnote 6 below). During this study, Dyson has collaborated with experienced, highly skilled teachers in Oakland, California schools to examine (a) the language resources for literacy learning that young children bring to school, particularly as members of various ethnic and cultural communities, and (b) the ways in which those resources influence the teaching and learning of written language in classrooms. In addition to Dyson, the research team has included Wanda Brooks, Elizabeth Scarborough, and Gwen Larsen.

influence the teaching and learning of written language in classrooms. The teachers in her project met with her to present case studies of children from their classroom, which included general introductions to each child and specific information about the children's participation in writing activities. The teachers reflected on such issues as (a) with whom children interacted during writing; (b) the themes, structures, and styles that figured into children's writing; (c) the responses the children benefited from—or offered—others about texts; (d) any links between children's texts and their in-school relationships and their out-of-school lives. The teachers also talked about (e) their relationship with the child's family and, at times, with other teachers who worked with (or had worked with) the child. These reports led to ongoing analytic discussion of the students across classrooms and to joint writing with Dyson. In this way the teachers brought together their constructions of children's actions and their own responses to those actions. The descriptions reveal the teachers' understandings of literacy learning as articulated in their day to day experiences with children. This joint analysis of commonalities and differences in the teachers' constructions or narratives of everyday teaching led the teachers to formulate understandings of what difference sociocultural difference makes in the daily work of teaching.

Flower's MTV (Making Thinking Visible) classroom research project involved teachers and students in using collaborative planning, a technique in which a writer works with a planning partner to generate ideas for writing.³ Collaborative planning provides a window through which to view the processes of thinking and writing. The purposes of the MTV project were threefold: (a) to help students develop a repertoire of strategies for planning and writing; (b) to encourage students to reflect on their own problem-solving strategies and become more aware of themselves as thinkers; and (c) to discover ways that classroom inquiry conducted by teachers and students can enhance teaching and help make the processes of thinking, planning, and writing more visible.

As the MTV teachers worked to understand their students' thinking processes and to help their students develop and become aware of their strategies for writing, they depended on their own writing and discussions of their writing to help them understand their students. They wrote a series of brief discovery memos that were shared with other members of the project. These memos recorded and commented on classroom observations, giving everyone an on-going story of the students. Later, these memos were combined into extended papers that documented the kinds of thinking and reflection that were happening in many different contexts—for example, in developmental writing classes at a community college, in teacher education courses, in remedial and gifted high school programs, in community literacy projects, and in programs for technical and professional writers in the workplace.

Unlike the Center's other teacher research projects, Schecter's study did not form a new teacher research group but rather studied how a well established group functioned.⁴

³ Flower's Making Thinking Visible Project received support from the Center and the Howard Heinz Foundation. The team of fourteen teacher researchers worked together for four years to implement collaborative planning strategies in their classrooms, to examine how students collaborated, and to write about what they observed. A full report of this project is contained in Linda Flower, David Wallace, Linda Norris, and Rebecca Burnett, (Eds.), *Making Thinking Visible: Writing, Collaborative Planning and Classroom Inquiry*, Urbana, IL: National Council of Teachers of English, 1994.

⁴ Teacher Research in Action was a two-year study and analysis of a teacher-research group in action. The project was especially concerned with: the kinds of support teachers need if they are to conduct classroom research; the effects of becoming researchers on teachers' views of classroom practice and their self-images as professionals; the kinds of knowledge that research by teachers can contribute to the field of

She focused on a teacher-led group sponsored by a National Writing Project site. In the course of doing research, the teachers routinely shared their writing with their colleagues. Schecter found that the amount and kinds of writing the teachers did depended on their purposes for engaging in teacher research: some were interested in using teacher research to empower other teachers, others hoped to stimulate social change, while others hoped mainly for personal professional development. For all of them, however, writing was a central part of the teacher research enterprise and was valued as a prime method of reflection. Marilyn, who hoped her teacher research would empower others, says, "Writing is essential ... It's not just thinking about teaching and thinking about some changes or even the process of research Looking at your kids and the data through writing forces you to consider other hypotheses." Moreover, according to Marilyn, writing is also a sign that a teacher believes that what she is doing is important, that "this matters to me and I want it to be good" (Schecter & Parkhurst, P. 780). Kate, who cared most about social change, hoped to use writing to reach people in positions of power who could affect life in schools. Paula, who was involved in the group for her own professional development, had the most ambivalent attitude toward writing, but even she used journal writing to help her reflect on her teaching.

Across all of the Center's teacher research efforts, regardless of the goal of the project or the structure of the teacher research group, writing played a powerful role. Creating a cadre of highly reflective teachers is essential to improving instruction, and teacher writing drives the reflective process. As school reform efforts are demonstrating, we must depend on reflective teachers as essential contributors to any national effort aimed at improving student achievement. Further, if schools are to become professional workplaces, writing will have to become integral to teachers' work and to their identities as professionals.

INTERCULTURAL COLLABORATION THROUGH GROWTH IN WRITING

One of the biggest challenges facing the United States today is finding ways for varied cultural groups to come together in multicultural classrooms and communities. Research at the Center has not only shown several ways that writing and instruction in writing can be organized to promote writing growth in the multicultural classroom but also has helped students and teachers move beyond multicultural awareness to new forms of intercultural collaboration. First, research at the Center is helping teachers understand and teach to the logic of learners, especially those at risk. Second, writing makes the tacit expectations of different discourses and literate practices in our society more explicit, as students are expected to move from acts of personal reflection, to problem analysis, to reasoned argument. In teaching strategies for writing, we are also teaching students the strategies for intercultural collaboration, for reading and communicating across differences. Finally, writing and writing instruction can unlock the door to personal and social empowerment for students by first letting people bring their voice to the table in a way that informs, reasons, moves, and persuades. Writing also supports the larger goals of social civility, bringing people into collaboration and community-building, by giving them the tools to cross the boundaries of race, class, culture, or discourse and the power to be full participants in a range of settings in our literate word.

composition study; and the forms used to present this knowledge in written texts. In addition to Schecter, the research team included Shawn Parkhurst and Rafael Ramirez.

The Logic of Learners

Teachers become more effective when they understand the logic of learners: when they know why some students seem to be walking to a different drummer, appear to misunderstand instructions, or even choose to resist learning that conflicts with other values or habits of mind at home or in their community of peers. Motivating at-risk children to learn is one of the keys to success, and understanding students' assumptions and their approaches to school or their interpretation of writing tasks lets teachers give students the help they really need.

Ogbu and Simons' study (*Cultural Models of Literacy*) lays some valuable groundwork for understanding students' worlds.⁵ It shows that the cultural models (assumptions and values) and the educational strategies minority groups bring to school can help explain educational differences. In a survey of 2,285 African American, Asian American, and Mexican American students, Ogbu saw that while the adult community strongly supported success in school and did not see it as a threat to ethnic identity, African American and Mexican American students stigmatized their peers who got good grades for "acting white." Although all three communities see education as necessary to "making it" in life, the African American community and its students see that road littered with barriers of prejudice and discrimination. Moreover, they believe that experience and common sense, as opposed to book learning, plays a relatively larger role in making it than the other groups report.

However, when one looks at students' oppositional behavior in school, there seems to be discrepancy between what African American and to a lesser degree Mexican American students say and what they do. Ogbu and Simons' study reveals an opportunity for learning that writing instruction is ideally suited to exploit: in both the quantitative and ethnographic dimensions of this study these students revealed their ambivalence about crossing cultural boundaries and adopting mainstream values and strategies for success in life—ambivalence they may not even be consciously aware of. Our attempts to teach writing (including the conventions of mainstream English) will be more effective if we address the reasons students have to resist such learning as well as the reasons they have to perform. On top of that, writing is the tool which lets students themselves address their own ambivalence and examine the cultural models and assumptions that they hold.

Anne Haas Dyson's study of elementary school writers (*Diversity and Literacy Development in the Early Years*) shows how children's sociocultural experience—of growing up as a person of a particular race, class, and gender—shapes their growth in literacy.⁶ It confronts the difficulties of teaching the social act of writing to children from

⁵ *Cultural Models of Literacy* is a two-year study of the ways in which knowledge about minority communities can inform the teaching of writing. Data for the study is a subset of the data collected for John Ogbu's Community Forces and Minority Education Strategies Project. Specifically, the data for this project are questions related to literacy learning taken from extended interviews of Mexican American, African American, and Chinese American parents and students. The Community Forces Project looks at the cultural models and educational strategies of what Ogbu has described as "voluntary," minority groups (Chinese American) and "involuntary" minority groups (African American, Mexican American) to identify those models and strategies which contribute to success in school and those which are less useful. In addition to Ogbu and Simons, the research team has included Carla Charraga, Alisa Crovetti, Marquette Jones, Jackie Kersh, Melissa Sheppard, and Catherine Zacharia.

