# 44. Classroom Cultures and Cultures in the Classroom

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### **Classroom Cultures: Introduction**

The adage that "those who cannot remember the past are condemned to repeat it" (Santayana, 1906) has special relevance to the issue of classroom cultures. Current discussions of classroom cultures depend heavily on debates about the most effective forms of classroom organization that occupied the originators of psychology. These discussions also parallel arguments about the nature of culture, which preoccupied the originators of anthropology, of sociology, and of the nascent social sciences in general (Bruner, 1996; Erickson, 1986). Because of its obvious importance, we have attempted, insofar as our scholarly reach allows, to locate current discussions about classroom cultures in a long tradition of research on the role of the culture in the organization of classroom life.

A good deal of what follows can be found distributed in various previously published sources, which we acknowledge in the course of this review. Our task is to bring this material together in a productive way with newer information that is appropriate to contemporary problems of teaching.

As we surveyed this vast territory and attempted to focus our efforts, we have relied heavily on the way in which the editors of this *Handbook* specified our charge. We were told to write about the following:

- The structural, social, cultural organization of classrooms (for example, groups in classrooms)
- · The symbols and rituals of classrooms
- The ways that various classroom groups work together to create a dynamic that is consequential

- The ways that inclusion can be a classroom cultural issue
- The issues of culturally congruent teaching

Drawing on the research summarized by Cazden, Doyle, Erickson, and Feiman-Nemser and by Floden in the previous edition of this *Handbook* (Wittrock, 1986) and on the research reviewed in many similar publications (e.g., Cazden & Mehan, 1989) has sensitized us to the fact that the term *culture* (or *cultures*) is used to refer to quite different orders of phenomena. This disquieting circumstance is evident in the specification of our task. Culture is variously described as a group dynamic that is "consequential" and that involves symbols and rituals, as well as issues of inclusion, that require special attention in order to create conditions called "culturally congruent teaching." That description would present too much weight for one concept to carry, even if the meaning of the term *culture* were not disputed (which it is) among anthropologists when it is being used in what is presumed to be a common fashion!

First, as the opening phrase of our task description indicates, the field widely agrees that every continuing social group develops a culture and a body of social relations that are peculiar and common to its members (Hollingshead, 1949). Hence, without **delving** into exactly what we mean by culture, we can expect that every classroom will develop its own variant. Fine (1987) refers to these variants as "idiocultures," which result from shared activity in a shared space.

Second, at the opposite pole and despite idiosyncrasies, a particular pattern appears to emerge from the variety of individual forms of classroom life that can fairly be called "the culture of the classroom." This normative form, often referred to

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as "the recitation script," was evident in the first formal classrooms that emerged in different parts of the ancient world (Lucas, 1972). That form dominates schooling in many parts of the world today (Gallimore & Goldenberg, 1993; Hoetker & Ahlbrand, 1969; Mehan, 1997). According to Tharp (1993),

Its basic operation is to assign a text for students to learn on their own and then assess the students to see if they learned it. It consists of a series of unrelated teacher questions that require convergent factual answers and student display of (presumably) known information, acquired almost entirely from an assigned textbook. It includes up to 20% "yes/no" questions. Only rarely during recitation are teacher questions responsive to student productions. Only rarely are questions used to assist students to develop more complete or elaborated ideas. (pp. 270–271)

This form of activity, as we will make clear below, has many of the aspects of a ritual, although it is only one of several rituals that are a common part of schooling. This uniformity of classroom life was expressed when the dean of a prestigious college of education remarked that what totally boggled his mind when he went into a tiny, isolated Inuit village in northern Alaska was that the classroom looked just like the many he had seen countless times before in his travels around the lower 48 states.

Our assignment orients us to additional ways in which the term culture is applied in discussions of classroom dynamics. Identifying inclusion as an issue for understanding classroom culture reminds us that participants differ from each other in many ways that influence and are influenced by the cultures of their classrooms. Historically, references to inclusion have been associated primarily with the mainstreaming of children with special needs. Those special needs often are defined in terms of either physical or intellectual handicaps or challenges (Putnam, 1993; Speece & Keogh, 1996). For such children, the ways in which the culture of the classroom is modified to enable effective instruction is a central issue. But categories such as "exceptional" and "normal" are not given characteristics of children; they are themselves culturally constructed and are influenced by teachers' prior expectations and preferences. One teacher may not tolerate a child talking out of turn and may deem the child "abnormal," whereas another may accept the same behavior as viable and normal classroom interaction. McDermott and Varenne (1995) and Mehan, Hertweck, and Meihls (1986) among others have shown that classroom cultures routinely include features that mark children as deviant, even in the absence of any visible handicap.

Contemporary discussions of classroom cultures generally contrast the normative classroom cultural configuration, as described by Gallimore (1996), with the group dynamics (cultural configurations) that characterize the other settings in which children and teachers live, particularly what is referred to as "the home" (Corno, 1989; Shultz, Florio, & Erickson, 1982; Volk, 1997). Later, we will return to this and other attempts to characterize classroom cultures with respect to other settings that children and teachers inhabit. For the moment, it is sufficient to suggest that classrooms—even in the most ethnically homogenous population centers—exhibit patterns of contrasting features that distinguish their sociocultural organization from that of other community settings. All children are "at risk" for exhibiting inappropriate behaviors imported from their home cultures.

The request that we deal with culturally congruent teaching indexes a concern that goes beyond the organization of individual classrooms and beyond a generic contrast between schools and homes. The request orients us to the fact that, in a great many and growing number of cases, teachers and school administrators who implement normative classroom cultures come from one home or community cultural background, whereas students and their families come from another. In these cases, "culture" refers to demographic variations that apply to large populations with long common histories, distinctive languages or dialects, and distinctive ways of life. The prototype that is likely to come to mind when we think about culture and classrooms in this light is a contrast between the teachers and administrators who are middle class, Anglo, monolingual speakers of English and the students who are working class, members of a socially recognized minority group, and speakers of either a different dialect of English or one of many other languages.

At the time of the previous Handbook, recognition of the need to address the home-culture-versus-school-culture issue had generated several interesting research projects that sought to design what was termed "culturally congruent teaching." That term referred to efforts to modify the normative forms of classroom cultures so they would incorporate cultural features of the home. The concept was based on the assumption that such efforts would make mastering the school curriculum easier for children. This work responded to the temper and problems of a time when, because of the Civil Rights movement, the need to address social problems that were associated with cultural diversity and economic inequality became a national priority. Although we will return to consider this line of research later, we can mention the classic work of Au and Jordan (1981), Erickson and Mohatt (1982), Heath (1983), and Philips (1983) as exemplary cases. Each of these investigators dealt with what we might refer to (oversimplifying somewhat) as the "two culture" case. In each study, classroom cultures, including the teacher's cultural background, were analyzed, and classroom procedures were deliberately changed to be more congruent with patterns of adult-child interaction that were prevalent in local community cultural practices. Such changes required new roles and responsibilities for both teacher and student, mediated by different participation structures and implemented through different interaction routines. We judge this work to have been successful in demonstrating the utility of paying close attention to the way that classroom cultures can productively interarticulate with a contrasting home culture to promote academic achievement.

What makes the current historical moment so interesting and difficult is that diversity enters the process of North American education in a way that it did not for the earlier *Handbook* writers. Current discussions of "culturally congruent teaching" can no longer restrict themselves to cases where children come predominantly from a single cultural group and the teacher comes from another. Rather, teachers are more routinely facing three, five, and seven culturally distinct demographic groups and languages in their classrooms. Efforts to include children who vary in a number of physical, psychological, and social ways increase the complexity of classroom cultures and require that we create effective means to deal with the resulting diversity.

Our assignment to consider inclusion and culturally congruent teaching in relation to the question of classroom cultures sets the stage for the sections to follow. We begin by considering more carefully the concepts of "classroom" and "culture," both individually and in relation to each other, and closely allied concepts of "context" and "activity." We argue that classroom cultures are most effectively studied in terms of the activities that constitute them and in relation to the institutional contexts that they, in turn, constitute. After reviewing research on classroom versus home culture issues, we turn to research on modifying classroom cultures to take account of the home-school disjunction, particularly in cases where the cultural backgrounds of the school personnel and the home-community participants are different. We then arrive at the multicultural case and discover that, in important senses, every classroom is multicultural. The challenge is to make this knowledge useful in the organization of teaching and learning. Finally, we discuss the relevance that the activity-centered approach may have for the inclusion of students identified as learning disabled and for the increasing use of computer-assisted instruction.

One note of caution: whether one is speaking of the generic home-school contrast or cases in which different "home cultures" of children and teachers are the focus of concern, we are mistaken to think about classrooms and communities as "pure" types, disjointed from each other. This point was made by Akinasso (1991), who suggested that one should view the home, the classroom, and the social communities that children participate in as a continuum where oral (speaking) and literate (written) traditions blend and reinforce each other. Akinasso was writing primarily in terms of West African conditions, but the same applies in the United States. Many recent studies suggest that a complex web of discontinuities and continuities characterize the relationship between classrooms, communities, and homes (Morine-Dershimer, 1985). McDermott and Varenne (1995) express this complicity by arguing that home and school are two points within a wider system for analyzing differences among people along race and class lines.

### **Basic Issues of Definition and Theorizing**

Roy D'Andrade (1984) argued that competing definitions of terms like *culture* are not, technically speaking, definitions (e.g., "a paraphrase that maintains the truth or falsity of statements in a theory when substituted for the word defined" [pp. 114–115]). Rather, they are more like theories in that they seek to make substantive propositions about an aspect of the world to which they refer. The definitions one offers depend on what kinds of propositions about what aspects of the world one is interested in. In this chapter, we are interested in (a) what definitions and theories can be used to understand how the dynamics of group life in classrooms are related to the consequences of the instructional interactions that occur there and (b) how to deal with the complexities that result from the presence of socially and culturally diverse participants in such settings. Most obviously, we need to agree on what we mean by *classrooms* 

and what we mean by culture(s), and we need to explore the implications of their conjunction in the phrase, "classroom cultures."

### Classrooms

Because our focus is on processes that occur in places called classrooms, to start the definitional exercise by examining what we mean by this term seems best. *The New Lexicon Webster's Dictionary* (1988) makes the matter seem clear-cut; a classroom is "a room in a school or college in which classes are taught." These words are fair enough, but not very informative. And how does this dictionary define a class? "A group of students taught together according to standing, subject, etc." When we put these two definitions together, we get an explanation that classrooms are places in schools where deliberate instruction is arranged for students who are grouped by age and other criteria.

The restriction of classrooms to settings that are a part of social institutions called schools may prove somewhat constraining when we begin to examine ways in which classrooms might be modified to make their cultural constitution more supportive of teaching and learning, but the more restricted commonsense notion of classroom is a good starting place. Matters are more complicated with respect to culture.

# Culture

Two decades ago, Raymond Williams (1976) commented that "Culture is one of the two or three most complicated words in the English language" (p. 76). Among other resources, he could refer to the classic monograph, *Culture: A Critical Review of Concepts and Definitions*, by Alfred Kroeber and Clyde Kluckhohn (1952/1963) that offered more than 250 different definitions of culture.

In its most general sense, the term *culture* is used to refer to the socially inherited body of past human accomplishments that serves as the resource for the current life of a social group, ordinarily thought of as the inhabitants of a country or region (D'Andrade, 1996). The classic expression of this view was provided by E. B. Tylor in one of anthropology's founding documents. In Tylor's view (1871/1903, p. 1), culture is "... that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society."

Following their encyclopedic review of differing ideas about culture, Kroeber and Kluckhohn (1952/1963, p. 181) offered their own omnibus definition, which includes features that we will find useful in later discussions:

Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; cultural systems may on the one hand be considered as products of action, on the other as conditioning elements of further action. Finally, Dahlke (1958), who was explicitly concerned about culture with respect to classrooms, writes that culture has three aspects:

A culture is instrumental: from it people select the techniques of doing things, the means to reach an objective. A culture is regulative: the actions of persons and the use of the instruments are subject to rules and regulations, the dos and don'ts of living. They specify what should be done or must be done. A culture is directive: from it individuals derive their ultimate as well as immediate values, their interpretation of life, the goals for which they strive. Cultural behavior is action based upon a complex of evaluations, i.e., as to what is good or bad, proper or improper, efficient or inefficient, adequate or inadequate, beautiful or trivial, valuable or valueless, free or compulsory. Cultural reality is thus a value reality. (p. 5)

Culture as a social inheritance, as should be clear even from this limited sample, encompasses a broad range of phenomena. Of necessity, scholars draw selectively on this range in their discussions, inviting disagreement and confusion.

### KULTUR AND CULTURES, MORE OR LESS

One of the major areas of confusion concerning discussions of culture, whether in classrooms or in society as a whole, centers around a cluster of dichotomies that produce two opposed interpretations of the "culture-as-inherited-goods" conception. These different interpretive frames have served as the justifications for different ways of thinking about classroom cultures. Despite the simplifications entailed by any general dichotomy, we will follow Stocking (1966) and will refer to these contrasting views as the "anthropological" and the "humanist-evolutionary" approaches (see also Erickson, 1986; Goodenough, 1981; and Harris, 1968, for extensive accounts of this history from different perspectives within anthropology).

Table 44.1 contains Stocking's (1966) series of contrasts between these two views. On the left-hand side of the table is the humanist-evolutionary view. As interpreted within this tradition, culture is something that people have more or less of. As Stocking (1966, p. 870) puts it, culture was associated with the "progressive accumulation of the characteristic manifestations of creativity: art, science, knowledge, refinement, things that freed man from control by nature, by environment, by tradition, by instinct, or by custom." This view implies some absolute criteria for determining "which way is up." To the Northern Europeans, whose technological successes had provided them the power to dominate those people whom their anthropologists studied, their own societies provided the measure against which cultural progress was measured. According to this view, societies do not have discrete cultures. Rather, they possess, to lesser or greater extent, the general culture created by humankind up to the present time. As a consequence, societies can be compared quantitatively to assess their rank on the ladder of cultural progress. Following Goodenough (1981), we refer to this notion of culture as Kultur, because it is so well embodied in German historical theorizing of the 19th century.

Important to the humanist-evolutionary point of view, creating and using culture is a conscious process, which is something that people set out to do. Culture is deliberately created using the highest of human characteristics: reason. Consequently, the fact that one group of people has a higher level of culture than another indicates that those people also use a higher (more powerful) level of intellect. The fact that cultural products are created through conscious action implies that those products are there for anyone to see; they are objective consequences of the process of human creativity. They can be studied by standard quantitative and experimental methods. The final characteristic attributed to the humanist-evolutionary view by Stocking (1966) may appear out of place: the claim that levels of culture are racially determined. However, as Harris (1968) documents in some detail, in the late 19th century, it was common practice to ascribe differences in Kultural levels to racial differences.

The notion of race occupies a contentious place in contemporary social science that we do not propose to review here (see Hirschfeld, 1997, for a recent discussion). Drawing on experimental evidence, Hirschfeld claims that, in the United States, even 3-year-olds treat race as "not simply a function of outward appearance and that, instead, it represents an essential aspect of a person's identity, it is something that does not change over the course of one's lifetime, and it is something that parents pass on to their children." (p. 193). That is, American children and adults treat race as an essential human feature, whether or not it is one. In the study of educational achievement, 19thcentury beliefs that inherited, immutable differences in intellectual potential limit the attainable levels of culture continue to have their champions, especially among psychologists who focus on individual differences (e.g., Herrnstein & Murray, 1994).

In the literature on classroom cultures, the term *ethnicity*, which mixes the notions of race (differences arising from phylogenetic history) with the notion of culture (in which differences arise from historical experience following the origin of any variations in genetic constitution) is most likely to be used (Portes, 1996). For example, Gumilev (1990, p. 171) defines an ethnic group as "a system comprising not only individuals who vary both genetically and functionally, but also the products of their activity over many generations (technique, anthropological terrain, cultural tradition)." Aside from emphasizing the coevolution of human beings' genetic and cultural characteristics, resorting to the term *ethnicity* does nothing to reduce the belief that racial differences are part of differences in cultural levels.

### THE ANTHROPOLOGICAL VIEW

The "anthropological" view, summarized in Table 44.1, can be traced back at least to the writings of Johannes Herder (1966),

Table 44.1. Humanist-Evolutionary vs. Anthropological Views of Culture

Humanist-Evolutionary View	Anthropological View
Culture Varies by Degree	Culture Varies by Quality
Progressive	Homeostatic
Absolute Criteria of Value	Relative Criteria of Value
Singular	Plural
Quantitative Comparisons	Qualitative Comparisons
Culture Used Consciously	Culture Used Unconsciously
Objective	Subjective
Racially Determined	Culturally Determined
-	-

Note: Adapted from "Franz Boas and the Culture Concept in Historical Perspective," by G. W. Stocking, Jr., 1966, American Anthropologist, 68, pp. 867-882. whose ideas about culture gained prominence in anthropology through the writings of Franz Boas (1911). Contrary to the humanist-evolutionary view of a single Kultur, which varies in degree, Boas posited the existence of many different cultures, which vary qualitatively from each other. Each culture, he held, is a historically unique configuration of the residue of collective problem-solving activities among a social group in its efforts to survive and prosper within its environment(s). In contrast to the progressivism and certainty about absolute values of the Kultural view, the Boasian cultural view was decidedly relativistic—relative to historically contingent circumstances. From this pluralistic perspective, all human groups are equally cultured. They make sense to their participants, and they have proven successful in perpetuating the group, even if not in circumstances of their choosing.

In line with his emphasis on the qualitative uniqueness of cultures, Boas noted facts contrary to the humanist-evolutionary perspective's emphasis on the uniformities that distinguish higher and lower cultures. Thus, it was possible to find domains of practice in presumably lower, primitive societies that were distinctly higher, according to the progressivist view, than corresponding achievements in the same domain in various European societies. The abstract art of the otherwise "primitive" Kwakiutl of the northwest coast of North America provides a good example of this phenomenon. Qualitative uniqueness was also supported by evidence indicating a society's culture is not homogenous. It varies internally, depending on the particular patterns of life that the group has evolved together. Consequently, levels of development cannot be measured in terms of a general level of cultural or mental achievement. Levels of development have to be specified in terms of the aspect of culture in question as well as of the framework for judging.

Several additional important features of the anthropological view that is summarized by Stocking (1966) are important to keep in mind. First, this view assumes that, although it is learned, a great deal of cultural knowledge is tacitly acquired and not easily accessible to conscious reflection. The anthropological view does not imply that cultural knowledge is rational in any formal sense; rather, it must be adequate to its everyday problem-solving environments. Second, the dominant versions of the anthropological view tend to restrict the domain of culture to the learned ideational and symbolic systems of the social heritage. This view is most closely associated with the work of Ward Goodenough (1994, p. 265), for whom culture consists of "what one needs to know to participate acceptably as a member in a society's affairs."

Material objects people create are not in and of themselves things they learn.... What they learn are the necessary precepts, concepts, recipes, and skill—the things they need to know in order to make things that will meet the standards of their fellows. (p. 50)

From this perspective, in contrast to the humanist-evolutionary perspective, culture is in people's minds—the mental products of the social heritage.

The symbolic systems view of culture has dominated the study of classroom cultures, and we have great sympathy for it. But we will take issue with the tendency of the culture-asacquired-knowledge view to reduce the role of culture to purely mental doings inside the head or to skills, which are those routinized forms of action that occur automatically and beneath consciousness. A more congenial perspective is offered by Geertz (1973), who balanced a view of culture as subjective knowledge with a view of culture as material practices. In an oft-quoted passage, he wrote that his view of culture begins with the assumption that

human thought is basically both social and public—that its natural habitat is the house yard, the market place, and the town square. Thinking consists not of "happenings in the head" (though happenings there and elsewhere are necessary for it to occur) but of trafficking in . . . significant symbols—words for the most part but also gestures, drawings, musical sounds, mechanical devices like clocks. (1973, p. 45)

Our task would be simplified greatly if we could report that a consensus has been reached within the field of anthropology regarding the correct way to think about culture so that the application of this concept to classrooms would be straightforward. As even a cursory analysis of discussions in the *Anthropological Newsletter* will quickly reveal, no such consensus exists. Naturally enough, what is true of the field as a whole regarding consensus is true of those anthropologists who specialize in trying to understand the nature of education in general and the processes of teaching and learning that occur in classrooms in particular.

For purposes of this chapter, we will seek to turn these terminological uncertainties-cum-theoretical disagreements into a virtue, because, by our analysis, classrooms are, by their very nature, places where at least some aspects of both the anthropological and humanist-evolutionary approaches are relevant.

### The Historical Origins of Western Schooling

The earliest known classrooms appeared in what is now referred to as the Middle East in approximately 3000 B.C. (Bowen, 1972; Lucas, 1972). Their appearance coincides with a veritable explosion in the complexity of life associated with the origins of the first relatively large cities and the new social configurations they produced. Crucial to these changes were (a) improved methods for making tools that enabled the building of canals to control the availability of water, thus, changing the nature of agricultural production; (b) weapons for conquering neighboring people; and (c) writing, which was essential for keeping records of the storage, exchange, and redistribution of goods that the new economic potentials and social structures made necessary. These changes were associated with the emergence of a complex class structure that was dominated by an aristocracy of kings and by priests who headed temples. The first schools arose to train a class of scribes who could serve the administrative and economic needs of newly complex societies. These schools were located in either the palace or the temple, which were, in any event, closely connected. According to Bowen (1972), becoming literate appears not to have been blocked initially by any particular social barriers, but, over time, scribes came to be drawn from the more influential social classes.

Schooling was divided into two basic levels, basic literacy and numeracy, followed by specialization in a branch of the bureaucracy such as religion, law, medicine, the army, or teaching. Pupils were given clay tablet workbooks onto which they copied their lessons. They sat in rows facing a teacher, often assisted by a monitor, ominously referred to as "the man in charge of the whip." The summary of one schoolboy's day, recounted by Lucas (1972) on the basis of a text from about 2500 B.C., has an eerily contemporary flavor:

He fears being late to school "lest his teacher cane him." His mother prepares a lunch hurriedly. Evidently the young scholar has a bad time of it. He misbehaves and is punished for standing up and talking out of turn. He writes in his tablet, gives a recitation, eats his lunch, prepares a new tablet, writes his lesson upon it, is assigned some oral work, and in the afternoon is given another written assignment. Catastrophe strikes when the teacher severely reprimands the student for careless copywork. (p. 24)

Surveying the characteristics of early education in a number of ancient societies,

Lucas (1972) identifies the following commonalties:

- Formal, differentiated schools first arose when the complexity of culture outstripped the capacity of its society to arrange for its reproduction by informal means.
- Formal instruction was possible only when a society achieved a level of complexity that required role specialization, accompanied by an economic base sufficient to free a class of people from direct involvement in production.
- Formal schooling relied on the invention of writing.
- Formal schooling was confined to a small minority of the population, and the knowledge associated with literacy was accorded high value.
- Basic literacy and numeracy were the gateway to esoteric knowledge that was opaque to the ordinary classes of people.

Without belaboring the point, many of these characteristics of the earliest schools were in full evidence when mass schooling was introduced into industrializing societies in the middle of the 19th century. Lucas, who pursues these parallels in some detail, notes that, in 1910, Woodrow Wilson declared that "we want one class of persons to have a liberal education and we want another class of persons, a very much larger class, to forgo the privilege of a liberal education and fit themselves to perform specific difficult manual tasks" (quoted in Lucas, 1972, p. 42).

From his comparative analysis, Lucas (1972) draws two conclusions that are worth keeping in mind as we survey research on classroom cultures, insofar as one's goal of research on this topic is to assist in the process of improving schooling for the broad masses of the public:

- 1. Institutionalized education never directly initiates social change.
- The school inevitably treats students as means to social ends.

# CLASSROOMS AND THE KULTURAL PERSPECTIVE

Central to classrooms from the beginning has been a focus on the transmission of certain "basic" skills associated with literacy and numeracy, which serve as the medium for the preservation, elaboration, and control of highly valued knowledge and skills. From these same beginnings, we find evidence that individuals were considered to differ in their access to the requisite skills, differences that have their origins in class privilege on the one hand, and what, in today's parlance, is termed "academic abilities" on the other hand.

Looked at from the Kultural anthropological tradition, classroom cultures can be compared in terms of the quality of the products that they produce. These products are, of course, student knowledge as indexed by grades and test results. They are the visible, objective evidence of the level of the local classroom culture. These products are assumed to be the result of conscious action on the part of participants, both teachers and students. The focus is on the explicit curriculum and its associated norms and values. Through conscious application of rational thinking and self-control, pupils achieve mastery of the cultural corpus.

