

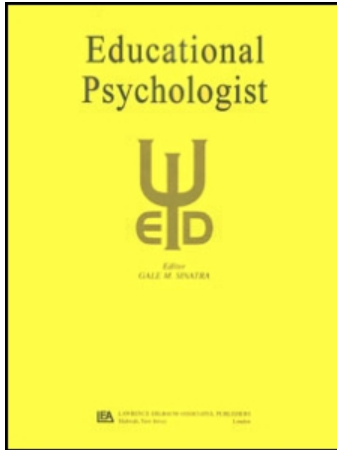
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Educational Psychologist

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t775653642>

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Online publication date: 08 June 2010

To cite this Article Gallimore, Ronald and Goldenberg, Claude(2011) 'Analyzing Cultural Models and Settings to Connect Minority Achievement and School Improvement Research', *Educational Psychologist*, 36: 1, 45 – 56

To link to this Article: DOI: 10.1207/S15326985EP3601_5

URL: http://dx.doi.org/10.1207/S15326985EP3601_5

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Analyzing Cultural Models and Settings to Connect Minority Achievement and School Improvement Research

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To improve schooling and achievement in a diverse society requires units of analysis that tap into significant structures, processes, and dynamics of culture as they affect individual students and schools. These units must be sensitive to variability among individuals within seemingly homogenous groups and to similarities between apparently heterogeneous communities. This article presents and illustrates 2 such units of analysis: cultural settings and cultural models. These units can produce details needed to address the linked problems of minority underachievement and school reform. We draw illustrations from 2 parallel lines of research: 1 addressed to underachievement of Spanish-speaking children and the other to improvement of schooling and teaching.

This article addresses the concept of culture and describes a way of thinking about and operationally defining aspects of culture in educational research on two connected challenges: the minority achievement gap and barriers to school improvement and reform. Rather than describing and arguing for a set of culture-specific findings, relevant for the education of specific groups of students, we instead describe and argue for units of analysis that tap important cultural factors.

We claim the concept of “culture” can be rendered more practically useful in educational research and practice if we introduce and employ two key ideas—cultural settings and cultural models. We think these ideas have implications for improving achievement not only for ethnic minority children but children in general. We will illustrate what we mean by settings and models in two specific research areas that often invoke the concept of culture yet are not necessarily discussed in close proximity—home influences on learning, and school and teaching improvement.

However, we make no claim of ethnic specificity. To the contrary, we suspect that our findings have more general applicability for understanding (and improving) both home in-

fluences on children’s learning and efforts to reform schools to better serve children and families. Thus, this article will be more an articulation of a point of view and less a review of our and others’ research on the achievement of minority children and how it can be improved through “culture-specific” or “universal” means. Our goal is to suggest some ways the research community can produce information about the relation of culture and achievement that practitioners can use for youngsters who need our help the most.

BRIEF HISTORY

In recent years, culture has been center stage in discussions of the achievement of minority children. Although culture and cultural analyses loom large in today’s research perspectives, that has not always been the case.

A problem of long standing in the United States, the underachievement of ethnic minority students, emerged as a national issue only after the Supreme Court outlawed segregated schools in 1954. Just as Sputnik forced the nation to consider that its educational system was not producing at “world-class levels,” so too did the Supreme Court decision force U.S. society to examine whether it was living up to the promise of equity and fair treatment for all children. Nearly

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50 years after the seminal events of the 1950s, the news remains mixed (National Education Goals Panel, 1997, 1998, 1999). Among the different ethnic groups, educational attainment (degree levels) of all American ethnic groups has risen in both absolute and relative terms, and there has been some progress in educational achievement. Nonetheless, Blacks, Latinos, and Native Americans remain significantly overrepresented among low-achieving students and very underrepresented among high achievers (Miller, 1995).

Prior to the Supreme Court decision, a major research focus was assessing the negative effects on minority child development of segregation and discrimination. The consensus at the time was that minority children, in particular African Americans, did poorly in school because their development was negatively affected by social conditions. Although such results were cited to good effect in legal briefs arguing for school desegregation (e.g., Clark & Clark, 1940), it was quickly challenged as implicitly “blaming the victims.”

The challengers rejected what came to be termed *deficit explanations*. They offered a competing view, sometimes called a *differences explanation*, which attributed minority underachievement to discontinuities between home and school cultures, for example, language, values, behavioral expectations, and so forth (Baratz & Baratz, 1970; Valentine 1971)—not to deficiencies in the child. For example, in one enormously influential study, Labov (1972) concluded that poor performance by inner city African American children was not due to their linguistic deficits; rather, it was due to White testers’ failure to understand the logic and coherence of “Black vernacular English.” In other words, important differences in the language used by these two groups, and therefore poor performance by the children, reflected a failure of communication—a failure due to cultural differences, not child deficits.

Over the next decades, a substantial literature accumulated for several U.S. communities, including African American, Native Americans, Latinos, and native Hawaiians, identifying discontinuities between various aspects of home and school cultures. Researchers and educators hypothesized that these discontinuities were at least partly, if not largely, responsible for widespread underachievement among many ethnic minority children. The central idea was that there were substantial differences between norms of behavior, language usage, cognitive styles, and other aspects of personal and interpersonal functioning that children learned at home and what was then expected at school. These differences—which researchers stressed were not deficiencies in children—interfered with children’s learning in school. A logical conclusion, therefore, was that ethnic minority children’s achievement could be improved if schools identified these differences (or discontinuities) and designed instruction and curriculum that were more compatible with children’s home cultures (Cazden 1986; Erickson, 1986; Tharp 1989).

Although there remains only limited evidence that reducing home–school discontinuities increases student achieve-

ment in the aggregate (Fueyo & Bechtol, 1999; Goldenberg & Gallimore, 1989; Vierra, 1984; although, see Allen & Boykin, 1992, for a different perspective), there are compelling demonstrations of their effects on learning environments. Numerous studies indicate that cultural patterns (e.g., behavior or language use) that are markedly different from school norms and expectations can interfere with the creation of optimal learning environments for some children (e.g., Au & Mason, 1981–1982; Valdés, 1996).

Cultural explanations have also gained prominence in the school reform domain. Sarason (1971) first made the connection a generation ago in one of the most celebrated books on educational reform, *The Culture of the School and the Problem of Change*; a second edition of this classic has recently been published (Sarason, 1996). Sarason’s (1971) message was contained in the title: Changing schools is a problem of changing school culture. School reformers have erred in attempting to change curricula or instruction or school organization. This misses the boat, Sarason (1971) argued; the school’s culture, the very fabric of its existence, is what must be changed.