⁶ *Diversity and Literacy Development in the Early Years* included a three-year study of the development of writing in the early school years (grades K-3). The project focused on young school children from low income, minority homes and data were collected from an urban, multiethnic K-3 school.

different social backgrounds and it also deepens our understandings of good writing instruction. One of the recent signal improvements in instruction has been the growing use of research-based teaching techniques focusing on the writing process and on writing as a social and cognitive event. As elementary school teachers follow the suggestions of this recent writing research, they begin to direct children to write to real audiences, with a genuine reason to share ideas, and to rely on audiences, such as classmates and teachers, for feedback and evaluation regarding successive drafts.

Not surprisingly, -these curricula lead children to practice an unfamiliar set of social skills for relating to a general reading audience. But as Dyson shows us, individual children respond quite differently to this set of goals for writing and communication. For example, children are taught that these reading audiences have new expectations for clarity, interest, and informativeness, and teachers try to embody these expectations for their students. These are important goals, but they are not the only goals people bring to writing, and in practice Dyson finds that these challenge the assumptions that individual children already have about how to relate to an audience through language.

In one year-long case study, a part of the larger three-year project (see footnote 6), Dyson observed a verbally gifted, African American first-grader struggle to understand why audiences for his writing should be "allowed" to make demands for clarity and the like. He often wrote compositions that had a musical quality and relied on plays-on-words, verbal imagery, and rhyming to delight his peers. While he felt that a written piece should be performed and appreciated like art work, some of his classmates insisted instead that a written piece needed to communicate information.

This case study, like the project as a whole, shows that children's cultural knowledge may often be at odds with the best educational practices. In teaching young children to write, teachers must integrate their instruction with children's individual expectations for how a written piece should be evaluated, what it should achieve, and how real audiences play a role in its successive drafts. When writing teachers successfully mediate these forums, they win the enthusiasm and participation of their students. Dyson showed how the gifted teacher of these students was able to lead them to appreciate and practice both the performative and communicative aspects of their writing.

This research helps elementary school teachers foster their students' abilities to express themselves and cooperate socially in a multicultural classroom. It shows how writing can develop children's audience-sensitivities—to help them accept different points of view and share ideas. In the innovative writing classrooms that Dyson studied, teachers arranged their lesson plans so that children relied on their peers for feedback about their compositions and ideas for new compositions. Not only did children share ideas about writing, children also shared opposing ideas on important topics. But this atmosphere for learning is only possible when teachers also recognize the different kinds of language experience and practices (especially those valued in the child's home and

The project examined how children's diverse cultural resources—their experiences with literary, popular, and folk traditions—figure into their learning to write; the various ways they use those resources in composing activities; and how they use writing to negotiate their complex social identities in their interactions with teachers, peers, and community members. In addition to Dyson, the research team included Paula Crivello. Results of this project are published in Anne Haas Dyson, *Social Worlds of children learning to write in an urban primary school*, New York: Teachers College Press, 1993. An ongoing extension of the project is focusing *on* children's use of popular culture *in* their social and literacy lives; this extension also receives funding from the Spencer Foundation.

community) that individual children bring with them. When teachers see all these styles as resources, learning flourishes.

Dyson's study also shows how writing teachers have a unique opportunity to motivate children to follow their directions. Writing teachers can win children's trust and cooperation by encouraging children's own ideas for how readers and audiences relate to one another. Writing teachers also have a unique opportunity to learn about their students' differing ways of sharing and communicating ideas. In an innovative writing classroom, children can find an audience in the skilled writing teacher for self-expression and for guidance in addressing other important audiences.

Understanding the logic of learners is equally important when older students are attempting a difficult task, like the adult learners in Flower's project on *The Writing of Arguments across Diverse Contexts*.⁷ When college students are asked to take on demanding writing tasks and to juggle a number of competing goals, they may make choices and set priorities that differ from what the teachers expect. And teachers, blind to that logic, miss the opportunity to teach to the students' real questions, difficulties, and needs. Flower's study takes us into a college dorm room where freshmen minority students work together to plan their essays on issues of minority students and education. Their course in argument writing asked them to plan collaboratively, defining an open question and taking a rival hypothesis stance to their question—that is, a stance that considered genuine alternative hypotheses or different perspectives on the problem and the evidence for each hypothesis before coming to a resolution. The essays that these students wrote suggested that they had difficulty with generating genuine rival hypotheses (as opposed to simply asserting a claim or thesis), and also with presenting adequate evidence to evaluate any of their claims.

However, the analysis of each student's planning sessions also suggests that a significant part of their problem-solving was devoted to other problems the teacher did not anticipate, did not see, and did not address in her teaching or comments. In particular, the analysis of the conflict episodes in students' planning processes pointed to three concerns students were working on. First was the problem of creating and using evidence. The second involved students' desires to address real readers with their arguments. The final area of concern for these minority students involved questions of their own identity and their place in this new, largely white institution. These concerns led to conflicting goals for writing.

For instance, one student produced a well-written paper that failed to meet the goals of the assignment. Instead of recognizing some of the valid arguments various writers in her source material were making, she took a single position. What happened? Why did she fail to take a rival hypothesis stance? The tapes of her collaboration revealed two important things: her own experiences as an African American led her to question what she viewed as faulty generalizations about African Americans in what she had read for

⁷ *The Writing of Argument across Diverse Contexts* studied the construction of arguments in school and out, by inner-city teenagers, pre-college minority freshmen, returning women in community college, college student mentors, and a multicultural neighborhood group, using planning process data, texts, interviews and self-reflections to study teaching and learning. Parts of the project were conducted in collaboration with the Making Thinking Visible project and the Community Literacy Center with support from the Howard Heinz Endowment and the Bingham Trust. Flower and her team have developed research-based educational materials for these sites, a hypercard dialogue/ tutorial, and dissemination projects at Washington State, and the Universities of Wisconsin and Utah. The team has included Lorraine Higgins, Elenore Long, Julia Deems, David Fleming, Amanda Young, and collaborators Wayne Peck, Barbara Sitko, Stuart Greene, and John Ackerman.

the assignment. For this student, the most important goal in writing this paper was to speak loudly and clearly to the research community whom she believed perpetuated such generalizations. The second point to note about this student's apparent "failure" to carry out the assignment was that she was in fact doing what many teachers long to promote—imagining herself as a person with a purpose writing to a real audience—and in this case to the intimidating world of the research community. The logic of her performance was the logic of a mature and committed writer. But all the teacher saw was a paper that failed to use the assigned argument structure.

The ways students negotiated their conflicting goals often led them to make choices dictated by problems the teacher never saw. Their negotiations led to a logic and a text that apparently "failed" to meet some assignment demands, when in fact students were choosing to negotiate a different, and to them, more compelling problem. Both sets of goals are necessary, but when teachers uncover the logic of these negotiations, they become more effective at diagnosing the students' writing problems and teaching to students' real needs. Understanding a student's logic does not mean replacing the instructional goals of a class with those of each student. However, it does mean teaching to the genuine conflicts students face and to the process of negotiating multiple voices, expectation, and demands all writers must juggle (Flower, 1994).

Making Literate Practices and Strategies Explicit

The responsibility for intercultural understanding is not only the job of teachers but of students. Yet how can students be expected to negotiate the maze of American culture and its multiple discourse communities, each with their conventions, roles, and appropriate languages? Such negotiation can become even more complex when it involves understanding multiple perspectives from the past, which normally occurs in history instruction. One answer is provided by writing, which helps students take part in intercultural collaboration by making different ways of talking, thinking, and being explicit. It prepares students for productive work across differences in disciplines and discourses.

Downey's project (Writing to Learn History in the Intermediate Grades) takes us to third-, fourth-, and fifth-grade social studies classes where writing is the key to helping students think like historians.⁸ Instead of memorizing names and dates, these children are learning about the context of life in other times and places through engaging in historical perspective-taking, which involved them in understanding the values, assumptions, and everyday habits of people who lived in the past. In particular, they engaged in historical imagination about people's lives and actions in ways that replaced historical stereotypes with a more accurate understanding of historical people and events. In the process, students learned to make causal connections between events over time. Writing played a central part of learning to think like historians.