Put in somewhat different terms, schooling provides the path to enlightenment and the application of reason to human activities. It is not just a socializing institution; it is a civilizing institution. The products of the highest layers of the social order associated with schooling are taken as the criterion against which the quality of the culture of all those "below" is measured by the social system. This perspective underlies the writings of Hirsch (1987), Bloom (1987), and others who urge the need to maintain the canon of Western civilization and to hold all students, regardless of their cultural background, responsible for knowledge of that canon and acceptance of its underlying values. Alternative criteria have difficulty gaining a hearing, which makes multiculturalism an awkward notion to think about approvingly. Rather, culturally different is, more or less by definition, culturally inferior.

### THE ANTHROPOLOGICAL VIEW OF CLASSROOM CULTURE

The historical fit of the evolutionary-humanist perspective to classroom cultures might, at first glance, seem to render irrelevant the anthropological perspective with its emphasis on relativism, plurality, and the unconscious nature of culture. But as several decades of work on classrooms cited at the beginning of this article have demonstrated, the anthropological approach to culture has played a central role in research on the dynamics of classroom interactions and their consequences for children's educational achievement.

Ethnographic research on schools has long shown that to describe classroom cultures as if they varied on only a single, quantitative dimension is inadequate. Rather, from at least the early 1930s, research has shown that schools (and classrooms within them) are institutionalized settings with their own qualitatively distinctive cultures. For instance, Waller (1932/1965) described schools as distinct social units set apart by welldefined characteristics:

- 1. They are composed of a definite population.
- 2. They have a clearly defined political structure.
- They are the "nexus of a compact network of social relations."

- 4. They are "pervaded by a we-feeling."
- 5. They have a culture definitely their own.

Waller (1932/1965) emphasized that "the" culture of the school is really made up of a number of different subcultures, which are in conflict with each other as a consequence of the contradictions inherent in the institution.<sup>1</sup> Working mostly from secondary sources, Waller details the ways in which school cultures work. He places a strong emphasis on the rituals, folkways, mores, and moral codes that develop within schools. Especially valuable is his awareness that school cultures, although they have a certain exteriority with respect to individual children, do not automatically determine behavior. Behavior is mediated by what Waller calls, following W. I. Thomas (1923), "the definition of the situation."

When we take an abstracting attitude toward these group products we may think of them as folkways, mores, taboos, collective representations, group attitudes, laws, etc. But all of these things affect the individual only as they are incorporated into the situations of his life. (Waller, 1932/1965, p. 292)

This process of incorporation is not a one-way street; rather, it involves a "dynamic reorganization of the parts of the situation into a pattern" (p. 294). Although this reorganization is effected through the explicit communication of norms and values, a great deal of the process is affected by implicit understandings that constitute the "invisible curriculum" of the classroom.

Paramount in his analysis is the fact that teachers represent the culture of the wider social group, whereas students are "impregnated" with the culture of the local community and with what Waller refers to as the special culture of the young that arises in their peer interactions, which take place in settings where adults are not in control. From this perspective, schools are really multicultural social settings where several different cultures converge (even in cases where the population from which students and teachers come is the same):

The culture of the school is a curious mélange of the work of young artisans making culture for themselves and old artisans making culture for the young; it is also mingled with such bits of the greater culture [of the society as a whole] as children have been able to appropriate. (Waller, 1932/1965, p. 107)

Waller cautioned that serious conflicts emerge when the teacher, as representative of the larger society and the culture of adults, attempts to impose adult culture on the indigenous culture of the students. Thus, the teacher's responsibility is to facilitate this imposition by offering students "a finely graded and continuously evolving culture, organized into ever more complex configurations, which simultaneously reduce the tension between the generations" (p. 107).<sup>2</sup>

# THE HYBRID NATURE OF CLASSROOM CULTURES

Even this brief account should be sufficient to urge on us the relevant and necessary view that classrooms are social settings in which we must consider simultaneously classroom cultures both as processes that vary by degrees—for which we find progressivist criteria of valuation, the contents of which are acquired consciously—and as a mediums or processes that vary qualitatively—where what is valued depends much on local aspects of social inheritance, the contents of which are acquired both explicitly and implicitly.

Despite our view that classroom cultures are most usefully viewed in this double-sided way, in terms of general social evaluation of classroom cultures, an asymmetrical means-end relationship exists between the two sides of the classroom-culture coin. Schools have historically served as the means of social sorting and preservation of the social position of more powerful segments of society. Classrooms that do not produce students who master the Kultur of the society in the classroom will be negatively evaluated, whatever the variety of their internal cultural forms and however well they may function from the perspective of those who participate in them. That is, related to classrooms, Kultur sets the criteria for evaluations of cultures, and diversity is, de facto, reduced to a matter of greater and lesser value. At the same time, we cannot understand how schools function without adopting the anthropological viewpoint and its methodology, which focuses on the internal dynamics of classrooms and the relationships of these dynamics to the social context of the school, the community, and the society as a whole.

### Activities

To agree on a proper unit of analysis that allows for comparisons across levels of social aggregation is a key issue for studying classroom cultures as a hybrid of the local and the socialhistorical levels of analysis. Two distinct academic traditions, one from anthropology and one from psychology, converge on the idea that activities are focal units for the acquisition, use, and reproduction of culture that can serve this purpose.

### GOODENOUGH'S "WORKING THEORY OF CULTURE"

In a recent article titled "Toward a Working Theory of Culture," Goodenough (1994) provides a way to meld the different cultural traditions that go into every classroom. Goodenough argues explicitly that culture should not be considered uniform across a society. Rather, culture is rooted in human activities and culture pertains to groups "insofar as they consist of people who engage with one another in the context of those activities" (p. 266). In words that echo Waller's statements about classrooms, Goodenough wrote that

<sup>&</sup>lt;sup>1</sup> Although the earliest known suggestion that activities should be considered the locus of culture came from sociologist Waller (1932/1965), usually, we are taught by cultural anthropologists to analyze the activities of human beings who are living in a certain culture and organize them into cultural patterns. In particular, sociologists and anthropologists who work from an ethnographic tradition have been very useful to understanding classroom life (e.g., Thomas, 1923).

<sup>&</sup>lt;sup>2</sup> Partially formalized structures of behavior known as "activities" serve as excellent examples of cultural patterns existing in the school. Unfortunately, Waller excluded classrooms from his analysis, focusing instead on clubs, sports, and other extra curricular activities.

the cultural makeup of a society should not be seen as a monolithic entity determining the behavior of its members, but as a mélange of understandings and expectations regarding a variety of activities that serve as guides to their conduct and interpretation. (p. 267)

Activities are the proper unit of analysis for cultures, simple or complex, because, in Goodenough's (1994) words,

People who interact with one another regularly in a given kind of activity need to share sufficient understanding of how to do it and communicate with one another in doing it so that they can work together to their satisfaction. All they need to share, in fact, is whatever will enable them to do that. (p. 266)

He goes on to argue,

There is a different culture of the activity for each set of role performers. These differences form part of the cultural makeup of the group of people who perform the activity, but there is no one culture of that activity for the group as a whole, one that all its members share. (Goodenough, 1994, p. 266)<sup>3</sup>

Both parts of the way in which Goodenough links culture to material practice are important. First, one must create sufficient understanding to get the task accomplished. Second, one must differentiate cultural tool kits, depending on the social roles one plays so that (as Waller argued 30 years earlier) the culture associated with an activity is made up of different subcultures.

Applying this line of reasoning to classroom culture sensitizes one to the fact that children and teachers, by virtue of their varying roles, possess different classroom cultures in important ways. This conclusion seems natural enough given that classrooms are explicitly organized for purposes of having adults organize instruction for children. However, it also implies that what transpires in classrooms is likely to involve a fair amount of misunderstanding and to be closely tied to the contexts of acquisition. Although the failure of school-based knowledge to be used outside of the contexts of acquisition is certainly a widespread and widely decried phenomenon (which goes under the rubric of "lack of transfer" in the educational psychology literature), Goodenough's view does not lead to a radical particularism. As he notes, the features he identifies as cultural imply a quasi-organized patterning of knowledge in networks of interdigitized activities. Hence, one can expect shared characteristics across activities (and hence, groups) within a society, to the extent that activities entail each other in networks that structure social life. However, general transfer is not to be expected. As Goodenough (1994, p. 267) puts it, "What is understood about the conduct of an activity may apply to the conduct of many others, but is unlikely to apply to all."

### PSYCHOLOGICAL APPROACHES TO LEARNING-IN-ACTIVITY

Despite his views about culture being learned during face-toface interaction in activities, Goodenough did not, himself, undertake the task of analyzing how cultural knowledge is acquired. And despite repeated discussions of the issue among anthropologists over the past several decades (see, e.g., exemplary materials in Spindler, 1987, 1997), the process of culture acquisition, which presumably classroom instruction is to ensure, has not been the focus of anthropological research. Rather, anthropologists have, by and large, adopted a disciplinary division of labor according to which (a) psychologists are accorded responsibility for understanding the process of acquiring culture and (b) anthropologists focus on cultural content (note that the background to this division is discussed by Wolcott, 1987).

Until 10 to 15 years ago, the result of this division of labor was more or less a total divorce between anthropological and psychological approaches to thinking about culture and thought, either in societies as a whole or with respect to classrooms and the processes of teaching and learning that go on there. A major reason for this disconnectedness was that dominant psychological theories of knowledge acquisition (learning) assumed that culture is irrelevant to the process of knowledge acquisition. One branch of educational psychology, under the influence of the major learning theories of the day, emphasized learning as a process that is guided by reinforcement through which the proper associations, habits, and skills are formed. Even when this view was supplanted by theories that emphasized the learner as an information processor, the outside-toinside view of knowledge acquisition remained a dominant view. The role of the teacher from this perspective was to organize classroom lessons in such a manner as to transmit information from the outside to the inside in the most efficient manner.

A second branch of educational psychology, influenced by Piaget's ideas concerning knowledge as a constructive process, viewed the teacher's role as one of arranging the conditions for children to construct knowledge through active engagement with curricular materials but did not view such arrangements or the process of knowledge acquisition as cultural processes (see for example the chapters in section 5 of the previous volume of this Handbook [Wittrock, 1986] for applications of these viewpoints). Despite their differences concerning the role of teacher and child in the educational process, neither psychologists nor anthropologists assigned to culture an explicit role as an intrinsic part in the learning and construction of knowledge and skills. Consequently, educationalists were confronted with a cultural anthropology that lacked a theory of learning and a psychology of learning that lacked a theory of the role of culture and activity in the process!

Since the early 1980s, interest has markedly increased in approaches to education that view learning and teaching as two sides of a single, culturally mediated process that occurs in socially organized activities (Bruner, 1996; Chaiklin & Lave, 1993; Cole, 1996; Forman, Minick, & Stone, 1993; Moll, 1990; Tharp & Gallimore, 1988). Consequently, in the past decade, a new opportunity has arisen to bring together within a single

<sup>&</sup>lt;sup>3</sup> Goodenough's view that cultural knowledge is, at best, partially shared has been widely substantiated by others (Schwartz, 1978; Wallace, 1961; Wolcott, 1991).

academic enterprise the two sides of the culture-learning nexus that is so central to classrooms.

For contemporary psychological approaches that emphasize the role of culture in the development of thought, a major inspiration was Lev Vygotsky (1978, 1987), a Russian scholar who founded what he referred to as a cultural-historical psychology that was based on the premise that human psychological functions develop through participation in culturally organized activities. He formulated what he described as a "general law of cultural development" that serves as the starting point for thinking about the role of classroom cultures in the process of education. According to Vygotsky (1981, p.163),

Any function in children's cultural development appears twice, or on two planes. First it appears on the social plane and then on the psychological plane. First it appears between people as an interpsychological category and then within the individual child as an intrapsychological category ... but it goes without saying that internalization transforms the process itself and changes its structure and function. Social relations or relations among people genetically underlie all higher functions and their relationships.

According to psychologists who adopt a focus on activities as units of analysis, "Through participation in cultural activities that require cognitive and communicative functions, children are drawn into the use of these functions in ways that nurture and develop them" (Gallimore & Goldenberg, 1993, p. 315). As a heuristic device for making the study of learningin-activity the object of empirical research, Gallimore and Goldenberg (1993) suggest five activity-setting variables: (a) the personnel present during an activity, (b) the salient cultural values, (c) the operations and task demands of the activity itself, (d) the scripts for conduct that govern the participants' actions, and (e) the purposes or motives of the activity (p. 316).

Barbara Rogoff (1993), who also draws on Vygotsky, directs our attention to close affinities between his thinking and the educational philosophy developed by John Dewey. For example, in a passage that resonates strongly with Gallimore and Goldenberg's application of Vygotsky's ideas, Dewey (1916, p. 26, cited in Rogoff, 1993, p. 141) wrote:

The social environment ... is truly educative in its effects in the degree in which an individual shares or participates in some conjoint activity. By doing his share in the associated activity, the individual appropriates the purpose which actuates it, becomes familiar with its methods and subject matters, acquires needed skill, and is saturated with its emotional spirit.

In her research, Rogoff (1994) applies these ideas to a school organized around her conception of communities of learners. In her discussion of the community-of-learners model, she examines what she refers to as the pendulum swing between adult-run and child-run models of educational activity. She makes clear that the community-of-learners model "is not a balance or 'optimal blend' of the two one-sided approaches, but is instead a distinct instructional model" (p. 214). In the community-of-learners model, children are involved in ways that connect authentically to the object of the activity and that

provide them with genuine motives for their actions instead of ways that require them to carry out preset pieces of an activity. For example, students' decisions on curricular projects are based on students' interests and on the potential effect of such projects on local settings and global circumstances (i.e., research on pollution versus memorization of weather terms). Working together in changing participation structures that are appropriate to the goals at hand, participants (including the adults present) serve as resources to the community of learners. The resulting educational activity is a blend that does not replicate either side of the dichotomy between adult-run and childrun instructional approaches.

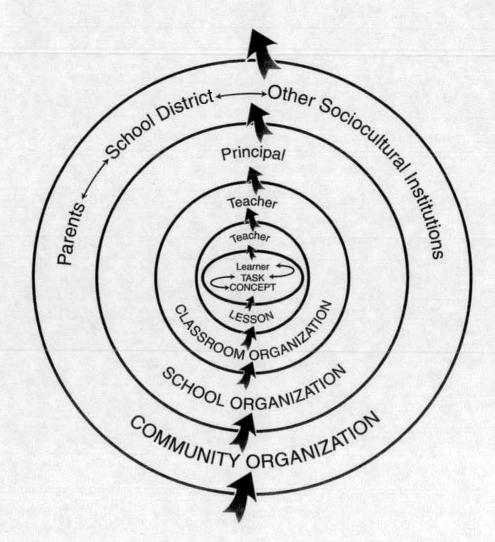
### Context

Whether individual lessons or the ensemble of lessons that occur over the course of a classroom day, classroom-based activities serve as the center of the process of teaching and learning. Psychologists and anthropologists who are concerned with culture and learning in the classroom are acutely aware that to focus only on such activities without attending to their contemporaries, which are historical and sociocultural-ecological contexts, is insufficient. Whether inspired by cultural anthropologists or psychologists who adhere to activity-based approaches to learning and development, theorists of classroom cultures and learning often evoke the idea of context along with or in place of the concept of activity as a routine part of their attempts to understand classroom processes (see Cole, 1996, for a comparative analysis of different formulations of these general ideas).

### CONTEXT AS THAT WHICH SURROUNDS

As noted by Cole, Griffin, and LCHC (1987), context—no less than culture—is an extremely complex and polysemous concept. Dictionary-derived definitions define context as "the whole situation, background, or environment relevant to a particular event," whereas environment is defined as "something that surrounds." The notion of context as "that which surrounds" is often represented as a set of concentric circles representing different "levels of context" (see Figure 44.1).

Roughly speaking, the different rings of context correspond to disciplinary boundaries used by those interested in educational processes. Psychologists, microsociologists, and ethnographers are most likely to focus on the activity or unit in the middle, which is some kind of face-to-face instructional interaction between the teacher and a student (or small group of students). The level of the classroom as a whole is most likely to be investigated by sociologists and anthropologists with interests in the activities at that particular level. The same is true of the community of which the school is a part; when the focus is the activities that take place at this level, sociologists, economists, and political scientists are likely to be conducting the research. To the extent that scholars do not work together across those borders, the dynamics among levels that are intrinsic to the contextual approach to thinking about teaching and learning are obscured. The result is a strong proclivity to see larger contexts as determining smaller, embedded ones, thereby over960 MARGARET A. GALLEGO, MICHAEL COLE, AND LABORATORY OF COMPARATIVE HUMAN COGNITION



**Figure 44.1.** An application of the notion of context to thinking about the organization of educational activity. *Source:* From *Contextual Factors in Education* (p. 7), by Cole, Griffin, and the Laboratory of Comparative Human Cognition, 1987, Madison, WI: Center for Education Research.

looking the interactive coconstruction of the different levels of context.

This same concern motivates ecological-psychological approaches to study behavior with respect to classrooms in their social-ecological context, the tradition that has been closely associated with such figures as Roger Barker (1968), Irwin Altman and Joachim F. Wohlwill (1978), and many of their colleagues and students (e.g., Gump, 1978; Schoggen, 1963, 1979). Their use of the term *ecological* orients us to the interdependence of each component in a system. With respect to the concentric circles representation of context in Figure 44.1, a socioe-cological approach underlines the fact that every activity is embedded in a set of reciprocally linked relationships.

As useful as it has proven itself to be in ecopsychological work and despite the constant warnings of microsociologists, ethnographers, and ecological psychologists, the notion of context as "that which surrounds" is typically used in a linear way, from "top to bottom"—from the macrosociocultural context to the local, face-to-face context. This tendency is especially strong in discussions of education (the quality of a lesson depends on the quality of the classroom, which depends on the quality of the school, etc.). Used in this fashion, the notion of context is reduced to the notion of an independent variable, which makes it convenient as a tool of analysis within a Kultural framework.

#### CONTEXT AS THAT WHICH WEAVES TOGETHER

Critics who favor "levels of context" as being actively woven together in interaction, point out that context as that which surrounds implies that environmental events come before, during, and after behavior. Consequently, context cannot function as an independent variable (for representative discussions, see Bateson, 1972; Lave, 1993; McDermott, 1993). This tradition draws on the Latin root of the term *context—contexere*—which refers to the process of weaving together. Ethnography figures large in adherents of this approach, because to observe the process of weaving is necessary; it cannot be discerned from the pattern it produces. From this latter perspective, we are not surprised that good lessons can occur in dingy classrooms and bad schools can occur in what would ordinarily be construed as good neighborhoods (Kozol, 1991; Rutter, Maughan, Mortimore, & Ouston, 1979).<sup>4</sup>

### CONTEXT AS ACTIVITY

At present, we are witnessing a coming together of the research traditions associated with those for whom context or activity served as the core organizing category. Engeström (1987, p. 67) provides one model of a synthetic approach when he declares "From an activity theory perspective, contexts are activity systems." This central premise is foundational to Engeström's (1987, 1990) applications of activity theory. Engeström also rejects a choice between context as that which surrounds and that which weaves together. He identifies human activity as a system comprising the subjects (agents, viewpoints, or subjectivities); the tools (skills, equipment, ideas); the object (which provides motive); the desired outcomes (objects transformed into some end); the rules (formal and informal, explicit or tacit ways of working with the object); a community (which shares the object with the subject, even if for different desired outcomes); and a division of labor (how actions are divided up in an activity). (See Figure 44.2.)

All of these aspects of human activity are drawn together around the object-the problem or topic that compels the subject into engagement. The object is only partially understood; it continually evades the subject's efforts to define and transform it into some outcome. We can apply this heuristic device to a hypothetical discussion of a class lesson as an activity. Let us position the teacher as the active subject. The teacher confronts a student or the students as the object of her work to effect a particular change in the children, the object. The tools used might include a lesson plan, chalk, a blackboard, and past experiences. The students engage with the teacher and with one another. As the teacher acts toward the students (object), she or he plus others in the community who share the object (other students, others involved in the lesson plan, potentially including administrators who concerned with what goes on in the classroom or parents who hear about the child's day) are drawn together around the object but hold variable orientations to it. Each party to the work directed toward the object seeks to transform its own conception of the object into a desired outcome or result (for example, normatively, a successful lesson, a quiet student, a good speller, an efficient test taker, and so forth).

Engeström's notion of an activity system is similar in important respects to the ideas of Gallimore and Goldenberg (1993) mentioned above. Engeström's framework provides a set of useful heuristics for analyzing the organization of educational activity and, therefore, the process of change. The activity system

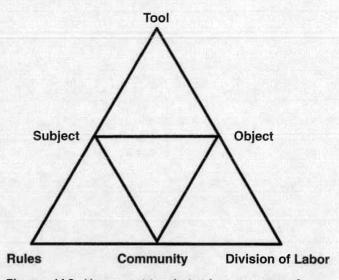


Figure 44.2. Human activity depicted as a system. Source: Adapted from Learning by Expanding: An Activity-Theoretical Approach to Developmental Research (p. 78), Y. Engeström, 1987, Helsinki: Orinta-Konsultit Oy.

as a unit of analysis also provides for including an expanded social-ecological world indicated in the concentric circles model (Cole, Griffin, & LCHC, 1987).

### ACTIVITIES AND PARTICIPATION STRUCTURES

We need to consider one additional conceptual tool that is widely used by those who adopt an activity-centered approach to classroom culture, the concept of participation structures. Courtney Cazden (1986, p. 437) defined participation structures as "the rights and obligations of participants with respect to who can say what, when, and to whom." Cazden was drawing on the work of Susan Philips (1983), who identified four participation structures that were characteristic of the classrooms she studied: (a) the teacher interacting with the whole class at once, (b) the teacher and students interacting in small groups, (c) the one-to-one interaction between a teacher and a single student, and (d) the student's having no interaction with the teacher or peers (seat work). In addition to identifying distinctive participation structure types, Philips found that their frequency and duration differed both within classrooms and across grade levels. She makes a point that will reoccur throughout the rest of this chapter: Each participation structure has distinct advantages and disadvantages for providing students with access to curriculum content, thus limiting the extent to which any single arrangement comes to be used to the exclusion of the others.

As one seeks to evaluate the relationship between the activities and participation structures and the people who use the vocabulary of activity systems, it is helpful to note that both

<sup>&</sup>lt;sup>4</sup> As Kenneth Burke (1945, p. 23) remarked several decades ago, consideration of action and context lead easily into paradox because the very notion of substance (sub-stance) must include a referent to the thing's context "since that which supports or underlies a thing would be a part of the thing's context. And a thing's context, being outside or beyond the thing, would be something the thing is not."

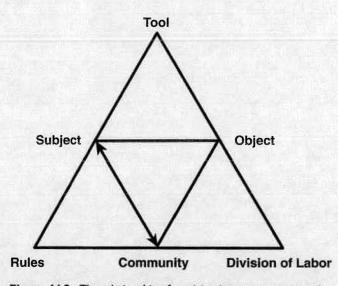


Figure 44.3. The relationship of participation structures to activity showing the absence of an object. Source: Adapted from Learning by Expanding: An Activity-Theoretical Approach to Developmental Research (p. 78), by Y. Engeström, 1987, Helsinki: Orinta-Konsultit Oy.

Philips (1983) and Doyle (1986) are mute with respect to the object(ive) of the activity that students and teachers engage in when they come together in the classroom. That is, a focus on participation structures is a necessary part of the analysis of any activity, but it undertheorizes the object of the activity. This difference is illustrated by comparing Doyle's "natural segments of classroom life," which include the following:

- Patterns for arranging participants
- · Roles and responsibilities for carrying out actions
- Rules of appropriateness
- Props and resources used

In Figure 44.3, we see the relation of participation structures to activity by noting that Doyle includes four features, all of which map onto Engeström's model of activity, but the object is absent. The significance of including the object of activity in one's analysis is illustrated by the way in which differential objects and corresponding motives may occur with the same participant structure. This analysis indicates that activities cannot be reduced to participation, but must address the intentionality of these participants. That is, arranging the physical classroom environment to support variable interaction patterns does not address the distinct and sometimes competing understanding in the purpose of the task (i.e., object) among participants.