The concept of school and teacher culture has become widely familiar in the educational research literature, as suggested by the title of Feiman-Nemser and Floden’s (1986) chapter in the third edition of the *Handbook of Research on Teaching*, “The Cultures of Teaching.” Much more informed by a sociological than anthropological perspective, research on school cultures has enriched our understanding of why educators act and think as they do in the context of the schools where they work. This research is potentially enormously important in the domain of school reform. Scholars of school improvement have continued to look at school culture in an effort to understand why successful reform is so difficult and, accordingly, to identify productive avenues for school change (e.g., Fullan, 1991, 1993; Little & McLaughlin, 1993; Wagner, 1994). Most recently, the preeminent theorist of school reform, Michael Fullan, introduced the concept of *reculturation* (Fullan, 1993, 2000), that is, how to change the norms, behaviors, language, expectations, and modes of interaction among the people who work in schools.

GOALS OF THE ARTICLE

Compared to 40 years ago, culture is not only more in focus in educational research and practice, but as the aforementioned citations imply, much progress has been made in understanding the role of culture in educational processes and outcomes. However, there is still much to be done.

First, an enduring problem is the isolation of researchers working on the minority achievement gap from those focused on school improvement. Both experience and findings point to an urgent need to unify findings from these two research communities and to build connections that can sharpen and improve their work. We believe that a critical pathway for im-

proving minority student learning and achievement is improving schools and teaching. Having worked in both communities, we believe that one point of connection between research on minority underachievement and research on school reform is the movement of both toward incorporating cultural analyses into their investigations.

Second, in each of these research communities there is a need for cultural research that contributes critical details needed to plan and sustain effective action for students, families, teachers, and schools. To improve schooling and achievement, and to connect the two communities, we need units of analysis that investigators in each community can use to tap into significant structures, processes, and dynamics of culture as they affect individual students and schools. The issues are practical as well as theoretical.

This article presents and illustrates two such units of analysis: cultural settings and cultural models, which we define in the following section. We want to demonstrate that researching features of culture using these ideas produces the kind of details most needed to address the linked problems of underachievement and school reform. For illustrations, we draw from two parallel lines of research our team has conducted since 1983, one addressed to minority underachievement and the other to improving and reforming schooling and teaching.

The first line of research is a longitudinal study of immigrant Latino families and their children (Gallimore & Reese, 1999; Goldenberg, Gallimore, Reese, & Garnier, in press; Reese, Garnier, Gallimore, & Goldenberg, in press). A principal focus of this study is understanding the achievement trajectory of children who enter school speaking Spanish and the factors associated with their academic outcomes.

The second line of research, built on studies in Hawaii (Tharp & Gallimore, 1988), began in the mid 1980s with a case study of a small-scale effort to improve Spanish-reading achievement in kindergarten and first grade in the same community from which we recruited three fourths of the sample for the longitudinal study (Goldenberg & Gallimore, 1991). A second intervention study in the same community was initiated in 1990 and concluded in 1996 (Goldenberg, 2000; Goldenberg & Sullivan, 1994). A third in-progress intervention was initiated in a different community in 1997. Our general strategy is to collaborate with administrators and teachers to improve teaching and learning—and document and analyze the results of these efforts (e.g., Goldenberg & Gallimore, 1991; Goldenberg & Sullivan, 1994; Saunders & Goldenberg, 1996; Saunders, Goldenberg, & Hamann, 1992).

MODELS AND SETTINGS

By cultural models we mean shared mental schema or normative understandings of how the world works, or ought to work. The concept incorporates behavioral (activity) as well as cognitive and affective components. Cultural models en-

code shared environmental and event interpretations, what is valued and ideal, what settings should be enacted and avoided, who should participate, the rules of interaction, and the purpose of the interactions (D'Andrade, 1995; Holland & Quinn, 1987; Shore, 1996; Weisner, 1984). Although the concept incorporates elements from other approaches, for example, what sociologists refer to as a *norm* (Feiman-Nemser & Floden, 1986; Lortie, 1975), some advantages of a cultural model approach have been presented by several authors who attempted to integrate cognitive, anthropological, and sociological research (Cole, 1996; D'Andrade, 1995; Holland & Quinn, 1987; Shore, 1996).

In more colorful terms, cultural models can be described as “tools for the mind” (Cole, 1985) that represent, in a given community or ecological niche, historically evolved and shared ways of perceiving, thinking, and storing possible responses to adaptive challenges and changing conditions. Cultural models are so familiar they are often invisible and unnoticed by those who hold them. They define for individuals the way things are and should be, those taken-for-granted assumptions only noticed when visiting a society with markedly different models. Models develop gradually, from collectively transmitted information as well as unique and shared experiences (Shore, 1996). We believe cultural models fit well with our second key concept, cultural settings (Cole, 1996; Gallimore, Goldenberg, & Weisner, 1993; Weisner, 1984), and provide some practical advantages for educational researchers.

Our definition of cultural settings borrows from various sources, including Sarason (1972), Tharp and Gallimore (1988), Weisner (1984), and Whiting and Edwards (1988). Sarason (1972) defined a *setting* as occurring “whenever two or more people come together, over time, to accomplish something” (p. ix). Tharp and Gallimore defined settings as homely and familiar:

The social furniture of our family, community, and work lives. They are ... the small recurrent dramas of everyday life, played on the stages of home, school, community, and workplace—the father and daughter collaborating to find lost shoes; the preschooler recounting a folk tale with sensitive questioning of an adult; the child who plays a board game through the help of a patient brother; the Navajo girl who assists her mother's weaving, and in the fullness of time, becomes a master weaver herself. (p. 72)

Both cultural models and settings are constrained and enabled by the ecological niche in which they reside (Weisner, 1984). Family life in modern industrial states often revolves around the 40-hr work week during which many parents earn a living and pursue upward mobility through exercise of their own literacy and numeracy skills. These workplace settings and demands influence parents' developmental models for their children (e.g., valuing early acquisition of literacy skills) and the construction of household settings (e.g., bed-

time story), which they hope foster valued goals. Likewise, educators may benefit from time for collaborative planning, but tradition, complex schedules, and competing demands prevent the creation of settings where meaningful collaboration is possible. In other words, what is possible in a given ecology may determine what settings we can construct and sustain and what cultural models have evolved. For our purposes in this article, we focus more on the interplay of settings and cultural models, leaving discussion of ecological constraints and enablers to another occasion.

In summary, our basic premise is that culture exists (and is created) in settings, those occasions where people come together to carry out joint activity that accomplishes something they value. In homes, common ones include the bedtime story or joint domestic work during which parents engage their children in interactions consistent with shared, often taken-for-granted and implicit models of child development (D'Andrade, 1995; Heath, 1983; Rogoff, 1990; Weisner, 1984). Settings can also be homework time, watching television, and sharing news and events of the day. In schools, common settings (aside from classrooms, which is where teachers spend the overwhelming majority of their time) include faculty meetings to make announcements and discuss operational changes and lunch in the teachers' room that provides one of the few times during the school day that teachers can socialize and interact freely with colleagues. Culture, in the sense we are using this term, is also defined by the absence of settings—not all homes regularly “do” bedtime stories, homework time, family dinners, and sharing news. In many—perhaps most—schools, settings for collaborative work designed to improve teaching and learning steadily simply do not exist.