For example, the third graders in this project had trouble sorting out whether Columbus, the Indians or the Pilgrims came first—of seeing a logical order to past events. An even harder task for the fifth graders was to imagine the life of American

⁸ Writing to Learn History in the Intermediate Grades is a five-year study of the ways writing can facilitate the development of children's historical understanding. Data were collected in urban classrooms in the San Francisco Bay Area with a diversity of students, including recent immigrants from Central America and Asia. Students in the study used a wide-ranging collection of historical materials and participated in a curriculum that included different kinds of writing (such as personal narratives, biography, historical fiction, and expository writing).

Indians, their food gathering and life style, in a way that distinguished it from going out to play or shoot deer, with a handy berry drink. Narrative writing was the place where students worked on such historical thinking, by writing about events such as a story of what was happening and trying to make their event's make sense given what they had learned about the past. It was also the place where they learned how to discern and build causal connections between historical "facts" and the artifacts and context of life—that is, what it could mean in terms of survival if you didn't find berries or missed your deer. Although students wrote from the perspectives of historical characters and cultural groups, they did not adopt their values but rather worked to understand how differences in cultures and traditions can shape identity and action—a sophisticated thinking skill. Thus, when the fifth graders took the role of Spanish colonists writing a letter to a cousin in Spain about their perception of the Indians and the struggle for land, they had to make the radical transition from an Indian point of view, to attitudes that made "Spanish sense."

It is important to note that the historical thinking Downey is studying does not come easily—many students had difficulty with perspective-taking and then with taking the more sophisticated step of building causal links and making "historical" sense. Teaching history through writing is powerful because it goes directly to the heart of historical thinking, and it lets teachers not only give explicit instruction but gain a new insight into the historical worlds students are constructing. Through this research Downey discovered ways to make the writing assignments and instruction more acutely attuned to the difficulties children have, especially those who are not native speakers of English. In particular, Downey found that student conferences, a key feature of process-based writing instruction, were also important in history instruction. These conferences became the place teachers not only noted writing problems, and checked for historical understanding, but helped students make these historical thinking-writing connections. Downey's work shows the advantages and challenges of integrating history with the language arts in the intermediate grades.

Sometimes making strategies explicit has a large impact because students already know a great deal—and need to figure out how the new literate practices of school are different. Higgins and Flower (in Flower's *The Writing of Argument across Diverse Contexts* project) worked with non-traditional students—low-income come returning women students who came to community college with significant life experience in making arguments for themselves and their children to institutions and social agencies.

The non-traditional students in this study do indeed use written argument in their non-academic lives. However, such arguments typically depend on external factual evidence or "proofs," so this experience did not prepare the women to produce the warrants and extended reasoning that academic argument requires nor did it prepare them for the different patterns of reasoning expected in their required course. Their academic writing forced them to deal with the (often conflicting) expectations of their teacher, a departmental review board at the community college, and the other members of the class.

For instance, all three groups shared a number of criteria (such as the appropriate use of organizational conventions); however, a close look at the goals and strategies of each group showed that students and teacher gave high priority to additional goals, such as influencing certain readers or using writing to explore charged issues in their own lives. Juggling all these goals—and the strategies to carry them out in the same text—is a significant problem for many inexperienced (and experienced) writers. Although the teacher offered students standard patterns for organizing an argument, what they needed more were strategies for making their own path of personal reasoning explicit.

Where could instruction make a difference? Higgins and Flower's study suggests that, first, teachers need to address these conflicts directly in their teaching—learning to negotiate competing goals is a necessary part of learning to write. Second, the standard practice of teaching argument often assumes that students will "find" evidence and support from outside authorities and organize it into a paper. But, in fact, college writing typically asks students not to find but to create a line of reasoning that supports claims with evidence, inferences, and good arguments. This study revealed that students are indeed doing this kind of reasoning in their planning—but not in their papers. The instruction these students need is in how to lay out their reasoning in text, how to make their own path of personal case building explicit in the text.

Community-Building and Collaboration

As the traditional promises of education and advancement begin to ring hollow, educators are seeking ways to make learning count both in school and in the workplace and community. Writing—especially strategic training in writing—unlocks the door to rhetorical empowerment, to participation in community-building, to bringing a stronger voice to the table. Center projects have shown how to make this process a reality. One did it by creating an international exchange of writing that motivated students to write to be understood and that allowed for comparisons of learning to write in different countries. Another project has made writing and collaboration a tool for making changes in inner-city neighborhoods by adapting the Center's research-based strategies to support collaboration among mixed groups of residents. In doing so, it has shown how school/community/university partnerships can be linked to community-building in urban centers.

In Freedman's project (Comparing Learning to Write in Great Britain and the United States) writing exchanges between British and American students in grades six through nine not only motivated students to make their writing work; it revealed some important differences in how teachers in both countries looked at motivation.⁹ The writing exchanges showed the kinds of classrooms that lead students to higher levels of achievement. In particular, students who achieved the most were in classes where the teacher expected them to produce lengthy academic pieces and where they were given several months to craft each one. To get young adolescents excited about producing such extended work, these teachers worked together with their students to form a classroom

⁹ Comparing Learning to Write in Great Britain and the United States was a four-year study which received additional support from England's National Foundation for Research in Education, the University of London's Institute of Education, and the University of California at Berkeley. It began with national questionnaires from 560 teachers and 715 of their students in the United States (funded by the National Institute of Education) and 135 teachers and 187 of their students in Great Britain (England, Scotland, and Wales). The questionnaire study was followed by two years of exchanges of writing between students in paired classes in the greater London area and in the San Francisco Bay Area. The study of the paired classes in the exchanges allowed for a close comparison of cross-national differences in relatively parallel classrooms where a similar curriculum was being implemented in both countries. Data included observations by the participating students and teachers as well as by university-based research teams in both countries. The research team visited classrooms and interviewed teachers and four focal students from each of the twenty participating classes at selected points across the two exchange years. Alex McLeod led the British university-based team, assisted by Ellie O'Sullivan. The U.S. team included Marcia Largent Corcoran, Christian Knoeller, James Lobdell, Kay Losey, Claire Ramsey, Dennis Shannon, and Norman Unrau. A report of the results of the study can be found in Sarah Freedman, *Exchanging Writing, Exchanging Cultures: Lessons in School Reform from the United States and Great Britain*, Cambridge, MA and Urbana, IL: Harvard University Press and National Council of Teachers of English, 1994.

community where writing activities kept the students' interest while at the same time pushed them to meet demanding academic challenges. This new kind of research-sensitive practice, which we call a negotiated curriculum, moves beyond fixed programs aimed at an idealized whole class. It also moves beyond the individualized "learner-centered" curriculum of the 1960s which is inadequate since it carries the implication that teachers concern themselves only with individuals and not with the community as a whole. A negotiated curriculum incorporates ways of leading discussions, and building activities, and frequently writing which emerge from the interests of the community of students in the classroom.

In Peter Ross's class students at the equivalent of eighth-grade level worked for two months on short stories, which they put together as a class anthology to send to students in the United States. And Peter's students wanted more time to do a better job. As one of his female students explained, "He [the teacher] gave us about two months or more," but "he said it had to go on a particular Tuesday and I said I needed some more time." In the end one of the young men, who wanted more time, wrote a spy story of over 5,000 words, packed with action and compelling detail.

As another example of an extended activity, Peter's class worked collaboratively for several months to put together a 119-page book about the school. The book contained photographs of the students in Peter's class, the school secretaries, the cooks, and the library. It also included a copy of the school rules a written piece on form tutors and the "head of year," and a weekly schedule of classes. In addition, there was an entry on the physical structure of the school, what classes there were, who taught what, and uniforms. Following these general items was a series of chapters on each subject taught at the school and final chapters on such topics as community activities, trips, and a recounting of a bomb scare at the school. After completing this project, the class produced a 183-page book about the community surrounding the school.

In classrooms like Peter's, teachers worked with their students to decide on writing activities, routinely bringing in issues close to the students' home communities and social and political issues that affected their lives. These teachers saw their job as setting motivating contexts for a particular group of students that would generate enthusiasm for writing in a variety of ways, for a variety of audiences. They understood that not all their students will be motivated by the same activity. When certain students were not motivated, the teachers helped them find something more motivating but equally academically challenging. Students experienced no stigma if they chose a different activity than the majority of the group. In the end, however, the teachers expected their students to master a variety of types of writing and to stretch beyond immediate and concrete concerns to consider more abstract issues and ideas. If students did not practice and master certain types of writing, the teacher considered it his or her failure in setting motivating contexts. This approach, which was more common in Britain than in the United States, provided an extremely powerful frame which allows students flexibility while giving both teachers and students import-Ant responsibilities.