### The Road Ahead

Using our brief treatment of basic conceptual and definitional issues as a foundation, we now move to consider recent research on classroom cultures with respect to the teaching and learning processes that go on there. We begin with what might be considered a monocultural view of classrooms, which gives rise to the whole-group recitation as the dominant cultural form. We highlight the similarities in those normative classroom arrangements across a multitude of specific instances, and we examine evidence on both how this kind of classroom culture is constructed and how it is learned by children in the early school years. The monocultural, recitation-based approach to classroom cultures, despite its prevalence, also generates problems and forms of resistance. After viewing the manifest difficulties with the monocultural approach, we turn to its alter ego, which is activity-based educational programs in which the overall culture of the classroom emerges from lessons that are organized in small groups with a more distributed system of power and responsibility among participants.

These additional materials set up the conditions for approaching a main concern in this review, namely, how to conceive of the sources of educational inequalities and how to think productively about teaching in classrooms peopled by increasingly diverse students. We seek to make clear (a) how current evidence argues for full recognition of the multicultural nature of all classrooms, (b) the need for teaching strategies that use well-integrated sets of appropriately organized activities, and (c) what the policies are that break down barriers between schools and local communities.

### The Culture of the Classroom

As we noted above, research has shown that all classrooms are heterogeneous with respect to the participation and activity structures that constitute the school day and the objectives of instruction that are implemented with children according to many criteria. This variability in participation structures and activities is made explicit in Doyle's (1986) excellent review of classroom activities in the previous edition of this Handbook. Summarizing his own work as well as that of Gump (1974, 1975), Silverstein (1979), and others, Doyle views classroom organization as an organized system of participant structure and activities. He notes that although all classrooms are characterized by particular distributions of segments defined in these terms, even a classroom that might be characterized a la Philips as "teacher acting with the whole class at once" does not use this participation structure 100% of the time. Rather, although certain kinds of segments may dominate daily classroom life, all classrooms are organized into classrooms segments. For instance, Doyle summarizes research conducted across two decades that consistently categorized classroom organization into three dominate segments: approximately 65% seat work, 35% whole-class presentation or recitation, and 15% transitions and other housekeeping events (Adams & Biddle, 1970; Gump, 1967, 1982; Sanford & Evertson, 1981, quoted in Doyle, 1986, p. 398). That is, individual seat work plus recitation accounts for the overwhelming time spent in a significant number of classrooms.5

Different schools and classrooms are characterized by differ-

<sup>5</sup> These activity structures sum to more than 100% because, at times, seatwork and whole-class instruction overlap.

ences in the number of segments identified (from 11 to more than 50), depending on researchers' definitions. So, for example, Berliner (1983) identified 11 such segments in K-6 classrooms: reading circle, seat work, one-way presentation, twoway presentation, mediated presentation, silent reading, construction, games, play, transitions, and housekeeping. Yinger (1977, 1979) moved outside the classroom to include a range of educational events that members of a classroom might encounter. He reports 53 activities including book reports, library, reading group, reading aloud, silent reading, math games, math units, creative writing, newspaper, spelling bee, weekly reader, science unit, art in room, assembly, cooking, field trips, and the like. Consequently, in discussing the culture of the classroom, we must keep in mind that local cultures are woven together from variable numbers of local activities and their constituent participation structures.

# The Canonical Pattern: The Case Study of Westhaven

Although the precise number and structure of activities differ somewhat from study to study, almost all American elementary school classrooms are dominated by the cultural pattern identified with the recitation model, which Philips refers to as the participation structure in which the teacher acts with the whole class at once.

An excellent example of the overall process that creates this dominant pattern is provided by Norris Brock Johnson's (1985) study of a school he calls Westhaven. Johnson's study is unusual in the concrete detail with which he reveals the interconnections among different levels of context that constitute classrooms. He pays close attention to the architecture of the school and the ideology of the local community. His study provides an unusually full picture that illustrates the emergence of the dominant pattern over the course of the age-graded curriculum from kindergarten to sixth grade. At the same time, he places the developmental pattern in its broader institutional, community, and ideological context.

Johnson (1985, p. 15) clearly states the basic contextualecological perspective that activity-centered approaches are a part of the following:

The school buildings children are required to frequent and the special areas with which and in which they interact are much more than passive wrappings for classroom life. The buildings, spaces, and associated artifacts that make up public school environments of traditional design (Gump & Good, 1976) physically manifest and replicate core themes in American society and culture. Sociocultural information is presented to children in public school both consciously and unconsciously through physical and spatial school environments as well as through teachers in classrooms.

This starting point makes it clear that the relationship between people and the environments they construct is reciprocal (Sarason, 1971, 1996). Buildings and architectural spaces are products of human social and cultural activity that simultaneously shape the processes that produce them. Johnson (1985) describes how the physical arrangement of classrooms and school buildings not only facilitates explicit practical functions (e.g., the separation between classroom areas and playground areas) but also reveals the implicit assumptions of the participants (e.g., that schoolwork and play do not mix). He goes beyond this general level of analysis to show that deep, unstated assumptions pervade the physical construction of the school and the activities that occur there. For example, although it is generally believed that play and work cannot be appropriately mixed for sixth graders, the same is not true for kindergartners. When viewed through a contextual–ecological lens, we can see how assumptions about age-related developmental differences are built into the overall architecture of the school as well as the physical properties of each classroom and the way that activities are organized there (see Figures 44.4–44.6).

At Westhaven Elementary School, approximately 30 students are assigned to each classroom. In the earlier grades, the children are small and their furniture is small. In the older grades, the same number of children are present in a classroom, but because their desks are larger to accommodate their growing bodies, they are relatively more crowded. Mobility is restricted according to age-grade level. In the preschool classroom, children sit at desks pushed together or at a large table. The classroom contains a set of toy stoves, a toy kitchen, a large rug, and ample space for storing books and toys. Johnson (1985, p. 33) writes that these arrangements orient children toward behaviors and types of interaction that reinforce classroom norms and values of cooperation and interdependence.

The free play, mobility, and comparatively unstructured activities associated with this grade are congruent with the physical and spatial characteristics of the classroom. Throughout the school year, preschool children are conditioned to adhere to predominant classroom cultural and social themes through their interactions with specific furniture shapes and furniture social arrangements.

These convergences extend, of course, to the social relations that characterize the preschool classroom. The relations are designed to initiate children into the culture of classroom life. In this sense, the preschool classroom (as its name implies) is deliberately designed to be transitional. The children learn to accept the authority of the teacher, but this authority is exercised in a parentlike way that Johnson refers to as "in locus parentis behaviors," characterized by nurturing and accommodation. (He notes that all teachers in the lower grades are women; the only men are in the upper-grade classrooms). A great many of the activities that occur in this preschool classroom focus on routines of learning, self-maintenance and control, and the ability to follow the sequences of activities in a timely and orderly manner.

As Johnson traces the spatial arrangements and activities to higher and higher grades, a regular, converging change is seen in the physical layout of the room, the forms of activity that occur within the room, and the relationship of the room to both the building it is in and the school campus as a whole. In kindergarten, the toy stoves and sink are gone. Children still sit together at tables in groups, but the tables are separated to form five distinctive groupings. By second grade, the rug area has disappeared, and by fifth grade, students are no longer grouped at tables but sit in their own chairs, bolted to the floor in neat rows, with all desks facing the front of the classroom where the teacher sits at a desk facing them. Now no play is sanctioned

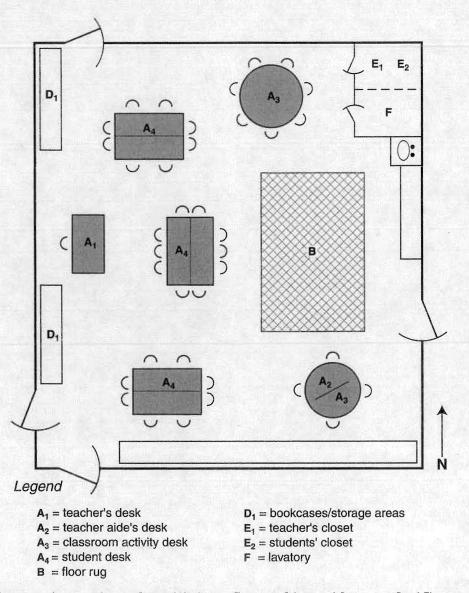


Figure 44.4. A kindergarten classroom layout. Source: Westhaven: Classroom Culture and Society in a Rural Elementary School (p. 58), by N. Johnson, 1985, Chapel Hill, NC: University of North Carolina Press.

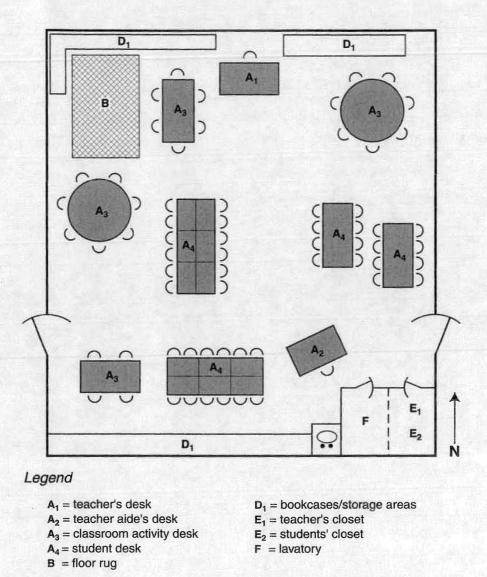
in the classroom; play occurs out on the playground. The range of classroom activities is greatly reduced and the recitation script is fully implemented as the normative cultural order of the classroom.

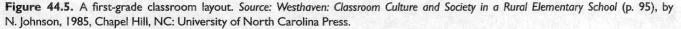
The blend of functionality and value expressed at the classroom level is also illustrated in the physical arrangement of the school building. That is, the building layout and equipment are points of reference for action. They become elements in action and organize the normative and functional order. (See Figure 44.7.)

The sociocultural themes of separation and specialization of domestic tasks are represented in the architectural forms associated with rank and stratification. For example, the elementary school building is organized for dividing labor into specialized tasks. Learning areas are separated and isolated from the office and support areas (lunchroom, supply rooms, maintenance, and so on). The administration area is located strategically near the school's main entrance so personnel can monitor behavior and can restrict access of parents or other visitors. This order is illustrated by the prominent posting at the front of the building that instructs all visitors to sign in at the main office.

These modes of surveillance that are represented in the architectural organization of the school grounds are consistent with larger societal trends. For example, Foucault (1979) observed that the traditional school classroom's physical arrangement students in rows facing forward and the teacher on a raised platform at the front of the room, enabling the teacher to maintain surveillance of students—was developed in the same time period (roughly 1820–1840) as the development of prison architecture that enabled surveillance of all inmates from a central observation tower (the metaphorical Panopticon). The resemblance of schools and prisons does not escape notice. It is evi-

### CLASSROOM CULTURES AND CULTURES IN THE CLASSROOM





dent in students' complaints that school is like a jail and that they are treated like criminals, as well as in teachers' comments that they feel "locked in" (Johnson, 1985, p. 243).

The segregation of the students is purposeful and deliberate. Johnson focuses great attention on the distinction between elementary, middle, and secondary school in regard to the differential rank, status, and prestige. A student's passage through the elementary building to the middle school mobile trailers to the high school building involves crossing several sociocultural boundaries. (See Figure 44.8.) Segregation of the children is strictly enforced; for example, carrying messages back and forth requires special passes.

Johnson (1985) reports that becoming a student is a process of cultural conditioning in which children are pressed to adopt the way of life of the classroom (the classroom culture) as their own. For instance, many features found in the Westhaven preschool were associated with modifying the values and behaviors that children bring to school. "The social system of classroom expects norms for behavior not merely to be obeyed by children but to be internalized by them as well" (Johnson, 1985, p. 51). A distinction is made between those children who have internalized customary classroom norms (for example, good students) and those who have not (for example, problem students). To some degree, the ability to adhere to norms of decorum is also used as the basis for academic sorting.

At Westhaven, the sorting of children within age groups happens early. Preschool students are ranked, divided, and then placed in different kindergarten rooms. The schooling of children ranked into high and low groups occurs in different classroom spaces that are designated as high and low classrooms. The spatial separation between the ranked subgroups is important and makes the status and rank of each more distinct. Johnson (1985) noted that "as the grade level increases, high and low sessions between grade levels grow more similar than high

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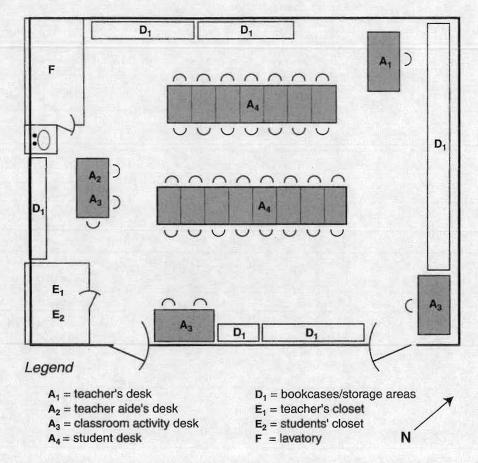


Figure 44.6. A fourth-grade classroom layout, typical of middle and upper elementary grades. Source: Westhaven: Classroom Culture and Society in a Rural Elementary School (p. 185), by N. Johnson, 1985, Chapel Hill, NC: University of North Carolina Press.

and low sessions within each grade level" (p. 243). Low-group instruction introduces more public ridicule and monitoring of students by the teacher but less literacy instruction than in the high sessions. As Mehan and his colleagues have shown, this kind of tracking is almost impossible to undo without explicit and deliberate institutional efforts (Mehan, Villanueva, Hubbard, & Lintz, 1996).

Johnson documents differential treatment according to gender throughout the children's schooling experience. These patterned, gendered roles apply to both students and teachers. The association with a motherlike figure in the preschool is consistent with the themes of nurturing and tolerance encouraged in the early grades. However, as expectations for children change (to perform academic tasks and produce products), so too do the desirable attributes of the teacher. In the upper grades, male teachers are associated with more instrumental, task-oriented activities. Different bodies of knowledge and subject areas are associated with males (e.g., wood shop) and females (e.g., art and music). In addition, classroom bias regarding females was strongly expressed in the upper grades. For example, girls were routinely delegated to carry out classroom housekeeping chores. Johnson noted a ". . . harem-like quality to the classroom as the male teacher crowded out younger males (students) and was surrounded by prepubescent females" (p. 242).

Johnson's analysis of Westhaven richly supports the ecologi-

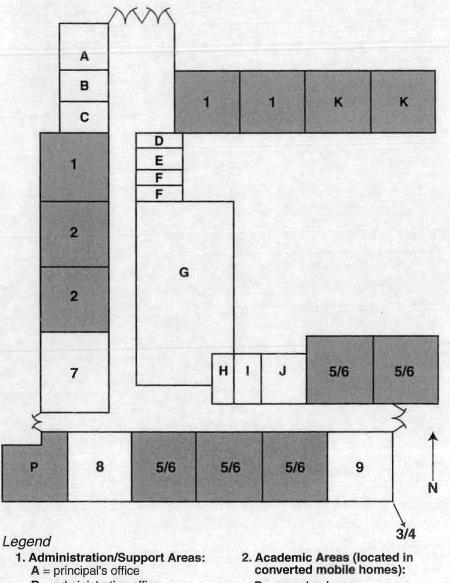
cal view that the physical environment is a set of "symbols representing ideas and practices in the social realm" (Rappaport, 1976, quoted in Johnson, 1985, p. 15) that store social and cultural information. They make concrete the dominant sociocultural themes, make visible the conceptual order of the sociocultural system, and serve as "material manifestations of metaphysical ideas" (Leach, 1976, p. 36).

# Learning the Culture of the Classroom

The foregoing should make clear that the average classroom is likely to present real challenges to children encountering it for the first time. Several analyses of children participating in elementary school classrooms support this basic expectation. The following examples illustrate how a single participation structure (in this case the structure of "one teacher to whole classroom") take different forms depending on the object of the lesson.

### LEARNING THE RECITATION SCRIPT

Mehan (1979) studied a mixed, first-through-third-grade classroom in San Diego, California. He focused on a discourse pattern referred to as an initiate-respond-evaluate (I-R-E) sequence. This pattern embodies the basic recitation script in



- - B = administrative office
  - C = teachers' lounge
  - D = supply room
  - E = maintenance room
  - F = lavatories
  - G = lunchroom/multipurpose room
  - H = kitchen
  - I = health/nurse's room
  - J = conference room

- P = preschool room
- K = kindergarten rooms
- 1 = first-grade rooms
- 2 = second-grade rooms
- 3/4 = third and fourth-grade rooms
- 5/6 = fifth and sixth-grade rooms
- 7 = music room8 = art room
- 9 = mathematics laboratory
- Figure 44.7. The Westhaven Elementary School building layout. Source: Westhaven: Classroom Culture and Society in a Rural Elementary School (p. 23), by N. Johnson, 1985, Chapel Hill, NC: University of North Carolina Press.

which the teacher initiates the interaction, the students supply a response, and the teacher evaluates this response. For example,

Teacher: What does this word say? Beth: One. Teacher: Very good.

In line with the idea that patterns of discourse are socioculturally organized so classroom cultures can be learned, Mehan (1979) reports that, over the course of the school year, these kinds of interaction sequences run more and more smoothly; students learned when was appropriate for them to talk and what was appropriate for them to say. For example, at the start

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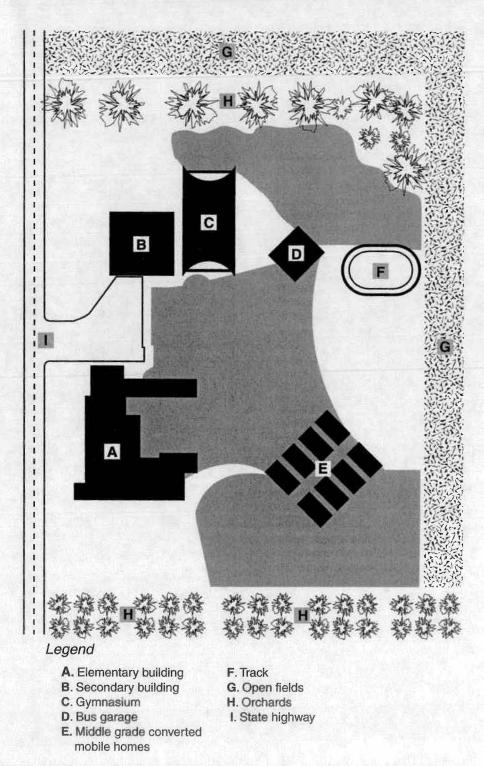


Figure 44.8. The Westhaven school complex layout. Source: Westhaven: Classroom Culture and Society in a Rural Elementary School (p. 14), by N. Johnson, 1985, Chapel Hill, NC: University of North Carolina Press.

of the school year, when students offered information, it was appropriate to the ongoing interactions and was responded to by the teacher and other students only 30% of the time. By the middle of the year, students were making appropriate contributions that were followed up on 80% of the time. Students not only contributed more appropriately, but also contributed more actively. In September, only 10% of the instructional sequences that Mehan observed were initiated by students. By January, students were initiating more than 30% of the sequences, manifesting their knowledge of and participation in the normative cultural order of classroom lessons. In this simple form, much of the teaching of the I-R-E discourse pattern happens implicitly because it is modeled within the interaction.

### TAKING ATTENDANCE IN BRITISH FIRST SCHOOLS

Mary Willes (1983) documented the work required of children and teacher in learning a particular version of the I-R-E sequence. She conducted her study in British first schools during the earliest months of children's participation in formal schooling. Because the children are so unfamiliar with the requirements of life in classrooms, a good deal of rather explicit culture teaching is directly observable. For example, in the classroom she observed, the teacher made an explicit routine of calling the register. She noted that many teachers simply mark children present when they arrive, but in this classroom, the teacher said that registration was a requirement the children would meet frequently in the future, so it was worth taking up lesson time for. Willes describes one session in which the teacher assembled the children and reminded them of what was to happen and what they were to do: "Teacher: Now, are you ready to answer to your names? (murmur of assent). Yes. Good. And we only answer to our own names, don't we? We don't say 'yes' to anybody else's" (Willes, 1983, p. 69).

With these very young, novice, school-goers, formulation of the rules was insufficient. The children had to learn to behave appropriately. A few minutes after giving the instructions, a young boy responded "yes" when the teacher called the name of a girl named Catherine. The teacher responded by jokingly suggesting to the little boy who answered to Catherine that she should call him Catherine for the rest of the day. Willes comments, "The teacher's response was good humored, but it left nobody in doubt that a mistake has been made, and that it was regarded as foolish" (p. 70).

### FIRST CIRCLE IN A U.S. SCHOOL

In kindergarten and the early elementary school grades, a common practice is for teachers and children to begin the school day by gathering as a group in a special part of the classroom that is designed for informal interaction (Bremme & Erickson, 1977; Dorr-Bremme, 1990; Michaels, 1981). In the classroom studied by Bremme and his colleagues, this activity was referred to as "first circle." During first circle, a group of 25 or so children engage in a variety of tasks: "They organize for activities to go on later that morning, fill in a calendar, and determine who is absent; they share personal experiences and engage in brief teaching-learning experiences" (Bremme & Erickson, 1977, p. 153). Dorr-Bremme (1990) has noted that the conduct of first circle seems a simple matter, something that the teacher and children just do. But close analysis of videotaped sessions of first circle over the course of 2 years revealed that it was composed of seven distinctive kinds of activities, each with its own internal structure and norms of appropriate behavior. (See Table 44.2.)

Two additional kinds of events were also observed: "time out," when someone from outside the classroom came to talk to the teacher and students looked on while murmuring quietly among themselves, and "breakdowns," when none of the constituent events of first circle was in evidence and order was reestablished through negotiation between children and teacher. Looking closely at the patterning of interactions among teachers and children during each potential first circle segment revealed that each was characterized by certain rules that constrained the meaning and appropriateness of participants' behaviors. The hidden complexity in the simple arrangement is illustrated here:

1.	Teacher:	It should be a good day today, as a
2.		matter of fact.
3.	Lisa:	It's cold out.
4.	Teacher:	It's cold out so Lisa [wants to keep Me and
5.	Wannetta:	Me and
6.	Teacher:	Lisa wants to keep her jacket on.
7.	Wannetta:	Me and Jimmy went over to, me and Ah, ah, ah! Wait a
8.	Teacher:	Ah, ah, ah! Wait a
9.		minute. Wa[it a minute! Yeah, wait a minute!
10.	Richard:	Yeah, wait a minute!

During segment-types 1–6 (see Table 44.2), the children sit facing the teacher in a semicircle, and the teacher invariably initiates the topics for discussion. The appropriateness of student responses depends on which segment is in effect. During segment 7, children initiate topics by making "bids" for a turn to speak, either by calling out or raising their hand. Children orient toward the speaker, not the teacher. In contrast with segments 1–6, during segments 7–9 children never mention school topics, and what the teacher says supports and reinforces the student's topic.

Bremme and Erickson (1977) note that when they first started their research, they were aware of neither the segments of first circle nor the patterning of behavior that characterized each segment. They learned about the appropriate cultural patterns through detailed observations, which they verified with the teacher. If these adults needed time to learn the appropriate cultural order, so did the children. At the beginning of the school year, the teacher discussed first circle routines with the children. But the children also learned through experience by participating in the activity. Evidence for the processes by which learning occurred came from cases where the children behaved inappropriately (from the perspective of the local cul-

### Table 44.2. Potential Segments of First Circle

- 1. Greeting and noticing (about the weather, about clothing, etc.)
- Reviewing morning activities, in particular, "work time" (which follows first circle and during which instruction takes place in small groups)
- 3. Distributing students to work-time activities
- Doing the calendar (which allows the teacher to involve individual children in filling in the date and to engage all children in orienting to units of time, etc.)
- 5. Taking attendance (which provides multiple opportunities to count and to scan the group for missing members, etc.)
- 6. Teaching specific matters relevant to morning activities (e.g., how to paste, being measured by a visiting nurse, etc.)
- Sharing personal things (e.g., recounting personal events that occurred outside the classroom such as a birthday party or an unusual trip)

Note: Adapted from "Contextualization Cues in the Classroom: Discourse Regulation and Social Control Functions," by D. W. Dorr-Bremme, 1990, Language in Society, 19, 379–492.

tural norms) because their breaches called forth corrections from the teacher.