Our experience suggests it can be useful to keep *setting* and *model* analytically distinct, even though they are manifestly interconnected, and it is difficult to establish the primacy of one or the other. We hope the value of maintaining the distinction becomes evident when we turn to a description of how models and settings have informed our work with minority children, particularly in the domains of home influences on literacy development and school improvement. Rather than offer in this article more definitions of the two units, we offer instead examples taken from our studies of Latino families and school improvement.

SETTINGS AND MODELS AS UNITS OF ANALYSIS: LITERACY, LATINO FAMILIES, AND SCHOOLS

In this section, we use materials taken from a longitudinal study of immigrant Latino families and their children (Gallimore & Reese, 1999; Goldenberg & Gallimore, 1995; Goldenberg et al., in press; Reese et al., in press). The study began in 1989 with recruitment of a randomly selected sample of 121 Latino girls and boys entering kindergarten in two school districts in Southern California. The study is continuing at present, with contacts now mainly with the youths (15 years

old). A mixed-method approach was employed throughout that has produced quantitative data (survey sample) and qualitative data (case sample, randomly selected quarter of survey sample). At kindergarten entry, all members of this sample of second generation Spanish-speaking students were placed in transitional bilingual programs where initial literacy instruction was in Spanish. On entering kindergarten, students exhibited substantial variability on individually administered tests of early Spanish literacy. Achievement variability within the sample continued throughout their elementary and middle school years.

Latino Parents' Model of Literacy Development

Although nearly all parents in our longitudinal sample believe formal education is a key to “becoming somebody,” literacy development prior to school is not a central feature of their cultural model of child development. Rather, these immigrant Latino parents place priority on children's moral development, which they see as a superordinate parental responsibility. *Educación* is the term they use to refer to this “moral” model of child development (Reese, Balzano, Gallimore, & Goldenberg, 1995). *Educación* places the principal responsibility of a parent on the rearing of a moral and responsible child who will become what is referred to as a “persona de bien” (a good person). The goal is a child who is *bien educado*, or “well brought up,” who knows right from wrong, respects parents and others, and behaves properly.

When asked to prioritize activities that parents consider important to do with their children in the preschool years, parents in the case study overwhelmingly ranked reading to children low (9 out of 12) and ranked teaching the children right and wrong and teaching them good manners among the top three activities (Reese et al., 1995). Early reading attempts by children before school starts are perceived as pretending to read or not reading at all. Although parents observe children's attempts at reading and writing, they do not appear to attach much importance to these. Several parents expressed the view that before their child went to school “no sabía nada” (“he didn't know anything”; Reese & Gallimore, in press). In other words, an “emergent literacy” perspective (e.g., Teale & Sulzby, 1986) does not inform their cultural model of the conditions under which children become literate.

Here is an example of what one mother said about her kindergarten:

[A] mother said her daughter pretended to read “although she doesn't know anything.” The mother said her daughter would get the older sister's schoolbooks and “read” them: “She talks to herself and makes it up,” the mother said, laughing. (Goldenberg & Gallimore, 1995, p. 209)

It would be a mistake to infer that this mother had no interest in her child's education. She, as did almost our entire sam-

ple, aspired to a college education for her child (Goldenberg et al., in press). What her comments reflect is not indifference but a cultural model, that construed her son's interest as playful, not a developmental precursor.

When the immigrant Latino parents do read to children, they begin to do so at an age when they believe the child will understand and appreciate what it is that they are reading. Therefore, we received few reports of reading to children under the age of 3. Over one half stated that they had begun at age 5, or at the time that the child began school. Less than one third felt that children below the age of 5 were able to understand; others referred to age 5 as "la edad de la razón," or, "the age of reason." For approximately one third of the sample, religion was a significant reason parents read with children (Reese & Gallimore, in press; Reese et al, 1995). However, even when parents are using texts to teach right and wrong, the salient feature for them is the moral content, not reading to the child to promote literacy.

Another feature of their cultural model is an emphasis on what is sometimes called a "bottom-up" approach to beginning reading (Goldenberg, 1988). Without exception, parents in our sample described the process as learning first the letters or the vowels, putting these together to make syllables, and putting syllables together to make words—the traditional syllabic or phonetic methods used in Latin America when they were children. As we shall demonstrate in a later section, this feature of their model constrains the way they interact with children around literacy activities teachers send home.

In summary, the literacy model described by our sample parents includes at least these features: Emergent literacy behavior of young children has no important developmental significance, learning to read begins in school, learning to read consists of first learning letters and sounds, and success in school (e.g., learning to read) depends on proper moral development. Like any model, it is a bundle of features, but these are the ones most prevalent in project reports and observations, and they are the ones we focus on here.

Variable Model Implementation in Settings: Cultural Models are Not Straitjackets

Seemingly widely shared and endorsed cultural models, such as the one our families described, do not necessarily produce invariant behavior even within seemingly homogenous groups. We observed substantial variations in what was actually implemented when we examined specific everyday settings in immigrant Latino households. Variations were a product of many factors (Gallimore & Reese, 1999; Reese & Gallimore, in press).

For example, in one case the mother had a ninth-grade education, including 5 years of schooling in the United States. In addition, however, she was an active member of an Evangelical church, an involvement that had a profound effect on the kinds of settings in her household (Bible reading, singing

hymns, etc.). This mother, like others in our sample, had limited education, but because of her religious beliefs, created literacy learning settings at home that were somewhat discrepant from the widely shared and endorsed model of literacy development. Another source of variation was the amount of education the parents had in Mexico and how much their parents had (grandparents of sample children). Even modest amounts of education prior to immigration was associated with more frequent use of literacy by parents living in the United States, including on the job and at home (Reese et al., in press).

Another factor that affects what settings are created or exploited is exposure to alternative cultural practices. For instance, one mother worked as a housekeeper for someone she observed reading to a 3-year-old. The mother expressed surprise and commented that in Mexico "reading to a child" was not a common household setting. She also mentioned she had later attempted reading to her own children, although she did not continue because they thought it strange. In other words, she could not easily construct a new setting. In no case did we find parents objecting to such amendments to their practices. Rather, they were open to making changes if they believed it would aid their children, and many reported such changes, although none of these involved their basic view that moral development was a preeminent parental responsibility (Reese & Gallimore, in press).

The most dramatic effect on settings we observed in households was produced by contacts between the home and the school. By direct observation of events in households, we determined there was nearly a 50% increase in literacy settings after a child entered kindergarten. Most of the parents understood or sustained a setting, which could be glossed as homework. Into this setting they fitted many kinds of things. In some cases, children appropriated the setting and incorporated it into their play as "playing school," using discarded textbooks and recycled school worksheets (sometimes from older siblings).