In fact, this same finding was supported in Freedman and Simons' M-CLASS teacher research project. In the M-CLASS schools, mostly located in poverty-stricken, violence-ridden areas where drop-out rates and low test scores are daily news, most Americans seem to doubt the possibility for academic achievement. However, Freedman and Simons are finding that community building through negotiation over important and substantive issues is a key to the M-CLASS teachers' successes. Still, their road is often a rocky one as Brenda Landau's story illustrates.

An African American herself, Brenda teaches high school social studies in one of the toughest areas of Chicago. When she first attempted to open up the curriculum of her African American History course to student negotiation, her students, many of whom were also African American, were reluctant to accept her invitation. On the second day of class, Brenda asked the students to write a journal entry telling her what they wanted the class to cover. Only a few students responded. As Brenda reports, "Most of the students did not do the assignment. I asked them why and several said that they did not know what I wanted them to say. We discussed the fact that the class was not going to be what I wanted them to say, but that we were going to try to identify and express things they were concerned about, their conflicts about multicultural issues and conflicts about their own identities."

After this discussion Brenda tried a second time, asking students to describe where the study of African American history should begin. Again students failed to respond. Brenda then laid out a general structure for the class, including time for student input through journals and discussions and launched into a three week lesson on Ancient African kingdoms. The students were not particularly responsive in class until a well-publicized shooting of a seven year old child who was walking to school from his Cabrini-Green (a Chicago public housing project) apartment to his school nearby. One student responded angrily in his journal:

As I got off the bus at Kimball and Lawrence, I saw these two ladies reading the front page of the Sun Times. I glanced at what it said, and to see what was in there. There was a picture of Cabrini Green with the headline that read The Killing Ground. I thought to myself, why is it now that the media makes a big deal about a killing of a boy. Little kids get killed everyday and there aren't any big headlines! I thought why now, why not earlier?

From this journal entry and the discussion which followed the shooting, Brenda saw that when the class linked African American history to current events, the students had a lot to say. Soon afterward, one student commented in her journal: "This class is not long enough. I need more time to express myself and for the rest of the students to express themselves. We have some pretty important stuff to say." This comment struck Brenda as a significant clue to how she might redesign her course curriculum. She decided to allow students to bring the world outside into the classroom, where they could safely discuss and write about how current events related to African American history and to their own lives.

As a result, Brenda writes, the class altered its rules of operation. The students decided that the group needed at least one class period, per week, to discuss whatever they wanted. They made three basic rules: that students respect one another's rights and opinions, that students could only speak when recognized, and that the teacher would only answer questions directed at her. The group also decided to watch the evening news daily and to take fifteen minutes of each class period to discuss current events.

While the students had not responded to Brenda's earlier invitations for their participation, she found that when she was more open about the ways they could participate, a negotiated curriculum began to emerge. Asking students to outline the course curriculum in journal entries didn't spark collaboration, but students' desire to discuss and write about contemporary African American issues led them to reshape the curriculum. Brenda was flexible enough to turn over one day a week, and fifteen minutes each day to issues which the students wanted to raise, despite her own full agenda of

African American history. She relinquished that position of power, but in order to do so, ironically, she had to draw on her reputation for "toughness" in order to manage the intense discussions which ensued in her multicultural classroom:

I told them that there are rules in here to guide you. And I am an authoritarian. Otherwise, there would be no way I could hold those two classes together. They are predominantly male, predominantly gang (with emphasis). If I didn't have a very strong personality and if my reputation was not throughout the school that you know, "She's tough. I don't fool around, but she's fair. Okay?", they would be really at each other's throats.

Brenda's experiences reveal a true negotiation between a classroom in which the teacher is in total control and one in which there is a complete partnership with students. She used her authority quite deliberately to allow students space in the curriculum, not free rein. The careful balance of power yielded impressive changes in Brenda's classroom. When she opened up the discussion to students, Brenda not only was able to teach more effectively, she learned a great deal as well. She discovered, for instance, through their journal entries and classroom talk that some of her students were ardent racial separatists. In her opinion, their interpretations of current events were distorted by a lack of information about African American history:

I listened to all of this and then when they got into the separatist bit I asked them, "Well how many of you are old enough to vote?"

Well only maybe one or two.

And I said, "If you were old enough to vote, would you participate?"

And they said, "No."

And I said, "You wouldn't?"

And they said, "No."

And I said, "Why?"

"Because it's not going to change anything in the Black community. It's not going to change the poverty. It's not going to change the crime. It's not going to change the drugs. It's not going to change the gangs."

I was active in the Civil Rights Movement and I've spent maybe ten years in Social Services working with gangs. Let me tell ya, I had to sit and listen, and I mean I learned a lot in that one session.

Brenda felt compelled to propose an alternative position to students and did so in response to the students' strong opinions. She states her goal:

My goal is to get them to the point where they realize that the only way they can make a difference is that they have to participate to a certain point. They have to. And one of the ways that you have to, is that you have to exercise that voting right. If I don't teach them anything more than that, then I will have accomplished something.

Brenda knew she needed to work to counteract the ignorance of African American history which she believed led to her students' tendency to live in "the here and now." Students no longer could ask Brenda what she wanted them to write, but they had identified and now began to express their concerns and their conflicts about multicultural issues and about their identities. If Brenda had retained tight control of the curriculum, she may never have learned that many of her students held beliefs which she felt needed to be argued openly in an African American History course; she might never have been

able to help students confront and examine the rationale for and the consequences of a separatist ideology.

Later in the year, when she was reflecting on the changes that took place in her classroom, Brenda commented that until students began to take part in the curriculum, it was as if they were not physically present. She spoke clearly of the importance of creating an atmosphere in which students bring their interests and concerns to the teaching-learning process:

These kids have taught me something. When I walked in, the first thing I learned—these were kids who had self-esteem which was on the floor and we were walking with it. And when we began to interact, and I began to earn their trust—that was the main thing, they had been so done in for so long that when I finally began to earn their trust, behind this defensive mechanism of rebellion were the wonderful minds. They had some knowledge which had been picked up in the street which was totally crazy in relationship-to African American History and multiculturalism and in addition to that that they weren't succeeding because nobody was tuning in to what they wanted to discuss. It was back to the 1950's where they weren't in the classrooms, basically. They weren't there. And all of a sudden you're given this opportunity to be 'here and to participate. For me, it was when I saw that light behind their eyes—that this was a beginning.

By encouraging students to share their "street knowledge" and by offering her own experiences and those of other African Americans, as well as her "book" knowledge, Brenda allowed her students to enter into the African American history curriculum in meaningful ways. The students had something important to think about and something important to read and write about.¹⁰

In Flower's study of argument writing in diverse contexts, writing crosses the boundaries between schools and communities, and it takes the results of educational research with it into inner-city neighborhoods. Collaborative planning is a problem-solving strategy for writing that developed out of the Center's initial research, into an educational practice that high schools and college teachers adapted to a wide range of students (Flower, Wallace, Norris, & Burnett, 1994). This study takes us to an inner-city neighborhood where adults on different sides of a controversial issue learned collaborative planning and used writing to deal with multiple viewpoints. The members of the multicultural Landlords and Tenants project at Pittsburgh's Community Literacy Center met to construct a Memorandum of Understanding that would define the problem from both perspectives at the same time it offered guidance to both groups in resolving conflicts.

The success of this initial project led to collaboration with Pittsburgh's major community development organization and another partnership with a neighborhood-based planning group. It showed, first of all, that the Center's research-based educational strategies for collaborative planning are translating well to community settings where people are using writing to draft better understandings and plans of action. An educational approach to community issues and research-based literacy instruction is proving its power in these non-traditional settings.

The study also revealed why attempts to build consensual arguments and texts in such contexts can falter. In tracing the points of conflict and negotiation in these planning and writing sessions, she observed how a group comes to premature agreement over a

¹⁰ The authors thank Julie Kalnin for providing a first draft of this section on the M-CLASS research.

concept, even though the analysis showed that each member held a very different set of meanings and goals associated with that concept—differences which later surfaced as conflict. Although many theories of argument assume that persuasion must lead to consensus and agreement, this study showed how community members designed a written document, based on problem scenarios and "what if" alternatives and solutions, that let them maintain different, often conflicting, values and perspectives, and still come to consensus through shared action. And in this case the action they took was a written guidebook that honored differences while it resolved conflict.