To understand how children came to learn the behaviors appropriate to the different segments of first circle, the researchers noted that the teacher engaged in various behaviors that marked the end of one segment and the beginning of another. Following the work of Gumperz (1982), they referred to these behaviors as "contextualization cues" or "context markers." The most obvious such cues were formulations, which are more or less explicit statements about what was currently supposed to be happening in first circle. "Let's see who is not here today" is a cue that attendance is now the relevant context. Paralinguistic cues that mark a shift in context (or an effort to maintain an ongoing context), such as increases or decreases in the rate or loudness of the teacher's speech and the use of framing words (such as "All right" or "OK") followed by a brief pause, were recurrent markers that a new context was about to occur. Nonlinguistic cues, such as where the teacher was looking or how she oriented her body with respect to the group, also played the role of contextualization cues.

The importance of contextualization cues for creating and maintaining the normative classroom culture is highlighted by the fact that when such cues were present, the relevant context was always established or maintained. But when the teacher failed to provide contextualization cues, the cultural order came unglued or, in the researchers' terms, was "unestablished." Then the teacher and children engaged in somewhat chaotic interactions until an appropriate segment of first circle was reestablished.

An important fact about the processes observed by Bremme and his colleagues is that contextualization cues appeared to be deployed and responded to without ever being the explicit topic of conversation. This finding highlights a central characteristic of the anthropological approach to culture in general, including classroom cultures: Although some cultural knowledge is acquired through explicit instruction, a great deal is acquired implicitly and often occurs outside of participants' conscious awareness. Whether cultural knowledge is conscious or not, the data are clear: Children learn to behave in terms of their local classroom cultures.

### **Difficulties Engendered by the Dominant Patterns**

Despite its dominance, the widespread and persistent treatment of the recitation script in classrooms is associated with wellrecognized problems. We will take up two prominent problematic areas: tracking and resistance.

# Differential Instruction (Tracking) in Classrooms and Schools

Numerous studies have demonstrated a pattern, which has been shown to vary with ethnicity and class, of differential instruction within classrooms according to ability level (Cazden & Mehan, 1989; Eder, 1983; Rist, 1970). Others have examined differences across classrooms (Henry, 1963; McDermott, 1993; Mehan, Hertweck, & Meihls, 1986; Oakes, 1985) and between entire schools and school districts (Anyon, 1980; Oakes, Gamoran, & Page, 1992).<sup>6</sup>

Focusing on within-classroom practices, many researchers have recorded systematic instructional differences during teacher and student interactions in the participation structure that is often referred to as "small group reading" (Allington, 1980; J. Collins, 1986; Eder, 1981; McDermott, Godspodinoff, & Aron, 1978). As a means of providing appropriate and necessary instruction to children of variable reading abilities, reading groups have the advantage of supporting more intimate discussions between children and teachers than is afforded by a whole-group approach. However, they can also be used as a means of providing systematically different kinds of educational activity, despite a superficially similar participation structure.

For instance, Eder's (1981) analysis of the teacher-student interactions across the groups revealed different objectives of the instruction. Participants in the high reading group were engaged in attempting to comprehend the text, whereas the instruction for those in the low reading group was primarily concerned with the objective of decoding text. These instructional differences were reinforced by the teachers' presumptions concerning students' content knowledge. That is, teachers assumed children in the high group had read the entire text before their participation in reading group. Therefore, the teacher discussed the main themes of the text with the children. The open discussion format provided opportunities for children to apply the story's content to their own lives.

When the same teacher interacted with the children assigned to the low reading group, she assumed that the children had not read the text and, therefore, the task for the reading group was "getting through" the story. Each child was directed to read a designated portion of the text aloud (round-robin). This approach resulted in children tuning out until their turn to read. As students struggled to read aloud, others lost patience, and the teacher interrupted the flow of the story to help the child sound out the word in an effort to move the action along. These children did not gain experience understanding text and, in turn, required more help, which resulted in more interruptions. These factors work to ensure that the low group children remain the low group children.

Differential treatment also occurs across classrooms within a single school according to the type of course, for example, advanced, regular, remedial. In addition to gaining differential access to curriculum and instruction, students in different tracks get different kinds of teachers. Some schools allow teachers to choose their teaching assignments according to seniority, whereas other schools rotate the teaching of low- and highability classes among teachers. Whether teachers choose classes or schools assign teachers to classes, students in low-income and minority neighborhoods are more likely to get less-

<sup>6</sup> In addition, a growing body of research has documented differential treatment of students according to gender. See, for instance, Paley, 1986; Sadker & Sadker, 1994; Thorne, 1993; Walkerdine, 1989; Weis, 1988. experienced teachers than students in more affluent neighborhoods (Oakes, Gamoran, & Page, 1992). Thus, students who have the greatest need for the best teachers are apt to get the least qualified.

Even in the face of apparent instructional differences, many schools would deny curricular tracking. Oakes (1985) documented that tracking is widespread but is often described as selective career tracks. Yet research has documented that the distribution of students to general or academic tracks seems to be related to ethnicity and socioeconomic status rather than simple preference or selection of career aspirations. Oakes, Gamoran, & Page (1992) found that students from low-income or one-parent households, or from families with an unemployed worker, or from linguistic and ethnic minority groups are more likely to be assigned to a low-ability group or track. Those researchers concluded that the relationship is both simple and direct (for example, the greater the percentage of minorities, the larger the low-track program; the poorer the students, the less rigorous the college prep program). Mehan and his colleagues (Mehan, Villanueva, Hubbard, & Lintz, 1996) not only have documented the practice of tracking but also have challenged it through creating special classes designed to untrack students.

Allan Luke (1991, pp. 133-135) described the tracking phenomenon as reflective of selective traditions.

The literature we select, the methods and strategies we use to teach and assess, and the knowledges and competencies we disburse selectively to different groups of students are selections from the plurality of cultures extant in the modern Western nation state. Perhaps more importantly, these selections are not random, but selections which serve particular economic interests and political ends. . . . From this perspective no approach [to literacy] is neutral. All are utterly implicated in distributing to and perhaps depriving children and adults power, knowledge, and competence to particular economic and political ends.

# Resistance to Official and Unofficial Discourse

At the same time, one can identify a dominant cultural pattern in any classroom or school. To demonstrate that this cultural pattern is acquired and performed by participants, one can also identify various countercultures that exist in contrast to the official classroom order. Clearly, teachers' and students' official and unofficial verbal exchanges influence each other. During official discourse, the teacher controls classroom interactions. Using the basic recitation script, teachers can initiate, regulate, and terminate all interaction and can manage the allocation of student turns.

In addition to the official classroom discourse, students learn how to negotiate an unofficial system of communication among peers. The classic study conducted by Opie and Opie (1959) revealed the extensive and creative use of language in children's interaction with each other both inside and outside the classroom and school. But the unofficial script is often ignored or is used as an example to other classroom members of what not to do. Although much of the unofficial talk is off-task (i.e., not directly relevant to the teacher's definition of the instructional task at hand), current research has documented that, in some cases, the unofficial discourse represents the students' attempts to work out a connection between the two discourses. For example, Gutierrez, Rymes, and Larson (1995) identified points in an ongoing classroom discussion when students seemed to be having a separate conversation, but closer examination indicated that the discussion was not a counterscript but earnest attempts by students to make sense of the classroom content.

Unofficial discourse is often interpreted as resistance to adult authority and the prescribed classroom culture. D'Amato (1987, p. 359) claims that resistance is inherent in the nature of the school, "and all children need some rationale for justifying to themselves the act of participating in it." Drawing on the work of Ogbu (1978, 1983) and Erickson (1984), he argues that children develop the rationale for participating in school from the beliefs held by their parents and the people in their communities about the value of school. Such beliefs are based on their experiences with matters of family history, racial or ethnic history, and class structure, as well as from the meaning of school events "for ongoing identities and relationships, particularly within children's peer groups" (D'Amato, 1987, p. 359).

When children are persuaded by the structural "implications of school for settings outside the school," such as the potential rewards of school achievement and the harms of school failure, they apply themselves to the work of education with little more than token resistance (D'Amato, 1987, p. 360). In this case, D'Amato (p. 360) argues, "Teachers hold the cards of power, and children are willing to organize their peer affairs in terms of teacher standards and of social processes managed and evaluated by teachers."

When the structural implications of school are not compelling to children, however, they confront school politics directly and openly. Thus they exhibit more hostile, disruptive opposition to school (D'Amato, 1987, p. 360). Paul Willis (1977) describes working-class, male high school students who are destined for futures as laborers and who resisted both the meritocratic model for success espoused by their teachers and the work values used to disqualify their resistance to the status quo. When such opposition is present, D'Amato argues, youths are more likely (a) to organize peer relationships around peer standards and processes that are managed and evaluated by peers and (b) to judge the acceptability of teachers and lessons in terms of their peer culture. D'Amato's concern for the factors influencing the contexts in which students comply with or resist educational activities could be extended to emphasize things such as student perceptions of the meaningfulness of the activity and rapport with the teacher.

Many applications of resistance theory (Erickson, 1987; Giroux, 1983) highlight how student's attitudes and behaviors, influenced by history and the social context, influence their educational careers. Resistance theory provides a way to introduce human agency into overly deterministic models of school's influence on the economic, social, and cultural reproduction of the social order. Such models often leave little room for the "moments of self-creation, mediation, and resistance," which active human agents experience (Giroux, 1983, p. 259). Resistance theory provides an additional element in our understanding of and explanation of (a) how school experiences vary, even within similar social groups, and (b) how microcultures that develop in different contexts (i.e., classroom cultures) support or interfere with school success.<sup>7</sup>

Although the oppositional behavior of working-class youths makes sense as a form of resistance to an institution that cannot deliver on its promise of upward mobility for all students, Mehan (1997) cautions us not to romanticize student's nonconformity. Not every instance of student misbehavior is a case of resistance (Erickson, 1984; Mehan, Villanueva, Hubbard, & Lintz, 1996; Ogbu, 1992). Mehan (1997) suggests that acts of resistance be examined through careful analysis of the social situations. For instance, ditching school, smoking in the hallway, and crumbling homework may not stem from an articulate critique of relations of domination from the point of view of the student. Because researchers in the critical ethnography tradition associate conflict and resistance with relations of teachers to children from historically subordinated groups, the fact that resistance is not limited to interaction between children from low-status families and teachers from higher-status groups is important to note. Linking resistance only to subordinated groups is dangerous, because it can stigmatize their actions as abnormal or pathological (Panofsky, 1995).\*

# Disputing the Dominant Pattern: Activity-Based Classroom Cultures

Although the whole-group-lesson recitation paradigm dominates classrooms in the United States and other industrialized countries, attempts have long been made to implement alternative participation and activity structures. In these attempts, classrooms are physically arranged to change the normative social relationships, and efforts are made to ensure that content is of interest to children. Cuban (1984) reviews the history of efforts to replace what he refers to as teacher-centered instruction with child- or activity-centered instruction, which we will treat as more or less synonymous with what Dewey (1938) referred to as progressive education. Cuban discusses in some detail two major attempts to implement child-centered instruction.

# The New York City Activity Program

The Progressive movement in America was the foundation for the Activity Program, a 6-year experiment beginning in 1934. Eventually involving 75,000 students and 2,200 teachers in 69 schools, it became the largest demonstration of progressive practices in the nation. Although the program's goals shifted throughout a 6-year period, major concepts in the Activity Program were (a) children as well as teachers participate in selecting subject matter and in planning activities; (b) the program centers on the needs and interests of individuals and groups; (c) time schedules are flexible, except for certain activities that may have fixed periods; (d) learning is largely experimental and inquiry-based; (e) formal recitation is supplemented by conferences, excursions, research, dramatization, construction and sharing, interpreting, and evaluating; (f) discipline is based on self-control rather than on imposed control; (g) teachers are encouraged to exercise initiative and to assume responsibility for what transpires in their classrooms; (h) the teacher enjoys considerable freedom in connection with the course of study, time schedules, and procedure; and (I) emphasis is placed on instruction and creative expression in the arts and crafts.

During the Activity Program experiment, teachers participated in staff development and in the design of elaborate syllabi and classroom suggestions. Listings of community resources were compiled and distributed to teachers interested in the Activity Program. Teachers filled out questionnaires and surveys. Students took tests. Classrooms were observed regularly to record teacher and student behaviors.

Physical environments were sought that were conducive to the proposed learning and teaching activities and styles. Referring to the trend in education toward an activity program, project-based method, William Caudill (1941, quoted in Dahlke, 1958) stated: "The architect should interpret the curriculum in terms of architecture. That is, the architecture must meet the educational demands." Caudill suggested that because courses of study were not regarded as finished products but were always revised, classroom structure should be flexible, using movable furniture and partitions. This flexibility in course structure would also allow for cooperative work in different-sized groups.

The focus on aiding children to develop their interests and abilities called for nooks or corners in classrooms for individual instruction. Conference rooms should be provided for parents. Meeting rooms for PTA and neighborhood culture programs would help to integrate home, church, community, and school as well as provide educational opportunities for adults. Flower gardens, vegetable gardens, and schoolground landscape could facilitate taking mathematical problems from the experiences and environment of the children. Small health clinics were essential for most schools to support the health and the physical and mental development of the child.

The Activity Program experiment ended in 1941 with mixed results. A major evaluation of the project revealed that few teachers put the Activity Program into practice for the entire school day. The regular classes spent 93% of their time in teacher-led whole groups, whereas the activity classes spent 84% in the same manner. The researchers declared that this difference was "not as large as one might expect in view of the fact that the programs presumably are quite different." Observations in experimental and control classrooms revealed that the amount of time spent on formal subjects such as arithmetic, reading, spelling, and social studies was "nearly the same in activity and control classes." In short, findings showed a notable, though not revolutionary, shift in the dominant participation structures, but the content of instruction was materially unchanged.

Members of the evaluation team did find that the average

<sup>7</sup> To describe and fully critique "resistance theory" as it is used by different theorists is beyond the scope of this paper. Giroux (1983) and Lave, Duguid, Fernandez, & Axel (1992) offer critiques of work that falls under the general category of resistance theory.

<sup>8</sup> Moreover, emphasis on racial stratification in explaining minority school failure may underemphasize the role that class, or socioeconomic status, plays in making possible or in constraining school success. See Fine (1987), Foley (1991), and Willis (1977) for examples of this issue.

activity class differed from the average control class in various ways. They found an outward appearance of pupil self-direction in activity classes. Activity classes allowed more diversity and a larger range of tasks during certain periods of the day. The Activity Program included more projects of the sort that correlate various enterprises and skills as distinguished from projects that study isolated subject matter. Also, activity classes provided for greater public display of the products of the pupil's work.

The study concluded that the Activity Program had been most successful (a) at getting students to participate and cooperate in group; (b) at encouraging student movement in classrooms; (c) at developing positive student attitudes toward school, teacher, and peers; and (d) at teaching purposeful, orderly, and courteous behavior. Teachers were less successful at developing flexible use of classroom furniture, workbenches, and tools and at reporting regularly to parents. The study also revealed that elements of the Activity Program had spread to regular schools, some of which had nearly as much of the Activity Program components as those selected for the intensive study. In short, the Activity Program proved to be as effective as conventional methods at teaching knowledge and skills and was superior to conventional methods for educating children to think and for improving pupils' attitudes and social behavior.

The Activity Program was extended throughout the school system gradually and on a voluntary basis, but this expansion was launched during a time of severe economic retrenchment. It received no additional funds for furniture, materials, or training. At the same time, cutbacks in the number of teachers resulted in class size increases. A decade after the program began, it was estimated that 25% of all city elementary schools were implementing the activity method to some degree. Precise accounts were not possible because funds were not available to visit teachers or their classrooms.

Some schools had remained untouched by the ideology of the Progressive movement and the Activity Program. Significantly, in light of current interest in activity-centered pedagogy, many teachers were opposed to the program because of the extra work required of them. The researchers found that 36% of teachers in the activity schools preferred the regular program. In regular schools, an unsurprising 93% favored classroom activities that involved whole-group instruction, little student movement, and a recitation script format. Despite the supposed benefits of the Activity Program, most teachers were convinced of the workability (if not effectiveness) of conventional instruction.

# **Open** Schools

The mid-1960s and early 1970s brought another wave of Progressive reform to many large districts in the nation—the open classroom. Charles Silberman's (1970) *Crisis in the Classroom* proposed the open classroom as the keystone in the arch of educational reform. The concept of open-space schools was seen as a way of revolutionizing the curriculum, the instruction, and the customary role of a teacher at both the elementary and secondary levels. An open-space environment was said to encourage teaming among teachers, varied groupings of children, nongraded arrangements, and diverse uses of space.

In New York City, the extent to which the elements of open classrooms were implemented is similar to the extent to which progressive practices (e.g., the Activity Program) were implemented two generations earlier. Definitions of openness varied, teachers were selective in what they introduced, and the pattern of adoption was uneven both within and across schools. By the last training cycle held in 1974, 28% of the 200 participants reported they had opened up their classrooms. Of course, not all teachers in open-space rooms used open-classroom pedagogy. Outcomes were difficult to document because no large-scale formal assessment of open schooling was conducted. By 1975, interest in open education had fallen. Federal funds for the training center had run out. The city had produced large deficits and drafted long lists of budget cuts that led to cuts of aides, staff development, and other services that had nurtured open education.

In Washington, D.C., a similar pattern emerged. Initially, teachers who volunteered to work in open-space classrooms were provided in-service workshops. A study of Washington, D.C., classrooms revealed that student-centered open classrooms were strongest with regard to furniture arrangement. learning centers, and students moving around the room without asking the teachers' permission. Teacher-centered patterns still registered strongly; almost half of the open classrooms were taught through whole-group instruction; students engaged in listening, working at desks, and responding to teacher questions. In more than half of the classes, one could find little student movement; in nearly two of every three of those classrooms, teachers dominated verbal exchanges. A study that compared reading achievement and other student outcomes in 372 open-space and self-contained classrooms found that "the selfcontained classroom provided a better learning environment than ... the open-space classroom" (District of Columbia Board of Education, 1922, pp. 96, 97, 104, cited in Cuban, 1984, p. 83).

The concentration to improve basic skills was growing. Teachers were charged to provide specific and direct instruction in skills students had to know, whether or not students had performed at the appropriate level on a given day. Testing to monitor progress expanded. Standards for semiannual promotions of students were tightened and enforced. Children were retained; remedial programs were expanded. The stress on academic skills signaled the reduction of tangible support for open classrooms. Teachers created self-contained rooms by building walls of portable blackboards and bookcases. Learning centers gradually disappeared.

# The 1960s Activity-Centered Curricula

The implementation of activity-centered instruction was a common characteristic of the most innovative curricula in mathematics, science, and technology education that was introduced during the 1960s, such as the Elementary Science Study Curriculum, the Science Curriculum Improvement Study, and the Active Learning Approach to Mathematics Curriculum (Briggs & MacLean, 1969). These curricula were generally child and activity centered. They called for breaking large classes into small working groups, and they required flexible support activities by teachers. The programs attempted to make explicit the principles that teachers might use to implement such curricula (for example, they provided a wide range of do-it-yourself hints for using readily available materials). But these lists had serious omissions. They did not provide explicit principles in practice for coordinating classroom activities over an entire school day or a large segment of the curriculum. They did not discuss how to maintain discipline. They also failed to describe how to fit the diverse entering skills of students into the diversity called for by the curriculum. Nonetheless, the overall picture was positive. In a meta-analysis of evaluation of the new science curricula of the 1960s, Kyle (1984, p. 21) concluded:

Recent research syntheses demonstrate the effectiveness of the hands-on, inquiry-oriented science curricula developed during the 1960s and early 1970s. Evidence shows that students in such courses had enhanced attitudes toward science and scientists; enhanced high-level intellectual skills such as critical thinking, analytical thinking, problem solving, creativity, and process skills, as well as a better understanding of scientific concepts. Inquiry-oriented science courses also enhance student performance in language arts, mathematics, social studies skills and communication skills.

Despite this conclusion, science classes experienced little uptake of an inquiry-oriented curriculum since Kyle's (1984) study. Rather,

- Nearly all science teachers (90%) emphasized goals for school science that were directed only toward preparing students for the next academic level (for future formal study of science).
- Over 90% of all science teachers used a textbook 95% of the time; hence the textbook became the course outline, the framework, the parameters for students' experience, testing, and the world view of science.
- There was virtually no evidence of science being learned by direct experience.
- Nearly all science teachers presented science via lectures and/or question-and-answer techniques; the lectures and question-andanswer periods were based on the information that existed in textbooks used.
- 5. Over 90% of the science teachers viewed their goals for teaching in connection with specific content; further, these goals were static, i.e., seldom changing, givens. (p. 7)

Overall, results seem to clearly show that activity-centered innovations demonstrated their effectiveness for enhancing students' education (Doyle, 1986). Yet each failed. Why? Several reasons are given (Cuban, 1984):

- Teachers lacked support—indicated by their assessment that preparation for these arrangements were too difficult and required too much time.
- The extra continual effort required to combat the recitation script interaction pattern was sustained by only a few teachers and supported by only a few communities.
- Support for continued staff development and in-service workshops was not enduring enough to allow teachers to develop strategies for "doing it alone."
- · No systemic commitment existed to sustain change.
- · Funds were insufficient to evaluate the outcomes of the ac-

tivity. Traditional outcome measures were used to assess the effect of new innovations.

- The innovations failed because they lacked external as well as internal support for change throughout the institution.
- The new way of doing things required extra resources of teaching time and preparation time and presented difficulties in obtaining the proper logistic resources on-site.
- · By and large, the required changes were too much trouble.

# *The* Culture of the Classroom Versus *The* Culture of the Home

As we noted in our introduction and despite the heterogeneity in the kinds of classroom cultures that characterize U.S. schools (as a class of institutionalized forms of activity), they all differ in significant ways from the forms that characterize children's lives in their homes and communities. Hence, while keeping in mind Akinasso's (1991) warning against treating classroom cultures as pure types (our earlier review fully warrants that warning), one can find some important discontinuities between the range of cultural forms that characterize classrooms as a category and the range of forms that characterize children in their homes and other community settings.

# Terms of Contrast

Waller (1932/1965), whose arguments for a marked discontinuity between home and school were discussed previously, traces the distinctive culture of the school to its focus on instructional interactions as the giving and receiving of information. Like many before and since, Waller notes that instruction is dominated by the transmission of facts and skills for which, as he delicately puts it, "the spontaneous interests of students do not usually furnish a sufficient motivation" (p. 8). Yet teachers are responsible to the community to motivate their students to acquire those very skills and facts.

According to Waller, the result of the conflicting interests and obligations of students and teachers is a political organization that is, by and large, autocratic, so autocratic in fact that he is led to remark: "The generalization that the schools have a despotic political structure seems to hold true for nearly all types of schools, and for all about equally, without much difference in fact to correspond to radical differences in theory" (p. 9).

More recently, Lynn Corno (1989) contrasted the culture of the home and the culture of the school in terms of differences in linguistic features, normative interactions, and value orientations (see Table 44.3). Among the several features listed by Corno, the difference in adult-child ratio appears to be especially influential. It poses the special problem of how to create participant structures that both allow for effective communication and maintain classroom order, as Doyle (1986) and others have emphasized.

We can see this contrast and the importance of adult-child ratio clearly at work in research by Shultz, Florio, and Erickson (1982), who compared the participant structures in a first-grade math lesson with the dinner table conversation in one of the student's homes. They found that chiming in was acceptable and occurred at all phases of dinnertime at home but that the

Table 44.3.	Contrasting the Culture of the Home with	
	the Culture of the School	

Culture of the Home	Culture of the School	
Oral Language Tradition	Written Language Tradition	
Context-Bound	Decontextualized	
Natural	Unfamiliar	
Casual	Formal	
Paralinguistic	Linguistically Complex	
Continuous Deployment	Discontinuous Deployment	
Low Child-Adult Ratio	High Child–Adult Ratio	
Emphasis on Quality of Life and	Emphasis on Quantity and	
Quality of Products or Results	Experience or Process	
Adults as Transmitters or Nurturers	Adults as Leaders or Managers	

Note: Adapted from "What It Means to Be Literate about Classrooms," by L. Corno in *Classrooms and Literacy* (pp. 29–52), by D. Bloom, 1989, Norwood, NJ: Ablex.

same conversation strategy occurred only during the instructional climax of lessons in the classroom. That is, during the early part of a math lesson, the teacher stops all efforts at overlapping talk among the children, or chiming in, and only later in the lesson relaxes the rules to allow children to focus mainly on the academic task rather than on monitoring their use of the appropriate interaction pattern. During dinner conversation, participants often overlap speech and interpret such interruptions as evidence of interest in the topic. In this way, multiple simultaneous speakers and multiple ways of listening could be found among dinnertime participants, which resulted in multiple conversational floors that speakers could address. In the classroom, however, holding the floor, defending it from interruptions, and allocating it at appropriate times to students are significant concerns for the teacher. Nonetheless, at other times in the lessons, the teacher's concerns for control were less visible, and talking while others were talking seemed to be an acceptable way of listening and interacting.