When small Spanish language books were provided by teachers for kindergartners, we observed greatly increased language use in home literacy settings. Although conventional worksheets yielded episodes almost identical in length, parents spoke with their children much more during book reading than did the parents whose children received more conventional copying and letter-learning activities. More specifically, parents gave children more positive feedback, asked more questions, and made more modeling statements. In other words, meaningful texts led to increasingly elaborate verbal scripts during literacy episodes (Gallimore & Goldenberg, 1993).

We make no claim that these variations in settings mean that the cultural models had changed in any foundational manner. Indeed, the model of literacy development that we have described here was widely shared and endorsed. The point is that despite what seems a ubiquitous view on how literacy develops, there is flexibility in what

settings parents construct, and that settings and model analysis sometimes provides useful information for designing or interpreting interventions, as the next section attempts to illustrate.

Using a Models and Settings Analysis to Inform Programs and Interventions

The interconnection between shared models people “hold in their heads” and variable instantiation in everyday settings can influence the effects of an intervention designed for individual children. For example, Goldenberg, Reese, and Gallimore (1992) examined the impact of sending home books on Latino children who were in one of two groups: One group used simple, photocopied storybooks in Spanish (*Libros*); a second group received packets of traditional phonics worksheets. Once or twice per month during the school year a new book or packet of worksheets (depending on which group the child was in) was introduced and used at school, then sent home. Parents were asked to use these materials with their children to help them learn to read. Experienced fieldworkers went into the homes of both groups to observe use of the books and worksheets, with special attention to the nature of the settings. It was expected that the *Libros* would increase the frequency of parents and children coreading, and that these occurrences would impact children’s reading achievement at school. When the *Libros* were introduced, they were slotted into a homework setting that preexisted in almost all households (a setting that was congruent with their cultural model of schooling). However, the parent–child interactions constructed around *Libros* were clearly not those intended by the teachers. Teachers and program developers expected the *Libros* would prompt reading-together sessions in which the parents would read and reread stories with and to their children and engage in interactions about the story, characters, and so on.

As predicted, at the end of kindergarten, children in classrooms using the *Libros* (and accompanying materials) at school and home were more advanced in their literacy development than children in the comparison readiness classrooms (Goldenberg, 1990). However, we were surprised by the following findings: Use of the *Libros* at home was unrelated to children’s early literacy scores. In contrast, use of the phonics worksheets at home was strongly related to children’s early literacy scores (Goldenberg et al., 1992). We think the explanation for both findings has to do with how the parents’ cultural model of learning to read affected how they structured the literacy interactions the materials from school generated.

Although the intent was for parents to use the *Libros* to create an emergent literacy setting around the *Libros*, families instead exploited the materials in ways that made sense to them. They used the little books to have children engage in rote practice and repetition. They did not use them as little storybooks to read, reread, and talk about with children; in-

stead, they saw them as materials to be used to help children learn and remember how to recognize words. Even when a child made a comment about a character or storyline, the parent would redirect the child to practice reading the text. However, parents used the worksheets in ways that were congruent with how the worksheets should be used—to practice the associations between sounds and letters—and also congruent with parents’ early literacy model. In contrast, the *Libros* were used in a way that made sense to the parents but that was incompatible with the nature of the materials themselves. Storybooks make poor worksheets, and if they are used as worksheets, they are unlikely to have any effect on literacy learning—which they did not: Use of the booklets at home had no bearing on literacy attainment at the end of the school year, whereas use of the worksheets did.

The study illustrates the complex interconnection between settings and cultural models. Families may sustain or construct settings in which literacy can take place, but the details can vary substantially depending on personal experiences as well as their cultural model of literacy development. In the case of the *Libros* experiment, parents used the materials in ways consistent with their cultural model of how children learn to read and their perception of the purpose of the homework assignments, whether they were using books or worksheets. If a child brought work home from school, most parents transformed the activity into rote practice, whether that was the teacher’s intent or not (Gallimore & Goldenberg, 1993; Goldenberg et al., 1992).

We believe this study shows the value of empirically assessing both settings and models to successfully accommodate an intervention to a particular cultural context. In the next section on schools and teachers, we show the value of using these units of analysis to untangle barriers to improving teaching. We argue that settings and cultural models are key units for understanding why it is so hard to change teaching in public schools, the topic to which we now turn.

SETTINGS AND MODELS TO GUIDE RESEARCH AND ACTION IN SCHOOL REFORM

In this section, we apply settings and models to a different domain to push our claim that they have broader implications beyond what was mentioned earlier. Along with our work on Latino children’s families and homes, we also examined avenues for improving achievement in schools the children attend. One challenge we faced was identifying a common set of concepts, or tools, to inform our efforts. An advantage of doing this is parsimony, part of the traditional “scientific model” pursuit of explanatory frameworks requiring the least elements necessary that are as general as possible. The desired outcomes are a better, more comprehensive understanding of how culture works in diverse areas of human activity and a move away from idiosyncratic approaches by the vari-

ous research communities that invoke the concept. In our case, the specific motivation is the reflexive problems now challenging the educational research community: Resolving the minority achievement gap and overcoming the barriers to school improvement and reform. Thus, although some may regard extending cultural settings and models to an analysis of school reform as a stretch (even a disconnect between the previous section on early literacy and this one on school reform), we suggest instead it is a logical and practical extension and a potentially fruitful one for some of the most serious challenges facing the nation's schools.

In addition to our studies of Latino families and children, we found that settings and models are useful for understanding key dynamics of school change. Just as family members come together regularly (or irregularly) during the course of their daily or weekly routines—for example, dinner time, church, homework, play time, watching TV—informed by their cultural models, so too do people in schools (teachers, students, administrators, aides) come together in settings on some regular or irregular basis, informed by their normative models. In these settings—classrooms, faculty meetings, grade-level meetings, and the like—the people in schools attempt to accomplish their work. The problem in schools is that settings are rarely as productive as they need to be. Meetings are held and children are in classrooms, but purposes, desired outcomes, and means to accomplish ends are too often unclear. The cultural models that inform settings in schools, and the settings that help shape these cultural models, are often inimical to productive work leading to school improvement. We argue that clearly conceptualizing settings and cultural models can help focus thinking and acting in ways that can further school reform efforts.

Cellular and Collaborative Models in the Culture of Teaching¹

We never had grade level meetings where we had to talk to each other and see what was going on and where everyone was. I remember [when I first started at this school] having to go from room to room and asking what page [others] were on because I had no idea if I was on track or off track or things like that. (Goldenberg, 2000)

The experiences of the teacher quoted earlier are all too common; teachers, especially beginning teachers, work largely isolated from others. They are often on their own and must guess or ask others if they are on track. But, unlike most teachers, the teacher quoted here participated in a 5-year project where norms of collaboration and interaction emerged and helped produce improvements in student learning (Goldenberg, 2000; Goldenberg & Sullivan, 1994). As we

describe later, the culture of the school was fundamentally altered. Cultural models and settings help us understand how and why this happened; our analysis illustrates the utility of these concepts for promoting and studying school reform.