In another study within the multi-context project, Flower looked at what a growing number of community service projects have recognized: literacy is a powerful link between our colleges and communities. Mentoring younger students is a way to address urgent social needs, benefiting marginalized teenagers who need intellectual strategies for negotiating their worlds more constructively as well as college students who often feel alienated from public life. However, Flower's study of community literacy—based on collaborative planning, problem-solving, and writing—offers a model that goes well beyond traditional tutoring. College students worked as collaborative planning partners with inner-city teenagers at the Community Literacy Center, helped the younger writers address issues that affect their lives, from risk and respect, to violence and school reform. Each semester, high-school-age writers not only published a written document but planned and held a public community conversation to present their arguments.

In this context we see the teenage writers move from a rhetoric of complaint and blame to collaborative problem-solving as they learn strategies for defining and analyzing problems, for taking rival points of view, and for articulating issues. Community literacy motivates students on the margins of school to seize writing as a tool for making themselves valued and heard. At the same time, the college students are embarked on a vigorous course of mutual learning as they understand and respond to an intercultural discourse. Tracking the conflicts and negotiations behind students' reading and writing showed them working hard to integrate their "academic" knowledge of literacy and intercultural communication with their experiential knowledge as a writing mentor. One such conflict, for instance, stems from students' commitment to respecting and supporting the perspectives of their teenage writer (rather than dictating what they might say), while at the same time wanting to exercise the authority of their own expertise as a writer/mentor and help teens produce an effective public document.

This study documented a process of mutual learning in which both groups of students not only developed their own skills as writers, but used writing to cross barriers of race, culture, socio-economic status, and discourse. This is not a trivial crossing: multicultural education can build awareness of difference, but raises the question of how to respond to it in productive ways. Writing and planning together—as a collaborative process focused on community issues—creates a productive relationship in which students can move beyond the awareness of cultural difference to the practice of intercultural collaboration.

LEARNING TO WRITE IN ENGLISH: A STUDY OF NEW IMMIGRANT ADOLESCENTS

Elisa is thirteen years old, small and dark-completed, her high cheekbones and very straight black hair reflecting her Indian heritage. A newly arrived immigrant from Honduras and a village girl, she and her sister lived with their grandmother for eight

years until their mother, who had immigrated earlier to the U.S., was able to send for them. Upon arriving in the U.S. Elisa was literate in Spanish, having completed the sixth grade, although her writing wasn't as developed as her reading. She knew very little English, although she could respond to questions like "what is your name?" She knew, however, that English was very important to her mother, who was an energetic and ambitious single woman who worked two jobs, and who insisted that her daughters watch only English language television.

Lilian at twelve is big for her age, blond and blue eyed, and a new immigrant from a small village in Mexico. Before coming to the U.S., Lilian had yet to travel even to the country seat a few miles away from her village. Here she lives in an urban area in a three-bedroom apartment that is shared by two families and other relatives; her family was struggling to keep food on the table and pay the rent. Her English abilities were close to zero when she arrived; she knew a few words like dog, cat, and ice cream, but she could read and write in Spanish. She confides that she had not been a very good student in Mexico.

Martin was born in Shanghai in the People's Republic of China. His father was a technician, and his mother, a primary school teacher of English. After coming to the U.S. as tourists and then staying on illegally, they both took jobs in a Chinese grocery store, and his mother also worked cleaning houses. Martin began studying English in the fourth grade in China; he was thirteen when he arrived in the U.S. He scored quite low for oral English skills and "0" for reading and writing when he was tested, but he knew some basic English. Lively, outgoing, confident, and aggressive, Martin says one of his priorities in school is studying English. When asked about his future, he said he wanted to *churen toudi*, or "rise head and shoulders above other people."

Audrey's father is a pastor who moved to the U.S. when he was offered a position in a Chinese community church. Born in Taipei, Audrey is twelve and had completed elementary school in Taipei and had gone to "night school" for training in English. She reported having plenty of opportunities to speak English at home and with kids in the neighborhood, but she also spoke Taiwanese and Mandarin. Audrey is not very motivated to learn English or to do well in school, and a year after moving to the U.S. her written Chinese was beginning to deteriorate. But Audrey is an accomplished musician, playing the cello, the piano, and singing in the choir, and she says she would like to be a music teacher.

These young people have something in common with many children in Many countries all over the world: they are just in the process of learning, often from scratch, the language in which they are to receive the bulk of their schooling. For these students learning to write in a language other than their first presents big hurdles, partly because we know relatively little about how writing ability in a second language develops. Educators often assume that non-English-background students must acquire a certain level of English before they can profit from the instructional approaches used with native English-speaking students (though this level remains undefined). It is also often assumed that when such students exit from ESL tracks, they should write like native-speaking students, and conversely, when they don't, that they aren't ready for "mainstream" classes. Guadalupe Valdés and Sau-ling Wong complicate and challenge these assumptions in their Center project, *The Writing of Non-English Background Students*.¹¹

¹¹ The Oral and Written Language Growth of Non-English-Background Secondary Students was a two-year, longitudinal, ethnographic study of recent adolescent-age, immigrant students who were not

Conducting detailed case studies of Latino-background and Chinese-background students, including those introduced above, they describe the acquisition of writing abilities by eight young people over a two-year period. They also created fine-grained portraits of writing instruction within ESL or "sheltered English" classes, illustrating writing assignments and describing instructional practices. And they take us as well into students' communities and homes, reminding us how performance in school often takes its cue from social, economic, and cultural circumstances that originate beyond the schoolhouse door.

One important contribution of the part of the study led by Valdés, focusing on the Latino-background students, is a detailed description of students' language development across two years. To trace students' growth, a total of four English language assessments and one Spanish language assessment were carried out. At the outset all students were literate in Spanish, being able to read aloud confidently from a sixth-grade-level book and to answer comprehension questions. Students were all also able to write a bit about themselves in Spanish, although their abilities varied widely. Students' listening comprehension abilities in English were shown to be developing more rapidly than their speaking abilities, though they were generally unsuccessful at the outset in taking part in the assessment activities. Finally, in general, students' writing abilities in English were non-existent.

From this modest beginning, Valdés traces students' growth; for some students that progress was remarkable indeed. Here is a sample of what Elisa, thirteen, was able to write about her family on the first assessment:

thes tha paper
door
window
mesuring spoon
spatula o turner
postre
measurins cup
teacher
sister
brother
granmother
name
period

And here is the writing sample that she produced for her last assessment two years later:

I woke up on saturday morning, it was cold and dark.
I had breakfast with my sister, mom and dad. I knew
that that day I was going to have fun. My mom and

native speakers of English. Eight focal students were selected, four native speakers of Spanish and four native speakers of Chinese, all of whom had arrived recently in the United States, some literate in their native language and some not. Project data included student interviews, classroom observations, written products in both English and the native language, language assessments, interviews with teachers and school personnel, and home visits to the parents. In addition to Valdés and Wong, the research team included Rosa Rodriguez and John Zou.

dad were getting read to go to work and my sister to go out with her friends.

When everybody had already left it was about six-thirty a.m. I started getting read. I went in the shower and spent 30 minutes. when I got out of the shower it was about 7:00 AM. I put lotion all over my body and put on my favorite underwear, pair of jeans, T.shirt, jacket and pair of shoes, I was feeling fresh and clean, I guess I was ready

I phoned my friend Rolando to tell him that I was ready. I wait for him for ten minutes. When I saw him coming, I saw a big limosine too. He asked me; "do you want to come in"? I said yes.

We went to San Francisco, we stay there for almost two hour. There we ate another funer breakfast.

I asked him if he wanted to go shopping with me. He answer yes. We went to almost all the malls in San Francisco. We spent almost all morning and part of the afternoon shopping. then we went for a big dinner at Sizzler.

At this point Elisa was able to meet practical writing needs, to take notes on familiar topics and to respond in writing to personal questions. She could write simple letters, brief synopses and paraphrases, and accounts of work and school experience. She demonstrated an ability to describe and to narrate in paragraphs. And though she had not yet learned to use cohesive devices and some of her verb inflections were inaccurate, her writing was generally comprehensible. Though she had a ways to go before she would write on a par with her native-English counterparts, her growth was nonetheless impressive.