Wells (1986) investigated the language experience of 5-yearold children at home and at school. He examined samples of naturally occurring conversations between the children and whoever interacted with them over a period of 6 weeks in both the school and the home. The data indicate that children talk significantly less in the classroom than at home. By contrast, the amount of talk addressed to the children by adults does not differ significantly from one setting to the other. The figure for adult talk in the classroom, however, includes both utterances that are addressed to the child as a member of a group and utterances that are addressed to the child in one-to-one interaction. Wells also found that in terms of syntactic complexity, the child is less frequently exploiting her or his full linguistic resources when talking to the teacher than when talking to parents. This research finding is underlined by the fact that talk with peers in the classroom is significantly more complex than talk with adults, although this language complexity is present in the home. Wells suggests that two factors influence the amount and type of speech that occurs: (a) the contexts and activities children choose to be engaged in or are required to engage in and (b) the number of available adults.

In a similar vein, Carolyn Panofsky (1994) concludes that so-

cially assembled situations at home are likely to differ significantly from the socially assembled situations typical at schools:

At home the purposes and goals of an activity are usually continuous with the child's ongoing experiences and valued by others in her intimate social network. The child's active participation will be a pivotal factor in the home situation, where the choice to withhold participation or to participate on one's own terms or in one's own way exerts a definitive role. By contrast, at school the purposes and goals of an activity may be difficult for a child to understand and a child's lack of participation can go unnoticed and unnoted. At home, the child's participation is the sine qua non: if the parent, for example, wants book reading with the child to occur, a way must be found to engage the child's active involvement. (p. 225)

As these examples make clear, the peculiar circumstances of activity settings where 30-or-so children and one adult are together, along with the special purposes for which adults have arranged for children to be there, make it almost inevitable that cultural discontinuities will occur between schools and homes. In addition, sources of intergenerational cultural conflict are inherent in this discontinuity.

# Complicating the Dichotomy

In evaluating such proposals for dealing with how to create curriculum that takes into account the home-school contrast, we need to keep in mind that both classroom and school cultures vary greatly among themselves. As with any dichotomy, the social reality they represent is more complex. Binary classifications hide internal variety. Panofsky (2000) contrasts the normative order and participation structures in the home and in the classroom during child-adult, book-reading episodes. She provides evidence that the same event (parents reading to children) differs markedly among homes within what appears to be a single (class) population. She draws on Heath (1982), who found that when adults looked at books with very young children, they engaged in point-and-naming games, or ritual naming (Ninio & Bruner, 1978). However, Heath documented that once children's vocabulary needs diminished, some parents demanded an end to verbal interaction during book readingchildren were expected to be quiet and listen-whereas other parents allowed the verbal interaction to remain a part of the activity. Therefore, differences in reading interactions were not clear and exclusive markers of working-class or middle-class interaction norms.

Cultural match or mismatch between home and school is further complicated by the variability across school settings. In a set of recent studies, Harry Daniels (1989, 1995) and colleagues (Daniels, Holst, Lunt, & Johansen, 1996) have applied Bernstein's concept of cultural transmission. Studying the researcher's collected visual displays (e.g., photographs of wall displays from different schools, such as art displays), they found that students were able to identify those displays that would be favored and found in their own schools. Students' communicative competence at school, their understanding of the implicit and explicit curriculum guiding their manner of talk, and their criteria for their success in classrooms and schools vary within communities too. In one case, researchers documented the existence of communicative competence in different schools by studying one student who switched schools during the experiment. The student eventually unlearned the previous school's criteria for communicative competence and learned the new criteria for competence in his new school.

### **Confronting Educational Inequalities**

In earlier sections, we established a number of reasons to use the concept of classroom cultures to understand why learning and instruction are patterned the way they are. We have seen a dominant pattern that is emblematic of a basic educational philosophy: the transmission of cultural information under controlled conditions. This pattern is periodically challenged by a mélange of views focused around the idea of activity-based instruction that permits students to be active participants in the process of their own education, but this alternative is rarely sustained.

In this section, we will seek to understand the role played by the cultural divide between dominant forms of classroom culture and home cultures in producing the relatively poor achievement of major demographically defined groups. This concern is motivated by three factors: (a) the variable school achievement among our diverse student population (Erickson, 1987; Mehan, 1997; Mehan, Lintz, Okamoto, & Wills, 1995; Ogbu, 1991, 1992); (b) the growing demographic disparity between the background experiences of teachers and those of their students (Grant & Secada, 1990); and (c) the overall increase of American citizens of non-European backgrounds.

Bredo, Henry, and McDermott (1990) point out that how one frames the problem of variable student achievement greatly influences how one explains it and, therefore, the strategy used to deal with it. The dominant assimilationist frame is formulated in terms of the need to hasten the assimilation of the culturally different into the traditional culture of the school, an approach that draws directly on the humanist-evolutionary view. From this perspective, deviation from the culture of the school and the predominantly Anglo-Saxon, Christian heritage on which it was founded bespeaks a cultural deficit. Within this framework, school failure is a reflection of inadequately preparing children to measure up to the traditional forms of knowledge transmission and acquisition because of the inadequacies of their culture.

The alternative, the accommodationist framework, argues for the equal value of different cultural traditions, thus following in the anthropological tradition for understanding cultures. Its advocates seek to ameliorate the relatively poor performance of nonmainstream children by creating some form of accommodation between the culture of the school and the culture of the home, although their strategies differ in significant ways. One group seeks to reduce the discontinuities between home and school cultures by changing the organization of classroom activities to incorporate home cultural patterns. A second group seeks to make the (largely implicit) culture of the school explicit and to teach children how to be competent members of that culture. In effect, the second position seeks accommodation by deliberately making children both bicultural and bilingual.

# The Assimilationist View: Cultural Difference Equals Cultural Deficit

The cultural deficit view has a long history. Cuban (1984) reminds us that, at the turn of the century, public schools were so overwhelmed with the number of immigrant children entering them that education's primary goal was to transform immigrant children into Americans. Superintendents, principals, and teachers—who reflected the larger society's dominant attitudes—induced children to discard their (deficient) ethnic cultures in order to embrace American ideals and habits. New curricula incorporating manual arts and vocational courses were developed. Special classrooms for teaching English to newcomers were common. Such classes were large, 60 or more, especially in the lower grades, because non-English-speaking children were placed in the first grade, regardless of age.

From the beginning, two explanations were offered to account for the perceived cultural deficits: one attributed them to historical experience; the other, to flawed genetic endowment (Gould, 1981). More contemporary versions of the environmental and inherited-flaw explanations came to prominence in the 1960s. Arthur Jensen (1969) concluded that biology limited the development of African Americans' human potential. He argued that large-scale interventions such as Head Start would not close the achievement gap between Blacks and Whites because of the limited learning capacities of African Americans. At about the same time, Bereiter and Englemann (1966), who adopted an environmentalist interpretation of putative deficits, declared that "the speech of lower-class people ... is inadequate for expressing personal or original opinions, for analysis and careful reasoning, for dealing with anything hypothetical or beyond the present, and for explaining anything very complex" (p. 32), which, in turn, led to their poor academic performance. These two positions rationalize educational underachievement of the culturally different or culturally poor in terms of different causes, but both, in effect, view children's families as the agents of their shortcomings.

The pedagogical strategy that has generally accompanied the assimilationist model is one that places a premium on (a) mastery of the **basics** as a prerequisite to engagement in higher levels of the curriculum, (b) classroom management processes that ensure discipline and adherence to the teacher's instructions, and (c) efforts to maximize the amount of time children spend on a task. The teacher-centered transmission approach is the choice for those who frame the problem of educational inequality within an assimilationist framework.

The goal for assimilationists is to replace the native (deficient) culture with American cultural knowledge. Assimilationists in the United States have lamented a variety of deficiencies. Too many students do not have a grasp of fundamental information and basic historical facts about their own country. Too many have trouble reading the newspaper. Too many cannot complete functional mathematical tasks. Too many do not know how to spell (Bloom, 1987; Hirsch, 1987; Postman, 1995; Schlesinger, 1992). One of the most visible responses to students' underachievement is the notion of cultural literacy, that is, the explicit teaching (transmission) of the American culture advocated by some assimilationists. Hirsch (1987) states that "cultural literacy constitutes the only sure avenue of opportunity for disadvantaged children, the only reliable way of combating the social determinism that now condemns them to remain in the same social and educational condition as their parents" (p. xiii).

Hirsch (1987) argues that to be culturally literate is to posses the basic information needed to thrive in the modern world. It is not confined to one social class nor is it confined to an acquaintance with the arts. Hirsch (1987, p. xiv) further claims, "Although the greatest benefactors from gaining cultural literacy are 'disadvantaged' children, it will also enhance the literacy of children from middle-class homes. The educational goal is mature literacy for all our citizens" (italics in original). The means to this goal offered by Hirsch is a cultural literacy master list consisting of all the must-know information. This list is found as an appendix at the end of Hirsch's book and has been further elaborated in other publications such as The Dictionary of Cultural Literacy (Hirsch, Kett, & Trefil, 1988), written in more accessible language for use by parents at home (because one cannot trust the schools to teach the really important stuff).

Hirsch and others (Bloom, 1987; Schlesinger, 1992) blame faulty educational theories that guide teachers' instructional practices in schools for the decline in students' basic and cultural knowledge. Hirsch does not, however, engage in the great debate (Chall, 1983) about instructional methods and practices. Rather, he contends that literacy is much more than a skill to be mastered, and he requires a great deal of specific information. The basic goal of education is the transmission to children of the specific information shared by the adults of the group. Like any other aspect of acculturation, literacy requires the early and continued transmission of specific information.

Hirsch agrees that Americans should press reforms that advocate for greater representation of women, minorities, and non-Western cultures. They should also insist, he adds, that literate culture keep up with historical and technical change. He claims that 80% of the items from his list have been in use for more than 100 years. What is not clear is who has been using them and for what purposes.

Assimilationists believe that a common set of understandings is necessary for building both communities and nations and, therefore, that cultural conservatism is essential for purposes of national communication.

It enables grandparents to communicate with grandchildren, southerners with midwesterners, Whites with Blacks, Asians with Hispanics, and Republicans with Democrats—no matter where they were educated. If each local school system imparts the traditional reference points of literate culture, then everybody will be able to communicate with strangers. In the modern age, effective communication with strangers is altogether essential to promote the general welfare and to ensure domestic tranquillity. The inherent conservatism of literacy leads to a subtle but unavoidable paradox: The goals of political liberalism require educational conservatism. We make social and economic progress only by teaching myths and facts that are predominantly traditional. (Hirsch, 1987, p. xii)

For assimilationists, the solution to confronting educational inequities is the direct transmission from teacher to student of cultural literacy, which is based on classic material. The delivery and the content of the lessons are traditional. This perspective also acknowledges that the classics themselves are self-defined by their traditional history in use. Not on Hirsch's cultural literacy list are terms that we have found necessary in our discussion of classroom cultures and cultures in the classroom. For instance, the term *bilingualism* is absent (but *bile* is present); neither *biculturalism* nor *multiculturalism* is mentioned.

# Accommodationist View: Cultural Difference Equals Cultural Difference

Researchers following the "cultural difference" approach (Jacob & Jordan, 1987), also referred to as the communication process explanation by (Erickson, 1987), examine how communicative differences between home and school cultures "can lead to interpersonal conflicts that interfere with minority children's abilities to perform well in school" (Jacob & Jordan, 1987, p. 259). United in their opposition to assimilationism and in their emphasis on the "different but equal" position, those who adopt a cultural differences perspective vary in how best to deal with the problem of unequal educational achievements across ethnic groups.

### THE CULTURALLY CONGRUENT TEACHING SOLUTION

According to this group of cultural difference theorists, the existence of marked, cultural differences requires deliberate modification of the school and classroom culture. To reduce the cultural mismatch, researchers use as a point of continuity those cultural practices from the home culture of minority students. The purpose of such matching is to use what the children already know, along with associated cultural practices, as resources for understanding in the classroom (Dewey, 1938; Moll & Greenberg, 1990).

Cuban (1984) reports on efforts earlier in this century to use this accommodation strategy. In 1935, only a brief generation after the era in which assimilating immigrants to become Americans was the leading strategy, the goals of schooling shifted to encompass preserving the cultural heritage of particular groups while bringing different cultures together in a harmonious whole. Schools preserved children's languages and introduced intercultural curricula. Multicultural assemblies provided students with opportunities to watch artists perform and to hear leaders from different cultures speak. Homeroom periods in secondary schools were used for lessons about the contributions and unique character of particular ethnic groups. Teachers participated in in-service education about different cultures. Significantly, this effort coincided with the large-scale New York City Activity Program discussed earlier.

The cultural difference movement of the 1930s did not survive the conservative societal climate accompanying the cold war, which accentuated efforts toward national unity, conformity, and the assimilation of newcomers into the melting pot. Cultural differences were once again viewed as deficiencies, and efforts at recognizing and building on cultural diversity fell dormant.

When the anthropology of education became a distinct field

in the 1960s, the cultural deficit model dominated the thinking of professional educators. But by the late 1960s, sociolinguistically oriented anthropologists identified cultural differences that were in the communication style between teachers and their students and that played an important role in the underachievement of minority students (Erickson, 1987).

The main argument of cultural mismatch theorists is that students and teachers of different cultural backgrounds develop culturally distinctive ways of speaking and act on different assumptions about how to communicate things such as "irony, sincerity, approval and positive concern, rapt attention, disinterest, disapproval, and the like" (Erickson, 1987, p., 337). When cultural differences in ways of speaking and listening exist between child and teacher, systematic and recurrent miscommunication can occur in the classroom with damaging consequences for students' educational achievement. The literature on attempts to modify classroom practices to accommodate cultural patterns from the home culture has been reviewed several times, so we will treat it relatively briefly here (for valuable summaries, see Cazden, 1986; Cole, Griffin, & LCHC, 1987; Mehan, Lintz, Okamoto, & Wills, 1995).

In her important comparison of the language socialization practices of low- and middle-income families with those of the classroom, Shirley Brice Heath's (1983) ethnography of a small, southeastern U.S. town illustrated the kinds of cultural mismatches that can occur. She found that in school, teachers practiced forms of language associated with the recitation script: asking children known-information questions, using utterances that were interrogative in form but directive in function, and using questions that asked for information in books. Those language practices paralleled the ways that the middle-income teachers talked to their own children at home but were quite different from those practices prevalent in the homes of lowincome students, either Anglo or African-American. In the latter homes, adults rarely addressed questions to their children, favoring imperatives and statements instead. Differences also occurred according to ethnicity among the working-class families, so that children from each kind of home experienced a different kind of mismatch when attending school. But in both cases, youths from low-income homes were not prepared for language uses that were characteristic of the classroom.

The study by Philips (1983) of the interaction patterns of Native American children on a reservation in Oregon is perhaps the first study to highlight differences between backgrounds of teachers and students and to contribute to the discussion about incongruity of discourse. In her description of the classroom verbal interaction, she compared the participant structures of the recitation script with those of the local community. She found that the normative culture in the classroom violated Native American children's ideas of appropriate behavior. Her observations were followed by changes, which were made in the participation structures and which provided Native American children with the culturally congruent means of interacting with peers and the teacher. Those changes afforded the students access to more information and opportunities for fuller classroom participation and allowed them to achieve greater academic success.

In a similar study, Erickson & Mohatt (1982) videotaped a Native American teacher in a village school in northern Ontario and found that the teacher consistently avoided roundrobin reading discussions typical of classrooms. Rather than use the recitation script, she taught reading either by having whole-class discussions in which she allowed choral answers to content questions or by walking around the room among the students' desks. Individual students (who were reading silently at their seats) summoned her with a glance or some other subtle nonverbal sign. She would then lean over to meet the child, to engage in quiet conversation, and, by that means, to evaluate the child's performance and provide feedback.

Au and Jordan (1981) and Au and Mason (1981) based the work they did among Polynesian students in Hawaii on the Philips (1983) and Erickson and Mohatt (1982) studies. Specific reading group routines were modified to include the speech style of the local community. A "talk-story discourse pattern," common in Hawaiian homes, encourages "interruptions" that add supplements from the audience to the main story line. By introducing "talk-story" procedures into classrooms, the children-that is, the audience in this case-were able to participate in story reading in a more culturally congruent manner. The Kamehameha Early Education Program (KEEP), created by Au and her colleagues, was a language arts program that lasted several years (Au & Mason 1981; Vogt, Jordan, & Tharp 1987). The initial 3 years of the program emphasized classroom management strategies instead of cultural congruence with the home culture. In 4th year, the class received a full year of instruction with the new, culturally congruent, "talk-story" reading program. This program included changes in instructional practice, classroom organization, and motivational management that were thought to be more culturally congruent with Hawaiian culture (Vogt, Jordan, & Tharp, 1987). Although earlier techniques had included high praise for on-task behavior, the new approach attempted to balance warmth and toughness in ways effective for Hawaiian children. An emphasis on working together allowed students to draw on familiar home-culture patterns of giving and seeking help from peers and siblings, a natural tendency that had made previous efforts to get children to "do their own work" hard to enforce.

During the first 3 years, KEEP was unsuccessful at teaching its students how to read, and the reading scores of their classes were not significantly different from those of control group children drawn from nearby public schools. The 4th year, which involved the culturally congruent program, produced a dramatic increase in reading achievement to a mean score above grade level (Au & Jordan, 1981). Student enthusiasm and engagement for the activities also improved.

Later, some of the researchers and teachers from KEEP worked with Navajo members of the Rough Rock community to implement the KEEP language arts program and to find out if it was as effective with children from another culture (Vogt, Jordan, & Tharp, 1987). Many changes were necessary to make the program work well. The "tough-nice" technique of motivation management did not work well with Navajo children. Praise worked better when handled more subtly, and misbehavior was controlled better when ignored or addressed in a short lecture to the whole group. Whereas, for Hawaiian children, four to five students of mixed sex and ability produced the best peer interaction and assistance in groups at learning centers, this grouping did not work at all for Navajo children who were used to a strict separation of the sexes. For them, smaller groups of the same sex worked best. Finally, the KEEP team found differences in the ways that the comprehension lesson developed, namely that students preferred to read and discuss the stories as complete units rather than in an event-by-event, linear way.

Moll, Diaz, Estrada, and Lopes (1992) illustrated the importance of cultural congruence in a different way among Mexicano students in Southern California. All children were assessed as capable of communicating in both English and Spanish. The researchers documented that children who received native language (Spanish) reading instruction in one classroom were assessed as "high-group" readers. Yet, many of the same children were assessed as "low-group" readers in English.

The researchers intervened in the English reading lessons. Instead of reading aloud, the children were asked to read the English text silently and then were encouraged to discuss the text using either their Spanish- or English-language skills. The children's Spanish description of the English text illustrated that the children understood much more of the text than they could articulate in properly pronounced English. Conversely, the monolingual English-speaking teacher relied on children's ability to pronounce the English words correctly as evidence of decoding skills, which she believed to be required for reading comprehension. The Spanish-speaking teacher assessed children's comprehension of text material, knowing that the children could decode the text. Because teachers taught full days and because daily responsibilities restricted them from observing the other's teaching and classroom, the teachers were unaware of each other's teaching practices and of their variable expectations and assessments of the literacy ability of the same children.

Sarah Michaels's (1981) account of "sharing time" activities in an ethnically mixed, first-grade classroom provides another example of the type of interaction difficulties that can result from a mismatch between the language of the home and that of the school. During sharing time, students would talk about an object or a past event. The teacher, through questions and comments, would help students "focus and structure their discourse and put all their meaning into words, rather than relying on contextual cues or shared background knowledge" (p. 425). This activity amounted to an oral preparation for literacy, because in order to make the transition to literacy, children would need to acquire discourse strategies for making explicit relevant background knowledge. Yet children in the class that Michaels observed were differentially prepared for this activity and were treated differently along ethnic group lines. The African-American children usually received interactions of a lesser quality, leading Michaels to hypothesize that "such differential treatment may ultimately affect the children's progress in the acquisition of literacy skills" (p. 40). As with our previous description of Bremme and Erickson's (1977) investigation of a similar classroom event (first circle), participating in "sharing time" in an appropriate manner is clearly a learned skill that is previewed as foundational to literacy acquisition, a highly valued activity in the classroom context. Her case, Michaels asserts, suggests that what begins as miscommunication may end in differential treatment, in differential practice in literate-style speech, and, potentially, in educational failure.

In an attempt to disrupt the perceived off-task interaction

by African-American children, Michaels allowed the children more time to develop their stories without interruption (guidance toward the normative "sharing time" discourse pattern). She found that, when given sufficient time and the opportunity to develop their stories, African-American children provided all the elements of "good" sharing. She also noted that "waiting on" the children was difficult because other students were ready to redirect the child's story (i.e., evidence that they had learned the appropriate format for story time) and that the constraints of time and number of children worked against providing children adequate time to relay their stories.

Overall, these examples make it clear that a strategy of local accommodations of school culture to home culture can be educationally productive.

### MAKING THE IMPLICIT CLASSROOM CULTURE EXPLICIT

Several cultural mismatch proponents agree that change in the classroom culture to incorporate and better match children's home cultures is desirable, and yet those proponents are not willing to "wait on" change, which is likely to be slow (Ladson-Billings, 1992, 1995). Rather, those scholars advocate that teachers should be explicit about the "standards" (e.g., culture) that are presently in place. The explicit transmission of this knowledge is said to be a teacher's moral responsibility because it is necessary to prepare children for their participation in the classroom community and their role in the broader society (Corno, 1989; Reyes, 1992; Delpit; 1995; Ladson-Billings, 1992, 1995).

Lisa Delpit (1988, 1995) has been a major spokesperson for this position. In her critique of contemporary methods of reading and writing instruction, she contrasts the explicit teaching of isolated reading skills and the specific mechanics of writing with a "holistic process" approach to literacy. In the classrooms Delpit refers to as "holistic," skills are not explicitly taught. According to Delpit, this situation puts working-class, African-American children at risk of school failure. Contemporary teachers who favor holistic methods avoid providing students with education facts because doing that is too directive and teacher centered. The children are left to rely on their own literacy and cultural backgrounds, without explicit and direct instruction regarding the skills necessary for full participation in the classroom (and in society). By contrast, working-class parents view traditional instruction based on the recitation-script format and associated practices as being basic education.

This difference in "approved standards" exposes class differences between (middle-class) teachers and (working-class and poor) students and parents. Parents who lack a clear rationale for pedagogical shifts toward child-centered approaches are suspicious, especially when the method is espoused by teachers who are middle class and often Caucasian. The shift may be understood by working-class, African-American parents as attempts to change social relationships they value—in particular, authority relationships between adult and child—that are seen by teachers as violations of "proper behavior." At best, the teachers' child-centered instructional methods are perceived as laissez-faire, and, at worst, they are seen as an academic conspiracy that is aimed at keeping African-American children in their "place" (school failures). The work of Bernstein is widely evoked by those who advocate direct and explicit instructions of the culture in classrooms. In particular, they note his emphasis on discoordinations that occur when children and parents from working-class families interact with teachers and schools. He argues that such families encounter additional symbolic discontinuities between the home and school when dealing with the invisible pedagogy (e.g., the unspoken assumptions that guide participation and communication in school). Especially influential was Bernstein's (1973) argument that a progressive pedagogy reflects the culture of the middle class and acts implicitly to exclude the culture of the working class in a way that the "up-frontness," or explicitly stated rules, of traditional pedagogy does not.

The work of Marva Collins (M. Collins & Tamarkin, 1982) illustrates how one energetic teacher explicitly taught the knowledge and modes of learning expected according to the standards set by the mainstream and dominant culture. Collins noted that she did not favor the idea of the "africanization" of curriculum. She argued that she had never met a Black child who didn't know he or she was Black, so her duty was to provide the opportunities for them to move beyond their neighborhood cultures to participate in larger society.