Research on the culture of teaching is filled with images of the teacher as an isolated professional; one adult alone (perhaps with a part-time aide) with 20 to 35 young people. Willingly or not, teachers spend by far the majority of their time working autonomously. Given a choice as to how to spend extra work time, teachers overwhelmingly prefer to work in their classrooms or on classroom-related matters rather than on committees or school-wide matters with other teachers (Lortie, 1975). As Lortie said, teachers' "impulses are organizationally centrifugal; their primary allegiance is to the classroom" (p. 164).

A likely explanation for this orientation is the "egg crate ecology" of teaching; Feiman-Nemser and Floden (1986) called it a "cellular structure." Teachers spend the overwhelming majority of their work time in settings away from other professionals, teaching in classrooms that are essentially little islands unto themselves. Occasionally, the principal or another teacher will walk in for brief periods, but they are not a functional part of the classroom setting. As Lortie (1975) and many others have pointed out, teachers' fundamental orientation is to the students in their classrooms. Teachers are adversely affected when things are not going well with students in their classrooms, and their greatest source of pleasure (their preeminent "psychic rewards," according to Lortie) comes from seeing students learn what the teacher attempted to teach. Given the settings in which teachers work and what occupies the great preponderance of their thinking and behaving, it is not surprising that a cellular model of teaching prevails.

Research over the past 2 decades has suggested, however, that good things happen in schools where cell boundaries become permeable and norms of collegiality and cooperation are established—in other words, when the cellular model gives way to a collaborative model (e.g., Little, 1982; Rosenholtz, 1989). "In collaborative schools, pedagogy and assessment feed on each other, through the interaction of teachers to produce better results" (Fullan, 2000, p. 582). Fullan (1993, 2000) called this shift *reculturing* and suggests that it is a key to improving teaching and learning in schools. Fullan (2000) argued that restructuring is relatively easier to do, but "it makes no difference by itself to improvement in teaching and learning" (p. 582):

What does make a difference is *reculturing* [italics added]—defined as the process of developing professional learning communities in the school, i.e., going from a situation of limited attention, to assessment and pedagogy, to one where teachers and others routinely focus on these matters and make associated improvements. (Fullan, 2000, pp. 582)

How does the prevailing cultural model of teaching, at least this aspect of it, change? We do not really know. As

¹Unless otherwise noted, all quotations in this section are from Goldenberg (2000).

Fullan (2000) pointed out, although we have reason to believe that going from a cellular to collaborative model (where teachers focus collaboratively on how to improve teaching and learning in concrete, operational terms) will help produce improvements in teaching and learning

There is one fundamental remaining problem. The researchers who report these results found collaborative (or non-collaborative) schools as they were, i.e., once they were “up and running.” We know nothing about how these particular schools got that way, let alone how we would go about producing more of them. The particular pathways to collaboration in new situations remain obscure. (p. 582)

Here is where the concepts of settings and cultural models become extremely useful units of analysis, shedding some light on what Fullan (2000) called the obscure “pathways to collaboration” (p. 582).

Settings for Teacher Work and Learning: Pathways for Changing School Culture

A 5-year project in a predominantly Latino elementary school in the Los Angeles area provides an illustration of how the cellular model of teaching can be transformed into a collaborative model through the creation of settings where sustained, focused, and joint work among teachers takes place. In this case, the shift was also associated with improved student outcomes. Goldenberg and Sullivan (1994) sought to improve achievement at the school where Sullivan was principal by using a school-change model to promote structural and cultural changes at the school. In brief, the model identifies four elements to “leverage” change at a school site: *goals* that are set and shared, *indicators* that measure success, *assistance* by capable others, and *leadership* that supports and pressures. Goldenberg and Sullivan’s hypothesis was that these four elements, in concert and strategically deployed, could change the culture of the school, influencing dimensions of teacher thinking (e.g., expectations and efficacy) and behavior (e.g., classroom practices and parent contacts), which would then influence student outcomes. The project was in fact moderately successful in improving student learning. Average achievement at the school improved in both absolute and relative (to the rest of the district) terms, on both standardized and performance-based measures (Goldenberg, 2000; Goldenberg & Sullivan, 1994).

More to the point of this article, important changes in the cultural model of teaching, from cellular to collaborative, also took place at the school. The explanation for how and why this happened helps us address the challenge Fullan (2000) said reformers face—creating the conditions where collaboration among professionals becomes the norm. How, in other words, do we go from a cellular to a collaborative model of teachers’ work? The answer we discovered in this project resided in the creation of settings at the school where the four change elements—goals, indicators, assistance, and

leadership—were actually in operation. It was in these settings that teachers, administrators, and sometimes collaborating researchers met, discussed, planned, and tried out ideas aimed at improving language arts teaching and learning at the school. The settings were places where, as Sarason (1972) suggested, “two or more people [came] together, over time, to accomplish something” (p. ix). The creation and sustaining of these settings, over several years, helped counteract the centrifugal impulses of teaching that Lortie (1975) identified while establishing a pathway for improvement through collaboration.

There was an Academic Expectations Committee (AEC) comprising faculty representatives that developed a set of grade-level goals and expectations in language arts and mathematics (this was 1990–1992, before the standards movement swept the country). The AEC’s successor, the Academic Assessment Committee (AAC), developed and compiled various in- and out-of-the-classroom assessment strategies tied to the academic goals the AEC had formulated. There were also numerous teacher workgroups that provided small groups of teachers with the opportunity to meet regularly (as often as once per week) to focus on a content or instruction area such as math, writing, cooperative learning, or thematic teaching (Goldenberg & Sullivan, 1994). Other settings, such as faculty meetings, grade-level meetings, and the principal’s “cabinet,” already existed but had not been used to promote focused, school-wide, and coherent improvement. These settings proved to be very important in the overall change efforts. They also illustrated the difference between our concept of settings and what is very common in schools—meetings. What distinguishes settings from typical meetings is that in settings (as we define them), rhetoric and talk about school change get translated into actions that then have consequences for teaching and learning. The net effect of all the settings at Freeman Elementary School (the school described by Goldenberg & Sullivan, 1994) was that a shared cultural model evolved emphasizing collaborative work and learning among the entire school faculty. Through the creation of these settings and the adaptation of already existing ones, the culture of teaching at the school was fundamentally altered. A group ethos evolved in which improving student achievement through continued and sustained collaborative work with colleagues became the norm. The following sections will elaborate on these themes.

Models, Settings, and Pathways to Change

It is impossible to overestimate, but difficult to communicate, how thoroughly the aforementioned settings transformed Freeman as a place for teaching and learning and the improvement of both. The settings changed what teachers did and on what they spent their time, but they also changed how teachers thought about their professional activities, in other words, their cultural model of teaching. Teachers focused on their classrooms, certainly; but, it was now generally understood

that part of what they did involved working with other professionals on issues that had direct implication for teaching and learning at the school. As a faculty, they fulfilled the National Board of Professional Teaching Standards's (2000) vision of professionals engaging in "collaborative efforts to improve the effectiveness of the school."