Valdés points out that not all Latino-background students fared so well; indeed, after two years of schooling, the four focal students demonstrated different levels of English language development and different rates of growth in the four language modalities. All four students started at almost zero English, but two became fluent speakers, while two others acquired little spoken English during the two-year period. The two fluent speakers including Elisa, learned to write well enough to participate in selected mainstream classes, while the other two students developed very little ability to write in English. The different levels of development were influenced by a complex web of factors: the students' different responses to instruction, teachers' perceptions of their abilities, students' family backgrounds, their psycho-social development as adolescents, the circumstances which surrounded their immigration, and their hopes about what they could accomplish in the U.S.

Valdés's studies of the Latino students suggests a strong relationship between the development of oral productive skills and the development of writing abilities. This, however, was not always the case for the Chinese background students Wong studied. For example, Martin, who is described earlier, started out with the highest proficiency (among those students who were studied) in English writing, and throughout the two-year period he did better at writing English than speaking or comprehending it. Similarly, another student in the cohort made terrific strides in writing, but had difficulty even with everyday listening comprehension after two years. This finding contradicts the widely held notion that development in English always proceeds from listening to speaking to

reading' to writing, and that students who don't speak English well are not ready to tackle writing. It is also important to note here that for both Latino- and Chinese-background students, the development of writing ability may depend on the development of productive—oral or written—skills as opposed to receptive skills. Again, the importance of writing as the proactive branch of literacy comes to the fore.

Perhaps the most important contribution of Valdés and Wong's work is that they began the big and significant task of illustrating and analyzing levels and stages of writing development among Latino-background and Chinese background students. Such research is rare and time-consuming, but it is necessary if we are to give teachers a much-needed sense of what is possible for non-English background students, for how quickly some such students can be expected to develop, and what their writing can be expected to look like and when. Valdés and Wong's work can also help mainstream teachers to be more comfortable with the writing that non-English background students produce, being assured that non-native-like syntax doesn't mean that students can't benefit from instruction in mainstream classes, and that such students who still make mechanical errors in their writing can nonetheless exhibit and acquire sophistication in other areas of writing. In short, Valdés and Wong's work goes some distance in helping teachers to be more hopeful in their dealings with ESL students and more helpful in assisting those students with the considerable challenge of getting an education in English.

CHANGING WORK, CHANGING LITERACY? HIGH PERFORMANCE WORKPLACES AND SKILL REQUIREMENTS

Most of the Center's projects have naturally taken place within the context of schools (and other educational institutions or organizations). But recent global economic developments and widespread national concerns about the future of work and the transition from school to work made it critical to study literacy and writing requirements and practices outside school as well. Flower's work with community organizations is an important step in this direction, as is Schriver's research on assessing drug-education literature. Hull, however, has focused squarely on the workplace.

During the past ten years the way we think about work has changed and changed radically. Gone are the days, it is said, when North Americans (as well as citizens in virtually all industrialized countries) were expected to check their heads at the factory door and settle in for eight hours of repetitive, routine, perhaps physically demanding or even debilitating but certainly mind-numbing labor. The claim is that, in order to be nationally and globally competitive, North American industries must adopt new technologies and new forms of work organization often labeled "high performance." Although definitions of what constitutes a "high performance" workplace do vary, these freshly organized workplaces are usually said to push responsibility and authority to lower levels of the organization, to reduce or even eliminate middle management in order to increase the flow of information, and to create cross-functional teams that can respond more rapidly to customers and that can suggest ways to improve work processes continuously. A recent article titled "'The New World of Work'" in *Business Week* magazine captures something of the public perception of the extent and severity of the change: "Mobility. Empowerment. Teams. Cross-training. Virtual offices. Telecommuting. Reengineering. Restructuring. Delaying. Outsourcing. Contingency. If the buzzwords don't sound familiar, they should: They are changing your life.. The last decade, perhaps more than any other time since the advent of mass production, has

witnessed a profound redefinition of the way we work" (Hammonds, Kelly, & Thurston, p. 76).

The question becomes, of course, what do people need to know and to be able to do in order to function well in the new world of work—both those adult workers who now hold entry-level industrial and service sector jobs, and the young people who will move into these jobs in the future? And more particularly, what is the role of written literacy in these factories of tomorrow? Hull's project is showing specifically how writing and reading are used in changing workplaces and how the knowledge and skill of workers, especially immigrants and minorities, might be drawn upon more effectively to help workplaces reach constantly-sought, higher levels of productivity.¹² But this project is also shedding light on the nature of high performance work organizations, illustrating the difficulties that companies experience as they attempt cultural and structural change and the ways in which old practices and modes of organization die hard. Most significantly, Hull suggests that literacy practices might be a good measure of high performance work systems. That is, an audit of writing and reading requirements, responsibilities, and rights and their distribution across a workforce can provide an important indication of the extent to which a company offers workers the chance to participate in decision-making and the authority to do so.

To illustrate these themes from Hull's research, let us turn to an evening during the second shift at an electronics factory in the Silicon Valley of Northern California. This circuit board assembly plant is a Fortune 500 company with annual revenues in excess of \$1 billion. It represents "high end" manufacturing, focusing on high quality and the full range of services—design, assembly, quality checks, testing, and packaging of circuit boards for diverse products, from helicopters to elevators to computers. The plant has also adopted practices associated with "high performance," such as self-directed work teams and decentralized decision-making and continuous improvement and the use of flexible technologies. According to the plant manager, in order to become a high performance workplace, "First you have to create a culture, where people believe that they can make decisions without being put in a penalty box." As will become apparent, however, this factory is closer to traditional rather than high performance work organizations, despite the fact that it has tried to adopt certain high performance practices.

Ernie, a lead assembler in the hardware and wave solder department, is an immigrant from the Philippines with an interest in new management ideas such as quality circles and self-directed work teams. On this evening Ernie is facing a problem that is not uncommon among contract manufacturers in the circuit board industry. His department has received some old circuit boards from a customer, and the workers are supposed to update those boards by soldering some components onto them. Ernie's job is to figure out, by reading, all the documents and examining the sample board and checking the kit, exactly what is to be done to the old boards, with what parts, in what order. Significantly, he's the only front-line worker in his group who is required to read the MPI, or

¹² Changing Work, Changing Literacy is a three-year study co-sponsored by the National Center for Research in Vocational Education and supported as well by the Spencer Foundation. Through participant observation and interviews, Hull and her team created detailed case studies of the literacy requirements and practices in two manufacturing plants, one traditionally organized and the other "high performance." The project also included a noteworthy development effort, a multi-media data base for dissemination purposes. In addition to Hull, the research team consisted of Meg Gebhard, Mark Jury, Mira Katz, Brian Reilly, Kathy Schultz, and Oren Ziv.

manufacturing process instructions, which makes him a literacy broker of sorts. After he has deciphered the problem, he will, as the lead worker, explain it to the rest.

To carry out this task, Ernie has, as he soon realizes, some inadequate written instructions, an outdated drawing (the numbers on the drawing have changed, and so have the shapes), and a bill of materials. As is his usual procedure, Ernie compares the written texts with the components in the kit, pouring over a variety of forms of representation for a while, and it is then that he realizes that they don't match: that is, the components don't look like what the drawing says they should look like, and in fact, attaching them to the board presents some technical problems. At this point Ernie tries to flag down the engineer, who is on his way out the door, to ask him about the discrepancy. But the engineer gives Ernie short shrift, simply telling him to "lap solder" a wire, a solution that Ernie believes wouldn't provide the most reliable connection. Next Ernie goes to another part of the factory where parts for old boards are stored to see if the customer had provided a sample board to go by. And sure enough, there is a sample board, but it is plugged into a system, and Ernie is told that he will need to get permission from the person who oversees that area to take the board. That person is unavailable. Thus, Ernie looks at the sample board without taking it out of the system that it is connected to, and he constructs his own drawing of it, and he writes his own parts list as best he can.

He then goes to his supervisor's office, a woman named Margie, spreads out all the drawings and components, kneels down beside her, and they both hold the board that needs to be modified and talk their way through the problem. They're very concerned with how to get that component soldered on properly, and they go back and forth about whether it would be all right to tilt it so as not to have to attach such a long lead line; they both disagree with the engineer's solution of a lap solder. The supervisor keeps pressing Ernie toward a particular solution to the problem, but he persistently doubts that it will work—partly because he's unsure of the drawing he'd made so quickly, partly because he feels he doesn't have the written authority through manufacturing process instructions to proceed. Finally, after manipulating the component, situating it this way and that on the board for about six pages of transcript, the supervisor asks to see the official documentation, realizes how inadequate it is, and joins Ernie in complaining about the engineer who should have updated the drawing and provided sufficient instructions and thereby given them the authority to do their work, but didn't.