For Corno (1989), identifying the distinctive qualities of interaction in both the home and school setting provides the basis from which to organize and develop a "blended" environment in the classroom. For example, more recent attempts at curricular modification in schools in Native American communities have documented that when a teaching style exclusively uses interaction patterns that resemble home discourse, the approach may not provide students optimal engagement and practice with a range of learning approaches, including those that are not found in the community. Specifically, McCarty, Wallace, Lynch, & Benally (1991) state that exclusive use of culturally relevant pedagogy may have unfortunate ramifications (e.g., Indian students who have not been taught higher-order questioning and inquiry methods). They found Navajo students in the Red Rock community to be enthusiastic participants in inquiry-based classrooms (which required students to be active and vocal) when the curriculum drew on students' background knowledge and directed them toward solving new problems, namely, a "blended" approach.

Corno (1989) offers her set of home-school contrasts (see Table 44.3, p. 39) to enable teachers to identify the hidden curriculum of the favored cultural forms. Corno argues for exposing the hidden curriculum and advises teachers not only to be (self-) conscious of their teaching methods and motives but also to explain the implicit curricular agenda to children along with its role in their acculturation. The resulting form of knowledge should be metaconscious awareness.

# Primary and Secondary Cultural Discontinuity: Accommodation without Assimilation

The results of cultural congruence studies illustrate the significance of cultural difference in the educational underachievement of children whose cultural backgrounds differ from the culture of the classroom. However, cultural miscommunication (mismatch) alone is not adequate to explain of the variable school achievement of some minority students. As Erickson (1987) has noted, some students of minority cultures have not required culturally congruent pedagogy. Thus, some groups have done very well in the school setting in spite of significant cultural differences associated with their home culture. For example, Margaret Gibson (1988) documents students' abilities to participate in academic communities while maintaining their cultural traditions, what she refers to as "accommodation without assimilation." Specifically, she found that patterns of community attitudes and student attitudes toward school and eventual achievement in school were similar among both the children of well-educated Asian-Indian professionals and those of Punjabi Indian agricultural laborers, factory workers, and smallscale orchard farmers. This congruence in attitudes toward schooling coincides with ethnic pride and strong community support for education.

For more than two decades, John Ogbu has investigated why differences between home and school cultures pose more serious obstacles to school success for some groups of minority students than for others, that is, why different minorities adjust and perform differently in school in spite of cultural and language differences, along with why and how the problems created by cultural and language differences seem to persist among some minority groups but not among others (Ogbu, 1974, 1978, 1983, 1987; Ogbu & Simons, 1998).

Ogbu's analysis has focused on two types of forces that influence student achievement in school. The first is the nature of a minority group's history, including the initial terms by which that group was incorporated into the society in which it now exists. The second is the nature of the adaptive response, both instrumental and expressive, that the group has made to the subsequent treatment it has experienced (Gibson, 1997).

Ogbu's typology characterizes minorities as experiencing either primary cultural differences or secondary cultural differences, according to their historical positions in relation to the dominant group in society. Voluntary minorities have primary cultural differences, that is, differences that existed before the two populations came in contact. Involuntary minorities (also referred to as "subordinate" or "caste-like"), in contrast, have both primary and secondary cultural differences. Those differences have arisen after contact, often involving the domination of one group by another. Voluntary minorities are individuals who came to the United States more or less voluntarily because they believed their immigration would lead to greater economic opportunities, greater political freedom, or both. Involuntary minorities are those groups who were originally involuntarily brought or incorporated into the United States through slavery, conquest, or colonization and who, thereafter, were relegated to menial positions and denied true assimilation into mainstream society (Ogbu, 1978, 1987, 1996).

Voluntary minorities tend to accept the dominant culture's folk theory, believing that hard work, school success, and individual ability will lead to occupational and economic success. Their experiences with discrimination are tempered by the fact that they perceive the opportunities of the new environment to be better than those in their country of origin, and they do not perceive mistreatment as institutionalized or permanent. In sum, their attitudes toward the public schools are positive, and they actively ensure that their children study hard and follow school rules of behavior. Gibson's (1988) study of the Sikhs provides one example.

Involuntary minorities also believe a good education is necessary, but they might not really believe that they have a chance equal to that of White Americans to get ahead through education. Historical experiences with racism, unequal opportunities, and discrimination have led them to question how far one can get with an education, so they develop alternative strategies for "making it" without a formal education. Involuntary minorities distrust institutions and suspect those institutions of organizing their failure (see our previous discussion of differential treatment and tracking). These factors, Ogbu believes, have

... led involuntary minority parents and communities to be less likely to be directly involved in their children's schooling and may unconsciously teach children ambivalent attitudes about education and success, providing a weak socialization of children to develop good academic work habits and perseverance at academic tasks. (Ogbu, 1987, p. 104)

These attitudes have strong implications for the identity formation of minority children. According to Ogbu, voluntary minorities perceive their social identity as at least equal to, if not superior to, the social identity of White Americans. They reveal these attitudes in both a family and community emphasis to value education, follow school rules, and develop good academic work habits. Voluntary minority students are often highly motivated to do well in school, are encouraged and supported in the home to pursue academic opportunities, and eventually achieve after they overcome initial difficulties related to their cultural differences.

Involuntary minorities, in contrast, develop a social identity that historically arises in opposition to the dominant group. For instance, Ogbu argues that the standard language and behavior practices required at school are equated with the dominant group's language and culture, "a practice which results in conscious or unconscious opposition or ambivalence toward school learning." Therefore, language differences in home and school are viewed as markers of identity to be maintained rather than as barriers to be overcome. Furthermore, adopting attitudes conducive to school success is often felt as threatening to their language, culture, and identity. These differences produce an oppositional cultural frame of reference and an identity for involuntary minorities that makes the task to overcome their cultural and linguistic differences with the school culture more difficult. Encouraged by peers, family, and community (explicitly or implicitly) to express hostility or ambivalence toward the school culture and its rules, involuntary minorities often become active accomplices in their own school failure.

Thus, Ogbu argues that the academic success of immigrant minority groups in the United States (e.g., Asian, Indian, Central, and South American) and the widespread academic failure of other nonimmigrant minorities (e.g., African Americans, Native Americans, Native Hawaiians, Mexican Americans, and Puerto Ricans on the U.S. mainland) correspond to whether the minorities are members of voluntary or involuntary minority groups. In this way, "school performance is not due only to what is done to or for the minorities; it is also due to the fact that the nature of the minorities' interpretations and responses to instruction differ" (1996), namely, folk theories about how one gets ahead in the United States. Although Ogbu (1991) has noted that classrooms should be sites of mutual accommodation where the school, classroom, children, and communities accommodate one another, he does not clarify which aspects of school or classroom culture are negotiable. As a result, Ogbu's view fails to draw direct pedagogical implications or suggestions for classroom practice.

# Complicating the Typology

Although Ogbu's typology incorporates societal forces that influence academic success and, therefore, supplements the cultural difference perspective, it fails as a dichotomous typology to account for hybridity and variation among participants and local conditions. As Gibson (1997) notes, empirical reality proves to be far more complex than what can be explained through dichotomous typologies of accommodation and resistance, success and failure, or voluntary or involuntary minorities. For this reason, Ogbu's opponents view the distinction of minorities that is based on collective historical relations with the dominant culture as being overly deterministic in its attempt to explain minority students' current and predicted future academic performance.

For example, Jeannette Abi-Nader (1990) describes a 3-year program for Hispanic high school students designed and implemented by one teacher in an inner-city public school. The program, Programa: Latinos Adelantarán de Nuevo (Program: Latins Shall Rise Again) (PLAN), is a college-prep program that is designed both to address psychosocial conditions that predict minority student failure and to motivate students to create a vision of the future that will redefine their images of self and will build a supportive community. The program provides sequences of courses in reading (for sophomores), writing (for juniors), and public speaking (for seniors). During the year-long study, 23 sophomores, 19 juniors, and 16 seniors were enrolled in the program. They met in their respective groups for 45 minutes each morning and spent the rest of the school day in bilingual education classes or in the traditional English monolingual program. The most commonly used term to describe PLAN was "family." Students looked upon the teacher as father, brother, and friend.

Similarly, Mehan, Hubbard, and Villanueva (1994) report on academically successful Latino and African-American high school students who participated in an "untracking" program, Achievement Via Individual Determination (AVID). Those students developed strategies for managing an academic identity at school and a neighborhood identity among friends at home and formed academically oriented peer groups. The researchers report that from these new voluntary associations, new ideologies developed. The students' belief statements displayed a healthy disrespect for the romantic tenets of achievement ideology and an affirmation of cultural identities while they acknowledged the necessity of academic achievement for occupational success. This example resonates with Gibson's (1988) idea of "accommodation without assimilation." Mehan and his colleagues found Latino and African-American (involuntary minorities) groups to be capable of accommodation without assimilation—an ideology presumed to be restricted to voluntary minorities (Cummins, 1986; Gibson & Ogbu, 1991; Suarez-Orozco, 1989).

Ogbu's typology continues to be challenged and refined. A recent issue of Anthropology and Education Quarterly (September 1997) was dedicated to testing the usefulness of Ogbu's typology for international applicability. Collectively, five case studies reported mixed results. Three European studies of minority populations within each country were conducted in the Netherlands, France, and Britain. In each country, the overall patterns of school achievement did not tidily fit Ogbu's framework. In studies from Israel and Canada (countries where immigrants and their descendants have come to form the dominant cultural groups), data did support Ogbu's model; involuntary minorities fared, on average, far less well in school than the children of immigrants. Thus, the typology works better in what might be characterized as "new nations," traditional immigrantreceiving countries where a colonizing population from Europe conquered or displaced an indigenous group and subsequently has accepted and encouraged the immigration of other groups. Countries of this type include Canada, Israel, the United States, Australia, and New Zealand.

Therefore, the quantitative data that has been collected in countries where both types of minorities reside do indicate that, in the aggregate, voluntary minorities are more successful in school than involuntary minorities. In addition, voluntary minorities may have an adaptive advantage over those who have been incorporated involuntarily into the society in which they now reside, as Ogbu has suggested (Ogbu, 1978, 1991). However, Gibson (1997) points out that his analysis has centered on one particular type of voluntary minority, namely, those who have migrated voluntarily to a new country to enhance their economic opportunities and who have entered the new country with full rights of permanent residence. She also notes that Ogbu has paid too little attention to other types of voluntary minorities (e.g., refugees, undocumented aliens, and temporary workers). This unequal focus on various types of voluntary minorities represents one factor illustrating "within group" differences.9

Thus, to focus on whether a particular group should be categorized as voluntary or involuntary is not necessarily the appropriate question and is probably not one that can be answered for many groups. A more productive approach is to take stock of what the comparative research on minorities reveals about the factors that serve either to promote or to impede success in school and that then determine how this knowledge can be used in our efforts to improve educational practice. Ultimately, Gibson (1997) concludes that minority youths do better in school when they feel strongly anchored in the identities of their families, communities, and peers and when they feel supported in pursuing a strategy of selective or additive acculturation. What is needed are learning environments that support additive or empowering forms of acculturation and teacher-student relations based on collaboration rather than on coercion. Navarro (1997) concludes that to construct such collaborative power relations is transformative not only for the educator but also for the students.

### **Dodging Dichotomies: Dealing with Diversity**

So far, the studies we have reviewed have dealt with situations in which only one community culture is represented by the students in the classroom and only a single culture is assumed to exist within the classroom. The reality of many classrooms in the United States and around the world is that the classroom is a setting in which many cultures come together to create a unique set of circumstances. Therefore, even the most homogeneous populations will encounter multiple cultures in the classroom. Although we previously may have given these multiple cultures insufficient attention, the simultaneous existence of popular cultures, teacher cultures, ethnic group cultures, and social-class-related cultures now must be taken as a reality of classroom cultural production and social reproduction. How best to deal with that reality remains the question. Cazden (2000) recently posed the question in this manner, "How do we ensure that differences of culture are not barriers to educational success? More positively, how should we take cultural differences into account when designing programs and pedagogies?" (p. 249).

Up to this point in our discussion, we have repeatedly encountered two seemingly dichotomous views for dealing with diversity. The first advances a "one right way" that features back to basics, including high discipline, tradition, and an emphasis on recitation participation structures. It implements a Kultural view of school that seeks to reduce diversity by minimizing the recognition of cultural difference and by maximizing the role of individual effort in "doing it our way." Clearly, this view has many advocates in American society. This approach, however, stratifies the existing diversity into higher and lower sectors where many minorities and the "different" along

<sup>9</sup> In response to what Ogbu (Ogbu & Simons, 1998) has referred to as a misinterpretation of this work, namely, that minority school performance is caused only by sociocultural adaptation, his most recent explanation of minority school performance uses cultural ecological theory.

He further states that he is attempting only to describe the general pattern within a group; his analyses cannot be applicable to each and every individual that composes a group of people (in this case, minorities).

This theory considers the broad societal and school factors *as well as* the dynamics within the minority communities. In this case ecology is the "setting," "environment," or "world" of people (minorities), and "cultural" broadly refers to the way people (in this case the minorities) see their world and behave in it. The theory has two major parts. One part is about the way the minorities are treated or mistreated in education in terms of educational policies, pedagogy and the returns for their investment or school credentials. Ogbu calls this the *system*. The second part is about the way the minorities perceive and respond to schooling as a consequence of their treatment. Minority reposes are also affected by how and why a group became a minority. This second set of factors is designated as *community forces*. (italics in the original, Ogbu & Simons, 1998, p. 158).

many dimensions fare poorly. A second approach to dealing with diversity is to emphasize meaning-oriented, languagemediated activities in which students talk and participate as active subjects in the classroom. This approach minimizes stratification while it promotes diversity. It requires more complex methods to implement because of the diversity it spawns and because the qualities of its achievements are controversial.

Principle reasons can be found to reject either alternative to the exclusion of the other. We noted at the outset and throughout the chapter that all classrooms are actually hybrids of activities that combine features characteristic to notions of both Kultur and cultures. In this section, we explicitly argue for a mixed model in which the overall ethos of classroom culture satisfies the goals of diversity and student agency while it recognizes that self-discipline, excellence, and tradition play essential roles. The desired mix is attempted by distributing the power, goals, and activities throughout different participation structures that constitute the learning-teaching experience in an effort to change, rather than perpetuate, educational inequities among students along ethnically, economically, or medically defined lines.

Many before us have argued for a change in the organization of classrooms to deal effectively with the diversity of classroom cultures (in all senses). The challenge is to provide an alternative form of classroom that is sustainable on a widespread scale. If this alternative is not provided, classrooms revert to what Cazden and Mehan (1989) have referred to as the "default" interaction pattern—the recitation script.

### Framing and Classification

To address this problem, Cazden (2000) has highlighted Basil Bernstein's idea that classroom cultures can be categorized along two dimensions: *classification* and framing. By *classification*, Bernstein means the degree to which social practices are kept separate, whereas *framing* refers to the degree to which control is rigidly maintained in the practices. Bernstein (1990) has suggested that to weaken the relationship between social class and educational achievement, one must weaken the classification and framing of classroom practices. These modifications apply to both the interaction among participants within the classroom and to the flow of communication between the school classroom and the community(ies) that the school draws on.

Several researchers have recently followed Bernstein in advocating the change (weakening) of classroom frames and classifications; they have offered general suggestions for how this change should be implemented. For instance, Lisa Delpit (1988, 1995) has argued that teachers should validate students' home language without using it to limit students' potential. Therefore, providing educational opportunities for students' positive feelings by itself does not result in student achievement (Au & Carroll, 1997). According to Delpit, teachers must also acknowledge the unfair "discourse-stacking" that our society engages in and must recognize the conflict between students' home cultures and the culture of the school. She argues, consistent with the evidence on student resistance, for what teachers need to understand: Students who appear to be unable to learn are, in many instances, choosing to "not-learn" to maintain their sense of identity in the face of a painful choice between allegiance to "them" or "us." Teachers can reduce this sense of conflict by transforming classroom discourse so that it contains within it a place for the students' selves.

Delpit disagrees with James Gee (1989), who has argued that the dominant discourse of classroom culture cannot be explicitly taught.<sup>10</sup> She urges teachers to be explicit about the dominant culture of the classroom and to teach children how to succeed there. To do so, they must saturate the dominant discourse with new meanings and must wrest from it a place for their students and their students' cultural heritage.

Gloria Ladson-Billings (1995) does not refer to Bernstein directly. However, she has identified teaching practices that help to create classroom cultures where children can "succeed academically while retaining their cultural identities" and can become aware of the "political underpinnings of [their] community and social world" (p. 477)-what she refers to as "culturally relevant" pedagogy. Those practices can be expected to weaken the typical classroom frames and classifications in the manner suggested by Bernstein. Ladson-Billings identified three key characteristics of culturally relevant teaching, two of which implicate framing and classification. First, as members of the community, the teachers developed relationships with their students and their communities that were fluid, equitable, and reciprocal. Second, those teachers viewed knowledge as dynamic, shared, recycled, and constructed. Teaching and learning for such teachers was about "doing," and they organized the classroom to encourage students to be responsible for one another and to learn collaboratively.

Generalizing to other dimensions of student variation under the general rubric of "inclusion," Erickson (1996) explicitly suggests that teachers make classroom frames more elastic. For him, loosening the frames (which is not to create chaos but to allow for flexibility) achieves inclusion in its most general sense. Erickson reviews the findings of the studies he collectively refers to as culturally relevant pedagogies (many of which have been reviewed here) for insights about modifying classrooms to accommodate the inclusion of children with learning disabilities. Specifically, he recommends that teachers should modify both their lesson pacing and the time they allot for completion of written tasks, and they should make use of cooperative learning groups.

As important as such suggestions are, their widespread adop-

<sup>10</sup> Gee (1989) maintains that there are primary discourses, which are learned in the home, and secondary discourses, which are attached to institutions or groups one might later encounter. He emphasizes that all discourses are not equal in status, that some are socially dominant—carrying with them social power and access to economic success—and that some are subordinate. The status of individuals born into a particular discourse tends to be maintained because primary discourses are related to secondary discourse of similar status in our society (e.g., the middle-class home discourse to school discourse, or the working-class African-American home discourse to the black church discourse). Status is also maintained because dominant groups in a society apply frequent tests of fluency in the dominant discourses, which are often focused on its most superficial aspects—grammar, style, mechanics—to exclude from full participation those who are not born to positions of power.

tion is very much an issue. Telling people to change their habits is not a simple matter nor is change a matter of individual will (Vaughn & Schumm, 1996; Wells, 1986). Indeed, some otherwise sound advice may become counterproductive if it makes teachers self-conscious about their practices but does little to assist them.

Wells (1986) focuses on classification practices that organize the children's relations to the specific activity. For instance, asking children to generate an ending to their own unfinished story is likely to generate a very different set of power relations than the quizzes about names, attributes, and main events of a typical reading instruction story. Wells argues that one must attend to the ways in which the participants themselves construe the task.

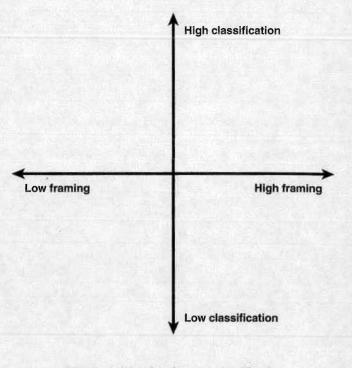
Wells identifies two major impediments to developing quality interactions with children that we believe illustrate issues of classroom classification and framing, respectively. One impediment is the teacher's unfamiliarity with individual children's interests and abilities (e.g., background knowledge). Consequently, teachers find themselves seeking to classify individuals in terms of preexisting stereotypes of what children of a given age or group should be like. The second impediment identified by Wells occurs when teachers become so concerned with teaching what they believe children should learn that they allow very little opportunity for the children to take responsibility for their own learning. As a result of those problems, teachers are likely to underestimate children's true capabilities. In sum, Wells argues that teachers need to start with recognizing that children are already active, self-directed learners. On this basis, teachers should seek to find out more about the particular interests and abilities of individual pupils by listening to what they have to say and by encouraging them to ask the questions they want to ask. Then teachers can develop a style of collaboration and negotiation in the planning of learning activities to which both teacher and pupil contribute and for which both take responsibility, thus weakening both framing and classification as viewed from a traditional perspective.

In a similar vein, Bowers and Flinders (1990) suggest that teachers use "responsive teaching techniques" to become aware of and to reframe cross-cultural interactions and to take into account the balance of power and solidarity in their classrooms. Bruner (1996) notes that this approach to teaching emphasizes "consciousness, reflection, breadth of dialogue, and negotiation" (p. 42). Clearly, these are recommendations for the weakening of classroom classification and framing.

Whatever the terms used to describe the recommended pedagogical approach, the resulting suggestions remain largely abstract for teachers at the level of implementation. Unsurprisingly, Au and Carroll (1997) have documented teachers' dissatisfaction with generalities and teachers' requests for guidelines that are specific enough to guide practice.

# Combining Bernstein and Activity-Based Approaches

By considering framing and classification at the level of activity and by considering classroom cultures as emergent hybrids of differently organized activity systems, we obtain an adaptable model for designing activities that support local goals and ob-



### Mixed model of framing and classification

Figure 44.9. Mixed model of framing and classification.

jectives and that produce favorable outcomes. The key features of a "mixed model" are as follows:

- 1. Activity as the unit of analysis
- 2. A dual object (e.g., excellence with diversity)
- 3. Fluid and deliberate movement within and between systems
- 4. Achievement of balance (center) according to object
- 5. Many "centers"

The merits of activity as a unit of analysis have been described in previous sections of this chapter. To consider the level of activity as the unit of analysis and, therefore, the unit of change helps to organize environments that meet and support particular objects. In our case, the object is to produce a mixed model that disrupts underachievement patterns for nonmajority students and ensures that they acquire standard school knowledge. We believe a mixed model is best achieved through a combination of activities that lower framing and control of the classroom by encouraging student responsibility and active participation and that lower the classification of the classroom by integrating students' out-of-school knowledge in ways that guarantee students' full participation in school, community, and society.

From this view, the overall classroom culture emerges from the particular hybrid of framing and classification configurations that organize the individual activities. (See Figure 44.9.) The variety of hybrids can be illustrated by the location of any given activity relative to other activities within the quadrants across the two continua. In this way, throughout a day and across the year, many centers exist among activities according to the relative high and low framing (control) and classification (separation of social practices) of the activity. Deliberate movement up and down (high-low) along the framing and classification continua is motivated by an object relative to a local context.

### Beyond the Best Practices Classroom

We have argued that the activity-based instructional approaches described here can be effective instruction for all classrooms regardless of the cultural variation of their members. Yet, Au (1998) cautions that simply adopting an active and participatory approach, or what she refers to as a constructivist approach, will not confront and change the underachievement of minority students. Au (1998; see also Au & Carroll, 1997) draws on the experience of KEEP to suggest that activity-based instructional approaches may improve student achievement but only when fully implemented. Full implementation requires that attention be given to (a) the culture (diversity) in the classroom (membership, ethnic, linguistic, cultural) and (b) the diversity of classrooms (cultures).

To address the de facto multicultural nature of classroom culture, Au (1998) calls for a diverse constructivist orientation. She views the difference between mainstream and diverse constructivism as a matter of emphasis and degree rather than kind. In her opinion, the mainstream constructivist orientation does not take adequate account of differences (ethnicity, primary language, and social class) that may affect school success. A diverse orientation attempts to look at how schools devalue and could revalue the cultural capital of students of diverse backgrounds. For instance, the mainstream constructivist orientation recognizes that students' knowledge claims must be considered valid within students' own cultural contexts. A diverse constructivist orientation inquires into the ways that knowledge claims are related to cultural identity and are shaped by ethnicity, primary language, and social class. A mainstream constructivist orientation may assume that students need primarily to acquire the proficiency in literacy needed for selfexpression and for success in the larger society, but the diverse constructivist orientation suggests that a concern for proficiency should not be allowed to override a concern for the transformative possibilities of literacy for both the individual and the society. Au and Carroll (1997) underscore the support required from resources outside the classroom (e.g., extensive staff development, time for planning, school restructuring) if one seeks to fully implement an activity-based instructional approach. Teachers can get beyond generalizations and can arrive at specific visions of local classrooms.

In similar fashion, Brown and Campione (1994) distinguish between two types of change (implementation): immanent change that is created within the social system and contact change that is created outside the social system in question. Selective contact occurs when people learn about a new idea and choose to implement it, and directed contact occurs when outsiders force the innovation to be adopted. Brown and Campione's dissemination effort has been one of selective contact and immanent change, with teachers free to select new ideas and innovations according to their needs—as long as they adhere to the first principles of learning on which the program is based. The notion of "implementation as evolution" (Majone & Wildavsky, 1978), which is constrained by those first principles, provides a way to for adaptation and modification to be organic parts of the implementation process. Ironically, specificity (e.g., addressing the special classroom culture) is the key to generalizing the activity-based approach to teaching and learning.