By the 3rd year of the project, every teacher at the school participated in multiple settings outside the classroom directly focused on improving student learning inside the classroom. The settings counteracted the centrifugal forces of teaching and provided common pathways for collaborative work. Teachers' own words indicate how the cultural model of teaching at the school had changed as the settings emerged and evolved. The teacher quoted at the beginning of this section, who reported that "We never had grade level meetings where we had to talk to each other" and that she had to go classroom to classroom to get help as a new teacher, went on to say things had changed quite a bit:

Now [italics added] ... with [the principal's] leadership it's kind of a given [italics added] that there's more communication within the staff, especially within the grade levels, as it pertains to the goals and just communication in general. It's really good.

Her use of the phrase "Now ... it's kind of a given" is significant because it suggests that the very basic assumptions and norms about what teachers are to do—the model of teacher behavior itself, with respect to collegial relations—had changed. Other teachers reported much the same:

All teachers are working together at this point, in grade levels and in teacher work groups. And they're focused on, in all of the groups, to work toward the goals and objectives that were written for all grade levels. All teachers had input on that. They're also all working towards, they're all focused in the same place. It's allowed them to be unified. It's allowed them to feel good about what they're doing.

These examples illustrate one of the themes of this article: Settings and models are interpenetrated. What teachers say they do, where they do it, and how they think about it are seamlessly woven together. The first teacher quoted earlier talks about grade-level meetings as the setting where there is "especially" more communication among teachers; this communication "pertains to the goals" (as well as "communication in general"); and all of this is "really good;" in direct contrast to before, when there was no communication and novice teachers were on their own. The second teacher reveals the same interpenetration, with what teachers do ("working together"), where they do it ("grade levels and ... work groups"), and how they think and feel about it ("focused ... unified ... good about what they're doing") woven together. The settings gave rise to a collaborative model; the

collaborative model informed and enriched the settings. These are rich pathways indeed.

An indication of the intense collaboration within and across settings, a striking contrast with the cellular or egg crate ecology of teaching, is provided by this teacher:

We have our grade-level meetings, and we have our academic assessment committees and ... *they all kind of correlate together [italics added]*. And say at the Academic Assessment Committee if we talked about oh, when you go back to your grade-level meeting ask them about this, this, and that. Remember [get] input before we finalize this. We just don't do things and they're stone. We take them back to our grade levels we look them over and we kind of make changes, take them back and if everyone agrees then we go on from there. *Nobody is left out in the dark and everyone knows what's going on [italics added]*. I would say ... everyone gets to participate in the decision-making at this school. It's very good. (Goldenberg & Sullivan, 1994, p. 17)

A final element of the cultural model of teaching that evolved at Freeman and that we wish to emphasize was that of teacher as learner. Teachers reported that their work on the AEC, AAC, workgroups, and faculty meetings was the best professional development they had ever experienced. Asked how the professional development they had at the school compared to how it was previously, one veteran teacher answered:

I'd say it's remarkably different. A few years ago we had mostly district mandated in-services ... unfortunately they couldn't be more than two or three times [during the year] and it could have been [only] an introduction [or] getting your feet wet, and it's a new part of the curriculum. And then all the in-servicing would stop But now with the workgroups, teachers have time to work on whatever their area of emphasis and it's something that is directly pertaining to our goals. Teachers have time every week, we have release time to get out of class at 1:45, we start our groups and [some of us stay] least until 3:45 or 4:00.

An anonymous survey of the entire faculty ($N = 30$) confirms what this teacher said. On a 1 (*low*) to 5 (*high*) scale, 90% responded 4 or 5 when asked whether workgroups had a positive effect on their classroom teaching; 79% chose 4 or 5 when asked whether workgroups enhanced professional relationships; and 93% rated the quality of interaction among participants a 4 or 5. From teachers' standpoints, the workgroups were clearly successful and made significant contributions to improvement efforts at the school (Powell, 1998). Most significant for the argument we are advancing here, however, is how the culture of teaching had changed at Freeman and the role the workgroups and the settings had played. This was strikingly summed up by a teacher who was asked whether

she thought she was a better teacher as a result of this project. She replied

Definitely. 100% ... 200% ... Everything, it all comes together. Before, we would just have faculty meetings. Then we started having grade-level meetings. It went from the very general to very specific, and yet, back to the general, *because everyone knows what everyone's doing, and you have your meetings, and then you meet with other people and you see what they are doing. It's like one big classroom instead of one big school* [italics added]. (Sullivan, 1994, p. 1)

In short, the experience at Freeman suggests some important new insights into how we can help school cultures get recultured, that is, develop norms, expectations, behaviors, and patterns of interaction that promote collaborative work focused on student learning. Cultural settings and cultural models help illuminate the pathway.

ADVANTAGES OF MODELS AND SETTINGS IN CULTURAL ANALYSES

The idea of culture has provided educational researchers and practitioners with many concepts that have been applied to important educational problems and critical questions. Our purpose in this article has been to offer for consideration two concepts, models and settings, that we have found useful but not typically deployed in research and discussions of culture's role in education. We used them to try and understand the role of culture in two domains that are crucial for Latino children and for children in general: home influences on early literacy development and school reform.

Anyone familiar with the diverse literature on cultural models and settings will quickly realize that our definitions and summaries are broad, bordering on cursory. We also appreciate that this article, because of space limitations, presents few details on setting and model methodologies such as the construction or discovery of cultural models (e.g., Agar & Hobbs, 1985; D'Andrade, 1991). We appeal to anyone interested in these ideas to consult the literatures cited, in addition to many we had no room to include. We also accept that these two concepts themselves are subject to ossification and misuse and by no means represent a full accounting of the referents of culture. Our claim is that these ideas provide certain practical advantages for educational researchers and practitioners.

We found several advantages of using settings and models as units of analysis. Because cultural models are variably organized in everyday settings, this approach provides an empirical strategy for dealing with the variability among individuals in supposedly homogenous groups. By assuming variability in household settings, despite shared cultural models, this approach also provides a way of addressing culture without treating all individuals within a cultural group as alike. The models or settings approach predicts variability, therefore it acts as counterweight to stereotyping tendencies.

Another advantage to this approach is that it permits (perhaps even encourages) identification of commonalities, as well as differences, among presumably distinct groups. For example, although major features of cultural models may be retained, as in the case of immigrant Latino commitment to moral development as a preeminent goal, models are subject to change. Amendment or evolution of cultural models predictably occurs when families (or teachers) move into and must adapt to a new set of ecological constraints and enablers (Edgerton, 1992). We have found this to be the case among immigrant Latino families (Goldenberg & Gallimore, 1995). Moreover, although teachers and parents might have differing models, there may be many shared features around which they can collaborate and many that are complementary. An example of this is parents' and teachers' valuing of formal schooling as an important pathway for social and economic mobility. Focusing on culture as a categorical and discreet variable can obscure these commonalities; examining variation in models and settings can reveal them.