Margie finally decides that Ernie should go ahead and put the components on; they will curve the lead to get more length out of it, but as Ernie argued, they won't tilt the component. But just to be sure, because they don't have written authorization—a deviation approval to alter the board in this way—they will contact the program administrator, Ron, whose name the supervisor notices on one of the documents. This administrator is assumed not to know anything about production, but to have the authority needed to deviate from the MPI. "I hope my eyes serves me right when I look at this part," Ernie says a little nervously as they wait for the program administrator to appear.

The program administrator arrives with an enormous red three-ring binder in his arms; it contains every single document about this project, its history, all of the communication with the customer, the MPI's, the material transfers, the deviations, etc. With Margie's permission Ernie explains the problem, and then Ron flips through his big notebook to see, in his words, "if I have anything in writing on this." Ron can't find permission from the customer to change the board in the ways Ernie has outlined, but he

says he may have seen such a letter on someone's desk, and that therefore they should go ahead with the work. Ernie asks if he can look one more time at the sample board that is now in a locked department, and Ron agrees. Everyone walks to the department where old parts are stored, the security guard opens the door, and Ernie looks at the board and says immediately, "I did the right drawings." He makes a new sample board, using the new parts and based on the earlier discussion, his drawings, and the customer's sample board. He then proceeds to instruct the other workers as to how they should alter the board. Almost an hour has elapsed since Ernie first identified the problem.

This "work event" and millions similar to it—where the smooth flow of production is interrupted and an employee joins collaboratively with others to use texts and talk and problem-solving to set it in motion again—are played out in factories across the U.S. every day. Literacy plays a big role in the event narrated above, as it does in the work life of most high performance companies. A great deal of this literacy comes about as a result of international certification standards, which require that every single procedure for every action in an entire factory, as well as every deviation to those instructions, and deviations to the deviations of the instructions, and so on, be documented—be written down, distributed, and referred to as necessary. Other literacy requirements arise because of the nature of the work in new industries. In contract manufacturing, for example, a company survives by making products for its customers quickly, accurately, and cheaply, and by doing so again and again, over time, as was the case with the old boards that Ernie had to alter. These relationships require a thick paper trail—witness the 3-ringer binder in the previous example—and adherence to a literacy-driven notion of "traceability." In many factories the ante for literacy is also raised when workers are required to take in-house courses on how to participate in self-directed work teams or are asked to enroll in specialized study to upgrade their skills, as in "pay-for-knowledge" systems.

The texts that saturate new workplaces are accompanied by rules of use, rules that are often complex, that grow out of social relations in particular companies and the history of industries, and that participants must decipher and master if they are to be considered fully literate at work. Much previous research on workplace literacy has consisted of readability analyses of work-related texts done in an effort to determine the grade level needed to comprehend them. Hull's research has begun to suggest how much more we need to understand about how texts are used in factories and other workplaces and about the rules and strategies that govern who constructs, reads, and uses these texts and how and for what purpose. In the above example, Ernie was quite aware of how tightly authority was wedded to manufacturing process instructions where his own work activities were concerned, and both he and his supervisor knew better than to ignore these instructions, even when they recognized them to be incomplete and inaccurate. Rules of use for literate activity will differ from workplace to workplace and from industry to industry, but the existence of the rules will not, especially as literacy demands grow in frequency and complexity and as workplaces change. One challenge for teachers of writing and English, this project suggests, is to find ways to teach prospective workers how to size up a given work environment's literacy practices.

An analysis of the literate practices and the rules that govern the use of texts in a given workplace also provides a window on the extent to which a factory has achieved the "high performance" ideal of shared decision-making and worker empowerment. It is clear from Hull's project and other research that the majority of workers want a voice in their companies' operations, and it is also clear that most experience a big gap between their desire to participate and the reality of opportunities to do so. Ernie, for example,

again and again talked to the researchers about his interest in participating in team meetings, a high performance practice that his company reserved for managers, engineers, and supervisors. (Ironically, many of these upper-end employees also complained about not being heard, albeit in a different way. Said one engineer, "The five white guys [in top management] want to 'empower' us, but they don't want to give us full control.") Significantly, not being heard in team meetings was paralleled by constraints on literacy. As a lead in his work area, Ernie was expected to read manufacturing process instructions and explain them verbally to the others in his group, who were not expected to read (because they were assumed, on the basis of their immigrant and ethnic status, not to be able to). His reading served certain functions, most often identification, verification, and receiving instructions. But he was not authorized to alter existing texts, even if outdated or otherwise erroneous, or to create texts which instruct others, even when he had the knowledge to do so and his superiors had dropped the ball. The texts that Ernie did create were unofficial ones, texts that he wrote on scraps of paper and pulled from his pocket nervously, texts that were not sanctioned by the company and that had no authority.

Hull's research suggests that as more and more companies recognize the good sense of moving toward "high performance" work organizations, it would also make good sense for these companies to examine and reconceive the literate practices that weave throughout the work that gets done. Is literacy set up to control? Are writing and reading practices strictly meted out, with certain workers having the authority to produce texts of particular sorts, and others having the responsibility to read them, and others still denied the right and responsibility of either? Then you probably have a traditionally organized workplace. Are writing and reading responsibilities—but especially writing—distributed across the workforce, with line workers able to participate in the writing and revision as well as the reading of manufacturing process instructions? Do they have access to the big red binders which hold the history of products? And do they have access to whatever training they need to make participation a right and reality? Then you are probably moving more in the direction of the high performance ideal.

WRITING ASSESSMENT

Where do students stand in relation to their individual growth, to their peers in the United States, and to children in other countries? This is a question that is increasingly on the minds of parents, teachers, policy-makers, and the public at large; writing assessment plays an essential role in answering it. Writing assessment also helps to give us clues about whether our instructional practices are working. As a field, writing assessment is necessarily diverse as it aims to set national educational policy or to help a single child in one classroom, as it is used for placement, diagnosis, or grading. It may involve objective tests, holistically evaluated essays, personal journals, or all of these. It may be limited to a single twenty-minute writing sample or it may encompass a whole years work. Because of the diversity of the field and the urgency of the questions, the Center has taken a strategic approach to the study of assessment by concentrating on just three central topics. The first is the highly visible but poorly defined topic of portfolio assessment, which is being promoted widely in schools across the country. The second topic concerns the validity of holistically scored writing samples; such samples are widely used for assessment, but their validity is rarely questioned. The third topic concerns the impact of

often hidden cultural differences between readers and writers that influence how we routinely assess the writing we read.

Portfolio Assessment

Although portfolio assessment enjoys great popularity among educators nationwide, there is little agreement about its goals or the methods by which it should be carried out. To find out what people mean when they say that they are "doing portfolios," Center researcher Robert Calfee surveyed 150 sources, including states, school districts, schools, and individual teachers.¹³ The survey focused on four questions: How did you get into portfolios? What does the concept mean in practice? How do you do it? and What do you see as the effect of portfolios for your students and for you? In addition, Calfee and his team conducted a two-day working conference with twenty-four of the respondents to obtain information in more depth.

Calfee learned first that teachers involved in the portfolio movement feel a strong sense of commitment and personal renewal. Teachers feel ownership of this "bottom-up" movement and report that the movement has provided them with the opportunity to rethink the meaning of their work and their relation to students. This kind of rethinking enables them to act in ways that affirm their status as professionals.

Although Calfee's respondents claimed that an important purpose of portfolios was to assess students' progress, they did not provide a clear account of how progress was to be measured. In fact, across the varied classrooms the portfolio concept amounts to a virtual anarchy in which anything goes" in deciding what to include in a portfolio and how to evaluate it. At the classroom level, then, the reliability of the assessment was simply not discussed.

Teachers also showed a definite aversion to evaluation and to the assigning of grades. Teachers were willing to judge individual compositions but were uncomfortable about assessing an entire portfolio. The following comment was typical: "I wish grades would just go away."