# Activity-Based Learning: Concrete Examples

In this section, we focus on four significant and current instantiations of activity-based approaches that can serve as concrete models for thinking about diversity-oriented classroom cultures. The examples also illustrate the manipulation of framing and classification within activities, and they support the flow of communication between schools and communities. We describe each example in sufficient detail to illustrate a range of useful activity combinations.

First, we describe the case of sheltered English instruction, which highlights the instructional modifications for the instruction of second-language learners. Second, we describe the Fostering a Community of Learners project, which explicitly designs classroom activities to take advantage of classroom diversity and to enhance student responsibility and control. Third, we describe efforts to expand the classroom social practices to include local funds of knowledge and to change the social relationship between schools and their surrounding communities. Finally, we describe a combination or mixed model, which uses activity approaches to address Bernstein's concerns with framing and classification.

### SHELTERED ENGLISH INSTRUCTION

For many children who enter public schools unable to speak English, the classroom is an alien place with unfamiliar language and social practices. The task of providing instruction to the increasing number of nonnative speakers is a huge challenge (Nieto, 1992). The enormity of this task is illustrated by the following description of the situation facing many schools and teachers today.

School started the day after Labor Day. Our enrollment suddenly included 150 Hmong who had recently immigrated to our school district. We had neither classrooms nor teachers to accommodate such a large influx, and no one was qualified to deliver instruction in Hmong. By October, it was obvious that our policy of placing these students in regular content classes was not working. The students were frustrated by their inability to communicate and keep up with classwork, and teachers felt overwhelmed and inadequate to meet the needs of students who were barely literate and did not know English. (high school teacher journal entry, quoted in Diaz-Rico & Weed, 1995, p. 114)

Unlike English as a Second Language instruction that provides focused language instruction by pulling children out of classrooms so they receive segregated instruction with other non-English-proficient children, "sheltered English" deliberately modifies content area instruction to accommodate the diversity in the student population. Rather than expect students who are new to English to participate independently in content classes designed for native English speakers, students are given additional language and academic support in situ.

The approach of Specially Designed Academic Instruction in English (SDAIE) to sheltered English instruction combines second language acquisition principles with those elements of quality teaching that make a lesson understandable to students (Sobul, 1984, 1994). SDAIE has four goals for students: learn English, learn content, practice higher-level thinking skills, and advance individual literacy skills (Law & Eckes, 1990). Diaz-Rico and Weed (1995) build on Hudleson's (1989) suggestions and provide five principles to guide the design of SDAIE classrooms:

- Active participation: Students learn both content and language through active engagement in academic tasks that are directly related to a specific content.
- Social interaction: students learn both content and language by interacting with others as they carry out activities.
- Integrated oral and written language: Students become more able language learners when language processes are integrated in a variety of ways and for a variety of purposes.
- Real books and real tasks: Students learn to read authentic texts and to write for useful purposes.
- Background knowledge: Student's prior knowledge of a topic may be activated through classroom activities that are drawn from a variety of language resources.

Teachers in SDAIE classrooms use language to further knowledge acquisition rather than to focus on language itself. Classroom activities are designed to promote students' concurrent learning of English and academic content (Diaz-Rico & Weed, 1995). Lesson modifications include changes from "teacher-fronted" classrooms in which teacher talk dominates and directs the flow of information (i.e., the recitation script) toward classrooms that support cooperative work among students. Teachers in collaborative classrooms focused on assisting students with the learning task rather than on providing (language) error correction, gave fewer commands, and imposed less-disciplinary control. In addition, teachers consciously altered the pace of lessons and used cues both to support the language of the classroom and to provide their students with "comprehensible input" (Krashen, 1980). Cueing devices included the use of charts, diagrams, maps, and other visual displays to orient the students to the important aspects of the lesson content.

Teachers who use the SDAIE approach also modify the classroom organization with the dual purpose of language and content instruction in mind. Teachers attend to language-based objectives and subject matter objectives in ways that do not overburden the student. Clearly, the selection, modification, and organization of instructional materials is an essential aspect of a successful lesson. Materials must be selected according to their utility to provide the students with "comprehensible input." This approach means selecting a variety of materials including video and various texts (magazines, articles, books) with good graphics and little jargon. Some material requires simplification of language, elaboration of concepts, or direct definitions (and may require using the students' native language). While providing instruction, teachers seek to integrate students' experiences or background knowledge through techniques such as brainstorming. Displaying this information using multiple graphic organizers such as semantic webs, maps, grids, and matrices supports students' understanding of the verbal discussion. Such understanding is also facilitated by using a wide range of presentation styles including lecturing (cueing students by including terms such as first, second, etc.); demonstrating with hands-on and show-and-tell explanations; working with text (outlining; overview of main headings, subheadings, etc.); and providing variable interaction patterns (individual practice, small group, dyads, whole group), thereby allowing students to test their language skills and content knowledge.

Evaluation of students is made consistent with the methods of instruction. For example, to expect a student to indicate his or her understanding by making a formal oral presentation to the entire class would be unfair. SDAIE teachers provide a range of ways for students to demonstrate their understandings, including those with which they are not completely comfortable. Finally, a crucial step is the follow-up lesson. Because each lesson has a dual purpose (language and content understanding), the follow-up provides an additional opportunity for students to test their understandings and to express their concerns and questions.

### FOSTERING A COMMUNITY OF LEARNERS

The Fostering a Community of Learners (FCL) project is a system of interactive activities that are designed to produce a selfconsciously active and reflective learning environment. The role of the teacher is key to organizing this type of classroom. Brown and Campione (1994, 1996) avoid the dichotomy between discovery learning and didactic instruction by arguing in favor of a Deweyesque middle ground that they refer to as "guided discovery." In guided discovery, the teacher acts as a facilitator, guiding the students' learning. Brown and Campione (1994) willingly admit that guided discovery is difficult to orchestrate and requires a teacher's sensitive clinical judgment of when to intervene and when to leave well enough alone.

FCL teachers promote guided discovery by drawing on the expertise among the students (reducing classification and enhancing recognition of diversity) and the wider community beyond the classroom itself, again weakening framing and classification. At its simplest level, the FCL instructional approach has three key parts: research, share, and perform. Students engage in independent and group research on a selected aspect of a topic of inquiry, mastery of which is ultimately the responsibility of all members of the class. The division of labor requires that children share their expertise with their classmates. This sharing is further motivated by some consequential task or activity (e.g., a test or quiz or the design of a "biopark" for endangered species) that demands that all students have learned about all aspects of the joint topic. The cycles of researchshare-perform are the backbone of FCL (Brown & Campione, 1996).

In addition to other instructional techniques (see Table 44.4),

reciprocal teaching and a modified version of the jigsaw method of cooperative learning are used. Specifically, students are assigned curriculum themes (e.g., changing populations), each divided into approximately five subtopics (e.g., extinct, endangered, artificial, assisted, and urbanized populations). Students form separate research groups, each assigned responsibility for one of the five-or-so subtopics. These research groups prepare teaching materials using commercially available, stable computer technology. Then the students regroup into reciprocal teaching seminars in which each student is expert in one subtopic, holding one-fifth of the information. Each fifth needs to be combined with the remaining fifths to make a whole unit, hence "jigsaw." All children in a learning group are expert on one part of the material, teach it to others, and prepare questions for the test that all will take as part of the complete unit. Thus, the burden of teaching others and learning from others' expertise is a real one and is a mainstay of these classrooms (Brown & Campione, 1996). By having students regularly disseminate information to classmates who depend on each other to get data for their projects, as well as by having projects connect with real-world consequences, teachers can organize learning activities to connect students with each other and with the world beyond the classroom. The particular activity structures of FCL are chosen to motivate, enable, and support the central research-share-perform cycles. Several activities and their classroom organization are summarized in Table 44.4.

Brown and Campione (1994, 1996) have identified the following features that characterize the ideal FCL classroom:

- Individual responsibility is coupled with communal sharing, which results in increased diversity of experience, knowledge, and skills among the classroom members.
- The use of ritual and familiar participation structures and routines enable children to make the transition from one participation structure to another quickly and effortlessly. For example, as soon as students recognize a participation structure, they understand the role expected of them. These routines include (a) the organization of students into groups (composing on computers, conducting research through various media or interaction with the teacher, editing manuscripts, discussing progress); (b) jigsaw teaching activity; and (c) benchmark lessons in which the teacher or outside expert introduces new information for reflection.
- A community of discourse guides the development of normative discourse that operates during each type of participation structure. This discourse knowledge is essential for active and productive participation in the classroom routines.
- Multiple zones of proximal development among classroom members are organized in activities such as the jigsaw technique to capitalize on the range of expertise and diversity among the children and teacher, a process that circulates power in the classroom routinely.
- Strategies are used such as seeding, migration, and appropriation of ideas. The role of the teacher is to "seed" new ideas and concepts into the classroom and to allow those that work to be "taken up." Those ideas migrate and are appropriated differently among the children, thus cultivating and enhancing the diversity of expertise in the classroom.

Table 44.4. Elements of Fostering a Community of Learners

Shared Information	Consequential Task	
Jigsaw	Exhibitions	
Cross-Talk	Tests, Quizzes	
<b>Distributed</b> Exercise	Design Tasks	
Majoring	Publishing	
Help-Seeking	Transparent Assessments	
Exhibitions	Authentic Assessments	
	Jigsaw Cross-Talk Distributed Exercise Majoring Help-Seeking	

Note: Adapted from "Psychological Theory and the Design of Innovative Learning Environments," A. Brown and J. C. Campione in *Innovations in Learning* (pp. 289–325), by L. Schauble and R. Glaser, 1996, Mahwah, NJ: Lawrence Erlbaum Associates.

Using a similar approach, also referred to as "community of learners," Rogoff (1994) extends the notion of transforming roles to include parents and the relationships between teachers and neighborhood representatives. According to a theory of participation and transformation of roles that leads toward greater responsibility and autonomy, each participant is viewed as key and active in guiding the decisions and instruction that occur in the school and classrooms. This approach to a community of learners provides opportunities for teachers and parents to inform each other regarding their respective knowledge bases and requires both to transform the traditional boundaries associated with their roles as teachers and parents (for more details see Matusov, Bell & Rogoff, 1994). This entire ensemble of changes materially affects the framing and classification practices in the classroom as a whole.

### FUNDS OF KNOWLEDGE

The previous two examples have focused primarily on weakening the framing and classification of classroom culture within the classroom settings themselves while giving secondary attention to connections between classroom and community. The Funds of Knowledge project extends the changes in the classroom beyond its physical walls. Luis Moll and his colleagues (Moll, 1996; Moll, Amanti, Neff, & Gonzalez, 1992; Vélez-Ibáñez, Moll, Gonzalez, & Neff, 1991; Moll & Greenberg, 1990) have established what they refer to as "strategic connections" between household research and classroom practice through teachers' participation in "ethnographic experiments" (Moll, 1996). Ethnographic experiments lower the classification of classrooms by lessening the separation of social practices in and out of school, and they have facilitated the flow of communication between school and community that has been suggested by Bernstein (1990).

The Funds of Knowledge project consists of three main, interrelated activities: (a) an ethnographic analysis of the transmission of knowledge and skills among households, (b) creation of an after-school laboratory where researchers and teachers use community information to experiment with literacy instruction, and (c) classroom observations in which researchers and

Agriculture and Mining	Material and Scientific Knowledge
Ranching and farming	Construction
Horse riding skills	Carpentry
Animal management	Roofing
Soil and irrigation systems	Masonry
Crop planting	Painting
Hunting, tracking, dressing	Design and architecture
Mining	Repair
Timbering	Airplane
Mineral	Automobile
Blasting	Tractor
Equipment operation and maintenance	House maintenance
Economics	Medicine
Business	Contemporary medicine
Market values	Drugs
Appraising	First aid procedures
Renting and selling	Anatomy
Loans	Midwifery
Labor laws	
Building codes	Folk medicine
Consumer knowledge	Herbal knowledge
Accounting	Folk cures
Sales	Folk veterinary cures
Household Management	Religion
Budgets	Catechism
Child care	Baptisms
Cooking	Bible study
Appliance repairs	Moral knowledge and ethics

### Table 44.5. Examples of Household Funds of Knowledge

Note: Adapted from "Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms," by L. C. Moll, C. Amanti, D. Neff, and N. Gonzalez, 1992, *Theory into Practice, XXXI*, pp. 132–141.

teachers examine existing methods of instruction and explore how to change instruction by applying what is learned at the after-school site (Moll & Greenberg, 1990).

The household analysis highlights the networks formed by the social sharing of knowledge that are part of the households' functioning. This sharing is referred to as the exchange of "funds of knowledge" (see Table 44.5) (Greenberg, 1989; Vélez-Ibáñez, 1988). The social networks serve as a buffer against uncertain and changing economic circumstances, promote labor markets by acting as a pipeline to formal and informal jobs, and serve important emotional functions that are most prominent in child care and rearing.

Moll (1996) stresses that funds of knowledge are not contextfree possessions or traits of people in the family but characteristics of people brought to life in an activity. What is important about these activities is the process by which skills are acquired through productive activity and then exchanged through social relationships. These social relations provide a motive and context for applying and acquiring knowledge. Household observations suggest the importance of taking into account not only visible and apparent knowledge but also the more latent or hidden knowledge that is displayed in helping or teaching others. Unlike typical classroom arrangements, much of the teaching and learning within these activities is initiated by the children's interests and their questions. Children are active in creating their own activities or are active within the structure of the tasks created by the adults. In either case, knowledge is obtained by the children, not imposed by the adults.

Moll believes that, without a focus on social relationships and people in activity as the unit of analysis, outsiders (educators) can very easily underestimate the wealth of funds of knowledge available in working-class households; those funds of knowledge may not be patently obvious to teachers or students. This knowledge and all its forms represent a major, untapped resource for academic instruction because it rarely makes its way into classrooms in any substantive manner (Moll & Greenberg, 1990). Cazden (2000) refers to a similar notion as "transferable design resources" (i.e., the knowledge students have gained from their community interactions). Cazden states that a teachers' assumption that all students have such resources is the indispensable first step toward incorporating those resources into the classroom.

The ultimate purpose of the household analysis is to change classroom practice (Moll & Diaz, 1987). Specifically, teachers use the information gained in households to change the sorts of activities and routines available within classrooms. The goal is not to replicate the household in the classroom, but to recreate strategically those aspects of household life that may lead to productive academic activities within the classroom. To support those changes in the classroom culture and to develop appropriate instructional materials, teachers and researchers participate in "change labs," which are seminars held after school. In addition, teachers participate in study groups aimed at understanding the data collected in households, its "fit" and utility for changing classroom practices, and the changes that are likely to be worthwhile (i.e., make a difference for student learning). (See Figure 44.10.)

An example of a topic used in the after-school change lab is one focused on construction and building, one of the most prominent funds of knowledge found in the children's homes that Moll studied. The group started collaborating by showing the students slides of a group of men constructing a home in rural Mexico as a way of eliciting their comments on the building process. Children then developed models of buildings or houses constructed with wood, paper, and other materials. One teacher decided to extend the topic as a research project with her sixth-grade students. After discussing the topic with the students, the teacher instructed them to visit the library and start locating information on building or construction, including materials on the history of dwellings and on different ways of building structures. Together, the students and teacher collected information on architects and carpenters. During the first phase, students built model houses and wrote brief essays describing their research and explaining their constructions. In the second phase, they mobilized funds of knowledge by inviting parents as experts to provide information on specific aspects of construction. For example, a mason described his use of construction instruments and tools. He then explained how he estimated or measured the area or perimeter of the location in which he worked. What is important is that the teacher invited parents and others in the community to contribute substantively to the development of lessons in order to access their funds of knowledge for academic purposes (a total of 20 people visit the classroom during this lesson). The visits provided opportunities for extending the initial lesson.

In one visit, a student's brother, who was studying to be a draftsman, presented construction plans to the class. This visit

### CLASSROOM CULTURES AND CULTURES IN THE CLASSROOM

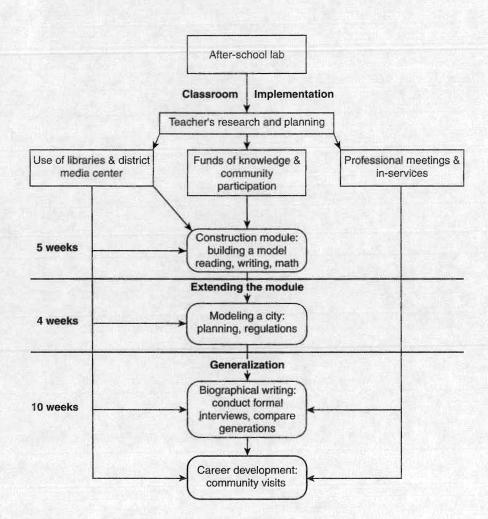


Figure 44.10. The process of "change labs" to support changes in classroom culture.

sparked the students to combine their individual structures to form a community. The students conducted subsequent research on what a town or city requires (e.g., water, electricity, etc.). Students supplemented their library research by conducting observations in their own communities to determine what other aspects of urban life they might need to incorporate into their model city. During this phase of classroom work, the teacher continued to participate in the change labs in which she received advice from **researchers** and other teacher colleagues.

During final phase, referred to as "generalization," the teacher extended the lesson without the direct assistance of the research team. This important phase illustrated how the teacher creates something to support new curricular goals that would address the needs of a specific classroom. Having attended an in-service on writing, the teacher incorporated developed materials into the lesson by giving students an assignment to write biographies about people from different generations. Key interview questions regarding the types of jobs that people had done were included. Visitors from different generations came to the class, and students asked them relevant questions. In addition, students were asked to interview two more people in their community from two different generations and to compare their interviews.

In recent efforts toward sustaining the project, teachers have become teacher-researchers, not only in the traditional sense of studying their own classrooms but also in conducting their own fieldwork in their students' communities (Moll, 1996; Moll, Amanti, Neff, & Gonzalez, 1992). The purpose of this policy is for teachers to develop both theory and method while they identify community cultural resources that could be used for teaching. Their aims necessarily engage families and family knowledge, thereby developing the "confianza," or mutual trust, needed to create new social relationships that are flexible and reciprocal between teachers and families (Moll, 1996). Parents and other people contributed to lessons because of the implicit assumption that the students would benefit academically. Clearly, such relationships could not be sustained if the parents, teachers, or students believed them to be educationally insignificant (Moll & Greenberg, 1990).

### Computers, Activity, and Classroom Culture

Several general reviews of the effect that computers have on classroom processes have been done to which the interested reader can turn (Cognition and Technology Group, 1996; Crook, 1998; Kerr, 1996; Koschmann, 1996; Mandinach,

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Cline, & Service, 1994; Papert, 1993; Riel, 1992; Riel & Fulton, 1998; Schofield, 1995; Scott, Cole, & Engel, 1992). Although the general tenor of this work has been one of optimism that computers and associated telecommunications facilities will provide clear benefits to education, others predict that computers are destined to follow typewriters and television into the dustbin of failed educational reforms (Cuban, 1986; Stoll, 1996).

Clearly, the way that computers are integrated into the classroom depends on the culture the teacher is seeking to promote there (Cuban, 1993). When computer use is blended into classrooms that depend heavily on the recitation script and on the educational philosophy it supports, teachers are likely to treat the computer as a tutor—a substitute human for individual instruction. When computers are blended into activity-centered classrooms, they are more likely to be conceived of as tools (Crook, 1998; Riel & Fulton, 1998). Some successes with respect to issues of educational achievement can be noted for those who adopt both metaphors.

# Computer Use to Enhance Teacher-Centered Instruction

Two examples give the flavor of what can be accomplished within a more-or-less standard classroom using computers as tutors. Reinking and Rickman (1990) investigated whether the vocabulary learning and comprehension of readers in intermediate grades would be affected by displaying texts on a computer screen that provided the meanings of difficult words. Among sixth-grade subjects, 60 read two informational passages containing several target words that had been identified as difficult. The results indicated that subjects who read passages with computer assistance scored significantly higher on a vocabulary test that measured the subjects' knowledge of target words.

Such programs have the power to go well beyond basic skills in ways that are designed to create greater reflective awareness of literacy skills. For example, a program developed by Glynda Hull and her colleagues (Hull, Ball, Fox, Levin, & McCutchen, 1985) was designed to teach basic writing to university students. A taxonomy of writing errors, called a "bug library," is inserted into the memory of a computer, and writing errors are detected through a process of pattern matching. With this intelligent word processor, a student composes a text and then asks the machine to scan it to pick out standard bugs. When the computer detects one of these errors, it calls up the passage with the error in it and displays it on the screen with the erroneous sentence highlighted in **boldface** type. Instead of explicitly stating the correct writing rule, the computer prompts the student to search for and solve the problem independently. The machine thus requires such active engagement that the author starts to recognize typical errors and, by repeatedly correcting them, learns to avoid making them. Studies carried out in both laboratory and instructional settings confirm that novice writers do improve (Hull, 1989).

However, despite their apparent potential, no quantum leap in educational achievement can be associated broadly with the inclusion of computers as instructional media in standard classrooms. Most important, they have shown no special power in amplifying the learning rates of children from nonmainstream cultural backgrounds.

Reviews are unanimous that introducing computers with sophisticated software is no guarantee of a significant change in either student performance or classroom cultures. For example, the large and initially well-funded Apple Classrooms of Tomorrow (ACOT) failed to show significant increases in student's academic skills from the use of computers (Baker, Gearheart, & Herman, 1990). Instead, the need to reorganize classrooms to take advantage of and support heavy computer use is emphasized. Curriculum design, building organization, teacher preparation, and their histories (academic, personal, and cultural) all profoundly affect and are affected by the realization of the potential of the computer in the classroom (Riel & Fulton, 1998; Sandholtz, Ringstaff, & Dwyer, 1992).

### Computer Use to Support Activity-Centered Instruction

Of particular interest in this chapter is computer hardware and software that is designed to change the standard instructional climate by creating an activity-centered curriculum (Cole, Griffin, & LCHC, 1987; Koschmann, 1996; Riel & Fulton, 1998). Many demonstration proofs have been conducted to show that, when combined with extensive use of telecommunications, the use of new information technologies can bring about significant changes in classroom cultures. The concept that computers can provide solid benefits to children's education that are multicultural and inclusive appears at least plausible. Diaz-Rico and Weed's (1995) summary of key features of specially designed academic instruction in English provides a good summary of the kinds of features to strive for.

The expectation for active participation, at most, biases the selection of computer programs against those that amplify the "drill and kill" potential of computers or, at least, motivates the careful inclusion of computers in a broader range of activities so that the basics are learned in the context of the higher-order activities they are designed to mediate.

Social interaction is oriented to the joint use of computers or to the use of computers as means of obtaining information about issues of interest. Use of e-mail discussions has a leveling effect on traditional hierarchies of classroom status, a shift that disproportionately aids those who are least likely to be active participants in a traditional classroom. Goldman & Newman (1992) examined the features of e-mail discourse among sixthgrade students and their teacher who communicated with each other within a single classroom. The similarities found between face-to-face and electronic communication included (a) frequent metacommunication through letters, notes, and memos and (b) mindfulness of the differences in status and hierarchy between teachers and students. Complex and interrelated differences were also found between classroom discourse and e-mail discourse.

The researchers used the initiate-respond-evaluate sequence from research on patterns of classroom interaction (Mehan, 1979) to analyze network discourse. They found that, in classroom discourse, teachers usually initiated interaction, but in network discourse, students and teachers both initiated interaction. The temporal sequence of the exchange was altered by the fact that a single sequence might extend over days or weeks. Invitations made electronically by the teacher might go unanswered or receive parallel responses on different days. Reply interactions made electronically involved more than three turns, with less competition for the reply slot. Students could take turns as they wished, each responding to more than one question at a time, and they experienced fewer restrictions on the numbers of possible replies. Evaluation of replies was much less common in electronic communication. Correct answers were sometimes provided by the teacher, but often they contained no mention of any incorrect responses. Private messages from the teacher to students sometimes contained evaluative statements. In this case, the network was used to complement rather than replace the interaction that routinely occurs in the classroom. More recently, the Cognition and Technology Group (1996), Harasim (1996), and Riel and Fulton (1998), among others, have argued that the attributes of "anytime, anyplace communication" that distinguishes network learning actually make group interaction and collaboration in this medium especially effective when implementing activity-centered curricula.