Differences can also be revealed. An example in our own work is the emphasis of the Latino families on early moral development in contrast to the teachers' emphasis on early literacy development. It would not be surprising if teachers and parents failed to realize that education and educación refer to different cultural models of child development. They are complementary, but they reflect different emphases. As a result, teachers may not always recognize why some parents might show so much interest in how their child behaves. It is not because they do not care about academic achievement; rather, it is because good comportment is seen as a foundation for doing well in school. Analyzing culture through the lenses of models and settings permits a more subtle and complex view of culture, one that is closer, we believe, to what culture truly is: dynamic, heterogeneous, and impossible to encapsulate in neat formulas.

Settings and models are interconnected in ways that affect the design and implementation of interventions and innovations. Culture matters, both at home and at school, but the question researchers and professionals have grappled with is, "How does it matter?" The answer is obviously important for more than just theoretical reasons. The impetus for invoking culture to explain minority underachievement and the failures of school reform came from the great practical urgency of these problems and the need to make significant changes in how schools function. One of the benefits of models and settings as units of analysis is that they suggest ways in which schools and school cultures can be changed to better serve the needs of all students.

CONCLUSION

As we noted in the introduction, the concept of culture holds promise for helping us understand and positively influence the course of children's—all children's, not just ethnic minority children's—academic development (Tharp, Estrada,

Dalton, & Yamauchi, 2000). Yet, although culture has had an important influence on certain segments of research and theory, we are hard pressed to find comparable influence on educational policy and practice. There are some examples, such as California's Cross-Cultural, Language, and Academic Development emphasis credential, which requires incorporating cultural content and concepts in teacher training (California Commission on Teacher Credentialing, 1992). However, generally speaking, cultural concepts do not seem to have had a great impact on educational practice. Olsen et al. (1994) argued that in the 1990s spate of reform, issues of culture were largely absent. One possible explanation for this is that the cultural concepts advanced by researchers have not been seen as especially useful for educators whose primary concern is helping children achieve at higher levels.

The problem remains and may become even more important given recent trends. For example, teachers are increasingly being urged to think of their domains of responsibility as extending beyond what they do in their own classrooms and into the domains of the whole school and of the families and communities where they work. The National Board of Professional Teaching Standards (2000), for example, said that although teaching is usually thought of in terms of providing daily learning experiences to students

Accomplished teachers have a range of duties and tasks outside the direct instruction of students that contribute importantly to the quality of the school and to student learning. There are two broad areas of responsibility. One involves participation in collaborative efforts to improve the effectiveness of the school. The second entails engaging parents and others in the community in the education of young people.

Such recommendations run against the grain and defy the cultural models and settings that largely define the culture of teaching. Our hope is that the concepts of models and settings illustrated here can contribute to making the National Board's statements more than well-meaning rhetoric.

ACKNOWLEDGMENTS

The research reported here was supported by Grant P01-HD 11944 from the National Institute of Child Health and Human Development; Grant 199800042 from the Spencer Foundation; Office of Educational Research and Improvement, U.S. Department of Education; Grant R30A60001 from the University of California Linguistic Minority Research Institute; and Grant 89-02-LA3 from the Office of the President, University of California. Additional support was provided by the Neuropsychiatric Research Institute, University of California; and the College of Education, California State University-Long Beach.

We gratefully acknowledge the significant contributions of many colleagues who have contributed to the research described in the article.

REFERENCES

- Agar, M. H., & Hobbs, J. R. (1985). How to grow schemata out of interviews. In J. W. D. Dougherty (Ed.), *Directions in cognitive anthropology* (pp. 413-431). Urbana: University of Illinois Press.
- Allen, B., & Boykin, A. (1992). African-American children and the educational process: Alleviating cultural discontinuity through prescriptive pedagogy. *School Psychology Review, 21*, 586-596.
- Au, K., & Mason, J. (1981-1982). Social organizational factors in learning to read: The balance of rights hypothesis. *Reading Research Quarterly, 17*, 115-152.
- Baratz, S., & Baratz, C. (1970). Early childhood intervention: The social science base of institutional racism. *Harvard Educational Review, 40*, 29-50.
- California Commission on Teacher Credentialing. (1992). *Standards of program quality and effectiveness for professional teacher preparation programs for multiple and single subject teaching credentials with a (bilingual) Crosscultural, Language and Academic Development (CLAD) emphasis*. Sacramento, CA: Author.
- Cazden, C. (1986). Classroom discourse. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 432-464). New York: Macmillan.
- Clark, K., & Clark, M. (1940). Skin color as a factor in racial identification of Negro pre-school children. *Journal of Social Psychology, 2*, 154-167.
- Cole, M. (1985). The zone of proximal development: Where culture and cognition create each other. In J. V. Wertsch (Ed.), *Culture, communication, and cognition: Vygotskian perspectives* (pp. 146-161). Cambridge, England: Cambridge University Press.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Harvard University Press.
- D'Andrade, R. (1991). The identification of schemas in naturalistic data. In M. J. Horowitz (Ed.), *Person schemas and maladaptive interpersonal patterns* (pp. 279-301). Chicago: University of Chicago Press.
- D'Andrade, R. (1995). *The development of cognitive anthropology*. Cambridge, England: Cambridge University Press.
- Edgerton, R. B. (1992). *Sick societies: Challenging the myth of primitive harmony*. New York: Free Press.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119-161). New York: Macmillan.
- Feiman-Nemser, S., & Floden, R. (1986). The cultures of teaching. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 505-526). New York: Macmillan.
- Fueyo, V., & Bechtol, S. (1999). Those who can, teach: Reflections on teaching diverse populations. *Teacher Education Quarterly, 26*(3), 25-36.
- Fullan, M. (1991). *The new meaning of educational change*. New York: Teachers College Press.
- Fullan, M. (1993). *Change forces*. London: Falmer.
- Fullan, M. (2000). The three stories of educational reform: Inside; inside/out; outside/in. *Phi Delta Kappan, 81*, 581-584.
- Gallimore, R., & Goldenberg, C. (1993). Activity settings of early literacy: Home and school factors in children's emergent literacy. In E. Forman, N. Minick, & C. Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 315-335). Oxford, England: Oxford University Press.
- Gallimore, R., Goldenberg, C., & Weisner, T. (1993). The social construction and subjective reality of activity settings: Implications for community psychology. *American Journal of Community Psychology, 21*, 537-559.
- Gallimore, R., & Reese, L. (1999). Mexican immigrants in urban California: Forging adaptations from familiar and new cultural resources. In M. Foblets & C. Pang (Eds.), *Culture, ethnicity and immigration. In honor of Prof. E. Roosens* (pp. 245-263). Leuven, Belgium: ACCO.
- Goldenberg, C. (1988). Methods, early literacy, and home-school compatibilities: A response to Sledge et al. *Anthropology and Education Quarterly, 19*, 425-432.