Calfee's research demonstrates how important the portfolio assessment movement has been for the personal and professional development of many teachers. It has stimulated a great deal of reflection on fundamental issues of teaching and has afforded teachers a satisfying way to express their professionalism. Calfee further shows that for some teachers portfolios may be most important as a teaching tool—a focus for student/teacher discussions of writing. But it is not as yet clear what role the portfolio movement will play in assessment. The teachers in Calfee's study who "do portfolios" do not seem inclined to use them for grading nor is their attention focused on measurement issues.

Holistic Scoring of Writing Samples

¹³ Evaluating Writing Through Portfolios is a four-year study designed to evaluate current practice in portfolio assessment of writing in the elementary and middle grades. In collaboration with participants from major, contrasting portfolio assessment projects around the nation, this study has sought to examine and clarify several fundamental issues regarding the use of portfolios to evaluate student writing, namely, what is to be collected in the portfolio, under what conditions, for what purposes, and evaluated in what ways. The project is reviewing various existing portfolio project designs, analyzing the tasks of interpreting and evaluating the contents of portfolios, and considering various schemes to use portfolio data from individual classrooms to inform school-wide, district, or state evaluation programs. Data collected for this study included a broad survey of practitioners and school districts currently using portfolios, interviews with a selected group of respondents, and reviews of printed materials currently circulated among practitioners. In addition to Calfee, the research team has included Pam Perfumo and Walter Masuda.

Holistically scored writing samples are widely used to assess students' writing skills and to predict later writing performance. For example, a single holistically scored essay may be used to decide whether a student should be placed in one writing course or another, the underlying assumption being that a student's performance on one holistically graded essay is a useful predictor of how that student will do on later essays such as those the student writes in school. Further, in some forms of portfolio assessment, it has been proposed that holistically graded essays development over the course of a semester or a school year. The underlying assumption here is that students' performance on such tasks is stable enough that developmental changes would be evident. Given the importance of these applications, it is surprising that the reliability of holistically graded essays for serving these purposes has not been clearly established. Although considerable attention has been paid to rater reliability, that is the extent to which two raters can agree in evaluating the same essay, very little has been devoted to validity, or the extent to which the student's performance on one essay is related to that student's performance on another. If the validity of be used to track students' holistically scored essays is low, then great caution should be exercised in using them for placement or the assessment of student writing development.

To explore this important issue, the Center sponsored a study designed by J.R. Hayes to obtain estimates of the validity of holistically scored writing samples.¹⁴ In this study, the objective was to answer the question "To what extent is student writing performance consistent across successive essays?" The basic measure in this study was the correlation between a judge's rating of students' performance on one essay and that same judge's rating of the same students' performance on another essay. If the students who performed well on one essay also performed well on the second, then these correlations, which are measures of validity, would tend to be high.

Averaged over all classes and all judges, the correlation between students' performance on one essay and their performance on another was .16, which is extremely low. Such low correlations suggest that placement tests based on single holistically scored essays are hazardous. Further, they suggest that holistically scored essays are not likely to be effective if used to track students' development over the course of a semester or a year. These results call into question the widespread reliance that the writing community has placed in holistically scored essays and suggests that we need to look for measures of writing skill that have greater validity.

In response to these findings, Hayes and his colleagues are now assessing the validity of a variety of measures of writing skill which could provide teachers with reliable information that they could use to shape instruction for individual students' needs.

Cultural Differences between Readers and Writers

Understanding the nature of cultural differences is an important first step in developing methods for helping writers—both in school and in the workplace—to avoid communications that misfire from the audience's perspective. Research at the Center is

¹⁴ The research on assessment measures is the first part of a two-part study funded jointly by the Center for the Study of Writing and Literacy and the Center for Innovation in Learning at Carnegie Mellon University. The data for this study are derived from about 1000 essays, written by 250 students in 13 writing classes at two universities. The essays were selected by the classroom teacher as representing the most important assignments in the course. In addition to Hayes and Schriver, the research team included Ann Chenoweth, Jill A. Hatch, Beth Littleton, and Christine M. Silk.

helping writers respond to readers' needs in positive ways that reflect their understanding of their audience's culture and values.

In one project Schriver explored how 11- to 21-year-old students, drawn both from inner-city and suburban schools, responded to drug education literature.¹⁵ This literature was representative of over 100 brochures, handouts, and fact sheets that the researchers collected from national and local drug prevention agencies. The writers who design the literature employed both by government and private agencies, differ from their audiences in age and point of view and, often, in race and social class as well. These differences were frequently evident in the students' responses to the brochures.

Although the students who evaluated the brochure represented the age range for which this literature was designed, many students felt "talked down to." Both the language and graphics suggested to the students that the materials were meant for a much younger audience. One junior high school student felt that the pictures made the brochure seem "...too kiddy [meaning childish] ... it is something you would give to sixth graders." A ninth grade student complained, "If I saw this on a rack, I wouldn't read it. If I looked at the picture I'd think it was for 8 year olds and I wouldn't read it." Another felt that "the author thinks the reader is naive and isn't smart enough to make her own decisions."

Some students found the brochures racially offensive. For example, one student questioned the significance of a line drawing of a black youth in one of the brochures, "Why is a black man on the inside? Why are black people in all these brochures? I resent this crap!"

Many comments reflected the social distance that the students perceived between themselves and the authors of the brochures. One student remarked, "Well, it seems it's just the facts, and it's goody-goody. You know, 'Don't do this, don't do that'." Another said she thought the author was "The establishment. You know, the system." Others described the author of the brochures as "a person who is definitely NOT street smart." In fact, one person said, "Oh he's so-o-o-o street smart" to which another student shouted "NOT!" Still another characterized the author as "Someone who would never come to my neighborhood."

Shriver's study shows that even when writers have the best intentions, cultural differences can still have an important impact on readers when communication crosses cultural lines. A second Center project focused on another instance in which readers misinterpreted writers' intentions, but in this case the salient difference was age. Schriver and her colleagues found significant differences in the way college applicants and faculty and admissions counselors judged the applicants' essays. In particular, essays that the students judged to be creative, intelligent, and mature were often perceived by university staff as pretentious, pedestrian, or naive. Such negative judgments significantly reduced the probability that counselors would recommend that the student be admitted.

Presumably, cultural differences of the sort that influence the assessment of college applications as well as drug education literature can also influence the assessment of applications for employment or for bank loans as well as the evaluation of student writing in school. Such research can do more than describe the negative effects of cultural difference; it can point as well to ways of enhancing communication across varied types of cultural boundaries.

¹⁵ In addition to Schriver and Hayes, the research team included Jill A. Hatch, Charles Hill, Anne Steffy, Patricia Nespor, and Michele Machett.

IN CONCLUSION

Center research has shown, not that writing per se is the solution to all our educational difficulties—there is no magic—but rather that writing education and writing-centered activities—from teacher research to partnerships in the schools, the workplace, and the community—can deliver something unique. Writing-based literacy develops social and intellectual capacities in learners and promotes powerful literate practices and skills that can unlock the door to higher levels of performance and success. Ultimately, writing-based literacy is a major factor in solving some of the most pressing problems in education and in our society at large.

We know that research priorities often change as public interests shift. But if there is anything we have learned from our intense and long-term studies at the Center over the past ten years, it is the centrality of writing and literacy for an individual's success in school and the workplace and its importance to the effective functioning of the larger community. In the future we will need to identify and continue to learn more about the key sites in schools, workplaces, and communities where writing matters most.

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NATIONAL CENTER FOR THE STUDY OF WRITING

The National Center for the Study of Writing and Literacy (NCSWL), one of the education research centers sponsored by the U.S. Department of Education, has completed its mission and no longer functions as an independent entity. The Center was based at the Graduate School of Education of the University of California at Berkeley, with a site at the Carnegie Mellon University. The Center provided leadership to elementary and secondary schools, colleges, and universities as they worked to improve the teaching and learning of writing. The Center supported an extensive program of educational research and development in which some of the country's top language and literacy experts worked to discover how the teaching and learning of writing can be improved, from the early years of schooling through adulthood. The Center's four major objectives were: (1) to create useful theories for the teaching and learning of writing; (2) to understand more fully the connections between writing and learning; (3) to provide a national focal point for writing research; and (4) to disseminate its results to American educators, policymakers, and the public. Through its ongoing relationship with the National Writing Project, a network of expert teachers coordinated through Berkeley's Graduate School of Education, the Center involved classroom teachers in helping to shape the Center's research agenda and in making use of findings from the research. Underlying the Center's research effort was the belief that research both must move into the classroom and come from it; thus, the Center supported "practice-sensitive research" for "research-sensitive practice."

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