- Goldenberg, C. (1990, April). *Evaluation of a balanced approach to literacy instruction for Spanish-speaking kindergartners*. Paper presented at the annual meeting of American Educational Research Association, Boston.
- Goldenberg, C. (2000). *Settings for school change: Improving teaching and learning*. Manuscript in preparation.
- Goldenberg, C., & Gallimore, R. (1989, Autumn) Teaching California's diverse student population: The common ground between educational and cultural research. *California Public Schools Forum*, 3, 41–56.
- Goldenberg, C., & Gallimore, R. (1991). Local knowledge, research knowledge, and educational change: A case study of first-grade Spanish reading improvement. *Educational Researcher*, 20(8), 2–14.
- Goldenberg, C., & Gallimore, R. (1995). Immigrant Latino parents' values and beliefs about their children's education: Continuities and discontinuities across cultures and generations. In P. R. Pintrich & M. Maehr (Eds.), *Advances in motivation and achievement: Culture, ethnicity, and motivation* (Vol. 9, pp. 183–228). Greenwich, CT: JAI.
- Goldenberg, C., Gallimore, R., Reese, L., & Garnier, H. (in press). Cause or effect? A longitudinal study of immigrant Latinos' educational aspirations and expectations and their children's school performance. *American Educational Research Journal*.
- Goldenberg, C., Reese, L., & Gallimore, R. (1992). Effects of literacy materials from school on Latino children's home experiences and early reading achievement. *American Journal of Education*, 100, 497–536.
- Goldenberg, C., & Sullivan, J. (1994). *Making change happen in a language-minority school: A search for coherence* (Educational Practice Report No. 13). Santa Cruz: University of California at Santa Cruz, National Center for Research on Cultural Diversity and Second Language Learning.
- Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. New York: Cambridge University Press.
- Holland, D., & Quinn, N. (Eds.). (1987). *Cultural models in language and thought*. Cambridge, England: Cambridge University Press.
- Labov, W. (1972). The logic of nonstandard English. In W. Labov (Ed.), *Language in the inner city: Studies in the Black English vernacular* (pp. 153–189). Philadelphia: University of Pennsylvania Press.
- Little, J. (1982). Norms for collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19, 325–340.
- Little, J., & McLaughlin, M. (Eds.). (1993). *Teachers' work: Individuals, colleagues, and contexts*. New York: Teachers College Press.
- Lortie, D. (1975). *School teacher: A sociological study*. Chicago: University of Chicago Press.
- Miller, S. (1995). *An American imperative: Accelerating minority educational advancement*. New Haven, CT: Yale University Press.
- National Board of Professional Teaching Standards. (2000). *The standards: What teachers should know and be able to do* [On-line]. Available: <http://www.nbpts.org/nbpts/standards/>
- National Education Goals Panel. (1997). *The National Education Goals report: Building a nation of learners, 1997* [On-line]. Available: <http://www.negp.gov>
- National Education Goals Panel. (1998). *Mathematics and science achievement state by state, 1998* [On-line]. Available: <http://www.negp.gov>
- National Education Goals Panel. (1999). *Reading achievement state by state, 1999* [On-line]. Available: <http://www.negp.gov>
- Olsen, L., Chang, H., Salazar, D., Leong, C., Perez, Z., McClain, G., & Raffle, L. (1994). *The unfinished journey: Restructuring schools in a diverse society*. San Francisco: California Tomorrow.
- Powell, A. (1998). *Urban elementary teachers' perceptions of teacher workgroups: Examining professional development through a sociocultural lens*. Unpublished doctoral dissertation, University of California at Los Angeles Graduate School of Education, CA.
- Reese, L., Balzano, S., Gallimore, R., & Goldenberg, C. (1995). The concept of educación: Latino family values and American schooling. *International Journal of Educational Research*, 23, 57–81.
- Reese, L., & Gallimore, R. (in press). Immigrant Latinos' cultural model of literacy development: An alternative perspective on home-school discontinuities. *American Journal of Education*.
- Reese, L., Garnier, H., Gallimore, R., & Goldenberg, C. (in press). A longitudinal analysis of the antecedents of emergent Spanish literacy and middle-school English reading achievement of Spanish-speaking students. *American Educational Research Journal*.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. Oxford, England: Oxford University Press.
- Rosenholtz, S. (1989). *Teachers' workplace: The social organization of schools*. New York: Longman.
- Sarason, S. (1971). *The culture of the school and the problem of change*. Boston: Allyn & Bacon.
- Sarason, S. (1972). *The creation of settings and the future societies*. San Francisco: Jossey-Bass.
- Sarason, S. (1996). *Revisiting "the culture of the school and the problem of change."* New York: Teachers College Press.
- Saunders, W., & Goldenberg, C. (1996). Four primary teachers work to define constructivism and teacher-directed learning: Implications for teacher assessment. *The Elementary School Journal*, 97, 139–161.
- Saunders, W., Goldenberg, C., & Hamann, J. (1992). Instructional conversations beget instructional conversations. *Teaching and Teacher Education*, 8, 199–218.
- Shore, B. (1996). *Culture in mind: Cognition, culture, and the problem of meaning*. Oxford, England: Oxford University Press.
- Sullivan, J. (1994). *Producing change in an urban, second-language, elementary school*. Unpublished doctoral dissertation, Graduate School of Education, University of California, Los Angeles.
- Teale, W., & Sulzby, E. (Eds.). (1986). *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.
- Tharp, R. (1989). Psychocultural variables and constants: Effects on teaching and learning in schools. *American Psychologist*, 44, 349–359.
- Tharp, R., Estrada, P., Dalton, S., & Yamauchi, L. (2000). *Teaching transformed: Achieving excellence, fairness, inclusion, and harmony*. Boulder, CO: Westview.
- Tharp, R., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, & schooling in social context*. Cambridge, England: Cambridge University Press.
- Valdés, G. (1996). *Con respeto: Bridging the distances between culturally diverse families and schools*. New York: Teachers College Press.
- Valentine, C. (1971). Deficit, difference and bicultural models of Afro-American behavior. *Harvard Educational Review*, 41, 137–157.
- Vierra, A. (1984). The relationship between Chicano children's achievement and their teachers' ethnicity. *Hispanic Journal of Behavioral Science*, 6, 285–290.
- Wagner, T. (1994). *How schools change*. Boston: Beacon.
- Weisner, T. (1984). Ecocultural niches of middle childhood: A cross-cultural perspective. In W. A. Collins (Ed.), *Development during middle childhood: The years from six to twelve* (pp. 335–369). Washington, DC: National Academy of Sciences Press.
- Whiting, B., & Edwards, C. (1988). *Children of different worlds: The formation of social behavior*. Cambridge, MA: Harvard University Press.