### INTEGRATION OF ORAL AND WRITTEN LANGUAGE

The integration of oral and written language is a normal characteristic of activity-based classrooms that makes for a heavy use of computers as tools for communication within and between classrooms. In fact, the within-between distinction itself gets becomes problematic when children at different sites work collaboratively through networks with others who may or may not be nearby geographically. Cross-classroom collaboration (Riel, 1993, 1996; Riel & Fulton, 1998) can involve a portion of the curriculum that is conducted on-line and in which students in distant classrooms work together to conduct projects that are integrated with the total curriculum. This collaboration involves extensive and reciprocal interaction among classes. An example of cross-classroom collaboration is the Learning Circles, implemented on the AT&T learning network. Learning Circles was specifically designed as global education to promote multicultural sensitivities. It provided tangible opportunities for collaborative problem solving. Similar to "quality circles," which are common in the business field, six to nine classes form a learning circle. Students in these classes design and organize the curriculum using computer telecommunications. Students learn how to plan, organize, and complete projects with distant partners as they conduct research on societal or global issues. Multiple sources are used in research, including local community interviews and archival research. Each classroom group in a learning circle helps create the circle publication that summarizes the complete work at the end of the session. This publication process helps students review and evaluate the exchanges they had with others in distant locations. No one teacher controls a learning circle. It is a collective construction by the participants.

### REAL TEXT AND REAL TASKS

Real text and real tasks can be enhanced through network access that provides a broader array of information and classroom members. For instance, Levin, Boruta and Vasconcellos (1983) showed more than a decade ago that elementary school children's writing improved when they used computer networks to communicate—not with computer tutors, but with other students. They speculated that using a computer to communicate with other writers from a distance may have a positive effect on writing performance because the students perceive the assignment as a real task and sense the presence of an authentic reader.

More recently, Neuwirth and Wojahn (1996) found that the use of PREP, a computer writing program, supported the cooperative writing process among university students. Students' original text drafts were shared for peer review coaching among students. The PREP program allowed multiple users to review and mark up the electronic document as if they were marking up a printed copy of the document (e.g., to add text, draw arrows, and so forth) without replacing the original text. Once a peer provided the author with suggestions and critique, the teacher could add suggestions for consideration. The program records the suggestions and organizes them to reveal the original draft in one column, a peer's suggestions for revision in the second column, and teacher's suggestions in a third column.

### BACKGROUND KNOWLEDGE

Background knowledge is most clearly enhanced through computer networking and use of worldwide web (www) resources. The more-familiar association between computers and collaboration that involves interactions among a small group of learners working together at a computer can also furnish the settings for the construction of shared knowledge around computers, a benefit not derived in one-computer-to-one-child arrangements (Cole, Griffin, & LCHC, 1987; Crook, 1998. For instance, Pease-Alvarez and Vasquez (1990) found that the collaboration around computers not only provided computer knowledge but also enabled dominant Spanish speakers opportunities to use their native language as a support while learning subject matter content using the computer. In addition, students who participated in peer tutoring around computers used oral language in ways that differed markedly from interactions during typical classroom lessons. As student tutorial pairs learned more about using computers and their applications, they, in turn, became tutors and were then paired with younger and less-experienced students. In this way, the background knowledge of older students, both linguistically and academically, led to improved reading and writing performance in the younger students.

Despite the potential and promise of computers, commentators— even those such as Riel who advocate their use—continue to point out the downside of widespread use of computers and networks in classrooms at all levels of the curriculum (Noble, 1998; Riel, 1996; Stoll, 1996). Inequalities in access remain a severe problem. Even when access is achieved, the virtues of computers and telecommunications for reorganizing classroom cultures require ongoing support and attention. By all accounts, the technology will continue to change dramatically from year to year and will require an ongoing level of investment that is taken into account all too rarely by those who act on demonstrations of the possible without fully considering the costs to implement those possibilities. In sum, new information technologies enable new patterns of communication with people and resources located outside the classroom and provide important resources for building effective classroom cultures. But whether technology will fulfill this potential on a broad basis and fulfill it in a way that enhances the effectiveness of multicultural classrooms remains to be seen.

# Concluding Remarks: Hybridity All the Way Down

Many years ago, John Dewey formulated the underlying tension that has suffused our discussion.

[M]ankind likes to think in terms of extreme opposites. It is given to formulating its beliefs in terms of Either-Ors, between which it recognizes no intermediate possibilities. When forced to recognize that the extremes cannot be acted upon it is still inclined to hold that they are all right in theory but that when it comes to practical matters circumstances compel us to compromise. Educational philosophy is no exception. (Dewey, 1938, p. 17)

Clearly, the literature we have reviewed here has been replete with the "either-or" that characterized the debate between traditional and progressive approaches to education. Consistent with Dewey's call to overcome dualistic thinking, we have repeatedly referred to the hybrid nature of classrooms that builds on, rather than fights against, diversity.

In *Hybrid Cultures*, anthropologist Reynato Rosaldo (1995) differentiates two meanings of the term *hybridity*. Although his remarks are made with respect to the situation in Latin America, we believe they are well suited to our present discussion:

On the one hand, hybridity can imply a space betwixt and between two zones of purity in a manner that follows biological usage that distinguishes two discreet species and the hybrid pseudo species that results from their combination.... On the other hand, hybridity can be understood as the ongoing condition of all human cultures, which contain no zones of purity because they undergo continuous processes of transculturation (two-way borrowing and lending between cultures). Instead of hybridity versus purity, this view suggests, it is hybridity all the way down. (1995, p. xv)

We believe classroom cultures provide strong examples of what Rosaldo referred to as "hybridity all the way down." Clearly, the local classroom culture is affected by the products (tangible in objects, less tangible in tradition) of the ongoing practice and process of schooling. Each element embodies the philosophies, values, and concrete realities of the communities in question. Those elements are present in the federal regulations, the state curriculum guides, the policies of the local school board, and the district and school administrations. The teacher and the students all have birth cultures that, by providing a base of prior experience, serve as the test beds for their understandings of the classroom and the world. The teacher and students also have experience in multiple local institutional cultures that are mediated by gender, ethnicity, and class. None of these is left at the doorway of the classroom.

In addition to the presence of home cultures, but only par-

tially represented in this chapter, one finds in the classroom the local school culture (Bernstein, 1975; Daniels, 1995; Hamilton & Richardson, 1995; Sarason, 1996; Seeger, Voigt, & Waschescio, 1998), the professional culture of teachers (Feiman-Nemser & Floden, 1986; Gitlin, 1983); the pop culture (Giroux & Simon, 1992); and the kid culture (Fine, 1987). We could add to this list. What is clear is that "the culture" of the classroom is always "the cultures" of the classroom.

In our search for relevant literature for the task of writing about classroom culture, we found a text written more than 20 years ago titled *Culture in the Classroom* (Reynolds & Skilbeck, 1976), which resonates with the current situation. The authors stated:

[S]chools are entering a phase in which reaction against inadequately planned, overambitious curriculum innovations will be justifiably strong. But the need is for the better planning of curriculum reconstruction rather than less planning and curriculum inertia. (p. 126)

In final chapter of Reynolds and Skilbeck (1976), the complexity of classroom culture is reduced to four poignant choices:

- Schools can swim with the tide, identifying basic trends and features of culture and go along with rather than resisting them,
- Schools may identify particular values, beliefs and outlooks in the cultural heritage and seek to preserve them,
- Schools may largely ignore current cultural trends and preserve some island existence, or
- Schools may set out to analyze, assess, and think critically and creatively about their culture, looking for ways to contribute to its future development. (p. 126)

Reynolds and Skilbeck state that if the fourth alternative is chosen, clarity regarding what counts as "critical and creative contributions to the development of culture" is essential. These four decisions hinge on conceptions and valuations of culture so tacit that they are not easy to externalize, operationalize, or test. And they will always be contested.

We have chosen the fourth option. We have attempted to understand former successes and failures both through the historical context of their implementation and in the present school circumstances. Moore (1980) suggests that the only sustainable alternative may be to have it both ways by working for the transformation of schooling while also working within its reproduction.

At first impression, we were disconcerted to find that a 20year-old reference to the culture in the classroom would offer alternatives that still ring true and appropriate. We now find solace in the hope that what we have written will be judged as an example of the fourth option offered by Reynolds and Skilbeck (1976)—as a critical and creative assessment that is based on current (and ever-changing) circumstances.

### REFERENCES

- Abi-Nader, J. (1990). "A house for my mother": Motivating Hispanic high school students. Anthropology & Education Quarterly, 21(1), 41-58.
- Adams, R. S., & Biddle, B. J. (1970). Realities of teaching: Exploration with videotape. New York: Holt, Rinehart, & Winston.

- Akinasso, F. N. (1991). Literacy and individual consciousness. In E. M. Jennings & A. C. Purves (Eds.), *Literate systems and individual lives: Perspectives on literacy and schooling* (pp. 73–94). Albany, NY: State University of New York Press.
- Allington, R. L. (1980). Teacher interruption behaviors during primary grade oral reading. Journal of Educational Society, 72(3), 371–374.
- Altman, I., & Wohlwill, J. F. (Eds.). (1978). Human behavior and environment: Advances in theory and research (Vol. 3). New York: Plenum Press.
- Anthropology & Education Quarterly, 28(3), 1997.
- Anyon, J. (1980). Social class and the hidden curriculum of work. Journal of Education, 162(1), 69-92.
- Au, K. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of Literacy Research*, 30(2), 297-319.
- Au, K. H., & Carroll, J. H. (1997). Improving literacy achievement through a constructivist approach: The KEEP demonstration classroom project. *Elementary School Journal*, 97(3), 203–221.
- Au, K. H., & Jordan, C. (1981). Teaching reading to Hawaiian children: Finding a culturally appropriate solution. In H. Trueba, G. P. Guthrie, & K. H. Au (Eds.), *Culture in the bilingual classroom* (pp. 139–152). Rowley, MA: Newbury House.
- Au, K. H., & Mason, J. (1981). Social organizational factors in learning to read: The balance of rights hypothesis. *Reading Research Quar*terly, 17(1), 115-152.
- Baker, E., Gearhart, M., & Herman, J. (1990). Apple Classrooms of Tomorrow (ACOT) evaluation study: First and second year findings (ACOT Report #7). Cupertino, CA: Apple Computers.
- Barker, R. G. (1968). Ecological psychology: Concepts and methods for studying the environment of human behavior. Stanford, CA: Stanford University Press.
- Bateson, G. (1972). The role of somatic change in evolution. In Steps to an ecology of mind (pp. 346–363). New York: Ballantine.
- Bereiter, K., & Englemann, S. (1966). Teaching the disadvantaged child in the preschool. Englewood Cliffs, NJ: Prentice-Hall.
- Berliner, D.C. (1983). Developing conceptions of classroom environments: Some light on the T in classroom studies of ATI. *Educational Psychologist*, 18, 1-13.
- Bernstein, B. (1973). On the classification and framing of educational knowledge. In R. Brown (Ed.), *Knowledge, education, and cultural change* (pp. 363–392). London: Tavistock.
- Bernstein, B. (1975). Class, codes and control. In B. Bernstein (Ed.), Primary socialization, language and education (Vol. 3, pp. 116-145). London: Routledge & Kegan Paul.
- Bernstein, B. (1990). Class, codes and control: Vol. 4. The structuring of pedagogical discourse. London: Routledge.
- Bloom, A. (1987). The closing of the American mind. New York: Simon & Schuster.
- Boas, F. (1911). The mind of primitive man. New York: Macmillan.
- Bowen, J. (1972). A history of western education (Vol. 1). London: Methuen & Co.
- Bowers, S. A., & Flinders, D. J. (1990). *Responsive teaching*. New York: Teachers College Press.
- Bredo, E., Henry, M., & McDermott, R. P. (1990). The cultural organization of teaching and learning. Harvard Educational Review, 60(2), 247-258.
- Bremme, D. W., & Erickson, F. (1977). Relationships among verbal and nonverbal classroom behaviors. *Theory Into Practice*, XVI(3), 153-161.
- Briggs, E. E., & MacLean, J. R. (1969). Freedom to learn: An active learning approach to mathematics. Canada: Addison-Wesley.
- Brown, A. L., & Campione, J. C. (1994). Guided discovery in a community of learners. In K. McGilly (Ed.), *Classroom lessons* (pp. 229– 270). Cambridge, MA: MIT Press.
- Brown, A. L., & Campione, J. C. (1996). Psychological theory and the design of innovative learning environments: On procedures, principles, and systems. In L. Schauble & R. Glaser (Eds.), *Innovations* in learning: New environments for education (pp. 289-325). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bruner, J. (1996). The culture of education. Cambridge, MA: Harvard University Press.

Burke, K. (1945). A grammar of motives. New York: Prentice-Hall.

- Caudill, W. (1941). Space for teaching. Bulletin of the Agricultural and Mechanical College of Texas, 12(9), 42–46.
- Cazden, C. B. (1986). Classroom discourse. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 432–463). New York: Macmillan.
- Cazden, C. B. (2000). Taking cultural differences into account. In W. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning* and the designs of social futures (pp. 249-266). London: Routledge.
- Cazden, C. B., & Mehan, H. (1989). Principles from sociology and anthropology: Context, code, classroom, and culture. In M. C. Reynolds (Ed.), *Knowledge base for the beginning teacher* (pp. 47-58). Exeter, Great Britain: A. Wheaton & Co.
- Chaiklin, S., & Lave, J. (Eds.). (1993). Understanding practice: Perspectives on activity and context. Cambridge, UK: Cambridge University Press.
- Chall, J. (1983). Learning to read: The great debate. New York: McGraw-Hill.
- Cognition and Technology Group at Vanderbilt. (1996). Looking at technology in context: A framework for understanding technology and education research. In D. Berliner & E. R. Calfee (Eds.), Handbook of educational psychology (pp. 807-840). New York: Wiley.
- Cole, M. (1996). Cultural psychology: A once and future discipline. Cambridge, MA: Belknap Press of Harvard University Press.
- Cole, M., Griffin, P., & Laboratory of Comparative Human Cognition. (1987). Contextual factors in education. Madison, WI: Wisconsin Center for Educational Research.
- Collins, J. (1986). Differential instruction in reading groups. In J. Cook-Gumperz (Ed.), The social construction of literacy (pp. 117–137). Cambridge, UK: Cambridge University Press.
- Collins, M., & Tamarkin, C. (1982). Marva Collins' way. Los Angeles: J. P. Tarcher, Inc.
- Corno, L. (1989). What it means to be literate about classrooms. In D. Bloome (Ed.), *Classrooms and literacy* (pp. 29-52). Norwood, NJ: Ablex Publishing.
- Crook, C. (1998). Computer networks in education. Psychologist, 11(8), 378-380.
- Cuban, L. (1984). How teachers taught: Constancy and change in American classrooms, 1890–1980. New York: Longman.
- Cuban, L. (1986). Teachers and machines: The classroom use of technology since 1920. New York: Teachers College Press.
- Cuban, L. (1993). Computers meet classroom: Classroom wins. Teachers' College Record, 95(2), 185-210.
- Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56(1), 18-36.
- Dahlke, H. O. (1958). Values in culture and classroom. New York: Harper & Brothers.
- D'Amato, J. (1987). The belly of the beast: On cultural differences, castelike status, and the politics of school. Anthropology & Education Quarterly, 18(4), 335-356.
- D'Andrade, R. (1984). Cultural meaning systems. In R. A. Shweder & R. A. LeVine (Eds.), Culture theory: Essays on mind, self, and emotion (pp. 88-119). Cambridge, UK: Cambridge University Press.
- D'Andrade, R. (1996). Culture. In Social Science Encyclopedia (2nd ed., pp. 161–163). New York: Routledge.
- Daniels, H. (1989). Visual displays of tacit relays of the structure of pedagogic practice. British Journal of Sociology of Education, 10(2), 123-140.
- Daniels, H. (1995). Pedagogic practices, tacit knowledge, and discursive discrimination: Bernstein and post-Vygotskian research. British Journal of Sociology of Education, 6(4), 517–532.
- Daniels, H., Holst, J., Lunt, I., & Johansen, L. U. (1996). A comparative study of the relation between different models of pedagogic practice and constructs of deviance. Oxford Review of Education, 22(1), 63-77.
- Delpit, L. (1988). The silenced dialogue: Power and pedagogy in educating other people's children. *Harvard Educational Review*, 58, 280-298.
- Delpit, L. (1995). Other people's children: Cultural conflict in the classroom. New York: The New Press.
- Dewey, J. (1916). Democracy and education. New York: Macmillan.
- Dewey, J. (1938). Experience and education. New York: Collier Books. Diaz-Rico, L. T., & Weed, K. Z. (1995). The cross-cultural, language,

and academic development handbook: A complete K-12 reference guide. Boston: Allyn & Bacon.

- District of Columbia Board of Education. (1922). Report of Board of Education 1921–1922. Washington, DC: Government Printing Office.
- Dorr-Bremme, D. W. (1990). Contextualization cues in the classroom: Discourse regulation and social control functions. Language in Society, 19, 379–492.
- Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.). New York: Macmillan.
- Eder, D. (1981). Ability grouping as a self fulfilling prophecy. Sociology of Education, 54, 151-161.
- Eder, D. (1983). Ability grouping and students' self-concepts: A case study. Elementary School Journal, 84(2), 149-161.
- Engeström, Y. (1987). Learning by expanding. Helsinki: Orinta-Konsultit Oy.
- Engeström, Y. (1990). Learning, working and imagining: Twelve studies in activity theory. Helsinki: Orinta-Konsultit.
- Erickson, F. (1984). School literacy, reasoning and civility: An anthropologist's perspective. *Review of Educational Research*, 54(4), 525-546.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119–161). New York: Macmillan.
- Erickson, F. (1987). Transformation and school success: The politics and culture of educational achievement. Anthropology & Education Quarterly, 18, 335-356.
- Erickson, F. (1996). Inclusion into what?: Thoughts on the construction of learning, identity, and affiliation in the general education classroom. In D. L. Speece & B. K. Kcogh (Eds.), Research on classroom ecologies: Implications for inclusion of children with learning disabilities (pp. 91–107). Mahwah, NJ: Lawrence Erlbaum Associates.
- Erickson, F., & Mohatt, G. (1982). Cultural organization of participation structures in two classrooms of Indian students. In G. Spindler (Ed.), Doing the ethnography of schooling: Educational anthropology in action (pp. 132-175). Prospect Heights, IL: Waveland Press.
- Feiman-Nemser, S., & Floden, R. E. (1986). The cultures of teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 505–526). New York: Macmillan.
- Fine, G. A. (1987). With the boys: Little League baseball and preadolescent culture. Chicago: University of Chicago Press.
- Foley, D. E. (1991). Reconsidering anthropological explanations of ethnic school failure. Anthropology & Education Quarterly, 22(1), 60-86.
- Forman, E. A., Minick, N., & Stone, C. A. (1993). Contexts for learning. New York: Oxford University Press.

Foucault, M. (1979). Discipline and punish. New York: Vintage.

- Gallimore, R. (1996). Classrooms are just another cultural activity. In D. L. Speece & B. K. Keogh (Eds.), Research on classroom ecologies: Implications for inclusion of children with learning disabilities (pp. 229-250). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gallimore, R., & Goldenberg, C. (1993). Activity setting of early literacy: Home and school factors in children's emergent literacy. In E. Forman, N. Minick, & C. A. Stone (Eds.), Conflicts for learning: Sociocultural dynamics in children's development. New York: Oxford University Press.
- Gee, J. (1989). Literacy, discourse, and linguistics [Special issue]. Journal of Education, 171(1).
- Geertz, C. (1973). The interpretation of cultures. New York: Basic Books.
- Gibson, M. A. (1988). Accommodation without assimilation: Sikh immigrants in an American high school. Ithaca, NY: Cornell University Press.
- Gibson, M. A. (1997). Exploring and explaining the variability: Crossnational perspectives on the school performance of minority students. Anthropology & Education Ouarterly, 28(3), 318-329.
- Gibson, M. A., & Ogbu, J. U. (Eds.). (1991). Minority status and schooling: A comparative study of immigrant and involuntary minorities. New York: Garland Publishing.
- Giroux, H. A. (1983). Theories of reproduction and resistance in the new sociology of education: A critical analysis. *Harvard Educational Review*, 53(3), 257–293.

- Giroux, H. A., & Simon, R. I. (1992). Schooling, popular culture, and a pedagogy of possibility. In K. Weiler & C. Mitchell (Eds.), What schools can do: Critical pedagogy and practice (pp. 217-236). New York: State University of New York.
- Gitlin, A. (1983). School structure and teachers' work. In M. W. Apple & L. Weis (Eds.), *Ideology and practice in schooling* (pp. 193– 212). Philadelphia: Temple University Press.
- Goldman, S., & Newman, D. (1992). Electronic initials: How students and teachers organize schooling over the wires. *Interactive Learning Environments*, 2(1), 31–45.
- Goodenough, W. H. (1981). Problems in the conception of culture. In Culture, language, and society (2nd ed., pp. 47-59). Menlo Park, CA: The Benjamin/Cummings Publishing Company.
- Goodenough, W. H. (1994). Toward a working theory of culture. In R. Borotsky (Ed.), Assessing cultural anthropology (pp. 262-273). New York: McGraw-Hill.

Gould, S. J. (1981). The mismeasure of man. New York: W. W. Norton.

- Grant, C., & Secada, W. (1990). Preparing teachers for diversity. In W. R. Houston (Ed.), Handbook of research in teacher education. New York: Macmillan.
- Greenberg, J. B. (1989). Funds of knowledge: Historical constitution, social distribution, and transmission. Paper presented at the annual meeting of the Society for Applied Anthropology.
- Gumilev, L. N. (1990). Ethnogenesis and the biosphere (L. Gumilev, Trans.). Moscow: Progress Publishers.
- Gump, P. V. (1967). The classroom behavior setting: Its nature and relation to student behavior [Final report]. Washington, DC: U.S. Office of Education, Bureau of Research. (ERIC Document Reproduction Service No. ED 015 515)
- Gump, P. V. (1974). Operating environments in schools of open and traditional design. School Review, 82(4), 575-593.
- Gump, P. V. (1975). Ecological psychology and children (Vol. 82). Chicago: University of Chicago Press.
- Gump, P. V. (1978). School environments. In I. Altman & J. F. Wohlwill (Eds.), Human behavior and environment: Advances in theory and research (Vol. 3, pp. 131–169). New York: Plenum Press.
- Gump, P. V. (1982). School settings and their keeping. In D. L. Duke (Ed.), *Helping teachers manage classrooms* (pp. 98–114). Alexandria, VA: Association for Supervision and Curriculum Development.
- Gump, P. V., & Good, L. R. (1976). Environments operating in open space and traditionally designed schools. *Journal of Architectural Research*, 5, 20-27.
- Gumperz, J. J. (1982). Discourse strategies. Cambridge, UK: Cambridge University Press.
- Gutierrez, K., Rymes, B., & Larson, J. (1995). Script, counterscript, and underlife in the classroom—Brown, James versus Brown v. Board of Education. *Harvard Educational Review*, 65(3), 445-471.
- Hamilton, M., & Richardson, V. (1995). Effects of the culture in two schools on the process and outcomes of staff development. *Elemen*tary School Journal, 9(4), 367–385.
- Harasim, L. (1996). Computer networking for education. In T. Husen & T. M. Postlethwaite (Eds.), *International encyclopedia of education* (2nd ed., pp. 977–982). Oxford, UK: Pergamon.
- Harris, M. (1968). The rise of anthropological theory. New York: Crowell.
- Heath, S. B. (1982). Questioning at home and at school: A comparative study. In G. Spindler (Ed.), *Doing the ethnography of schooling: Educational anthropology in action* (pp. 102–131). Prospect Heights, IL: Waveland Press.
- Heath, S. B. (1983). Ways with words: Language, life, and work in communities and classrooms. Cambridge, UK: Cambridge University Press.
- Henry, J. (1963). Culture against man. New York: Random House.
- Herder, J. G. (1966). Outlines of a philosophy of the history of man. New York: Bergman Publishers.
- Herrnstein, R. J., & Murray, C. (1994). The bell curve: Intelligence and class structure in American life. New York: The Free Press.
- Hirsch, E. D. (1987). Cultural literacy: What every American needs to know. New York: Vintage Books.
- Hirsch, E. D., Kett, J. F., & Trefil, J. (1988). The dictionary of cultural literacy. Boston: Houghton Mifflin.
- Hirschfeld, L. A. (1997). Conceptual politics of race: Lessons from our children. *Ethos*, 25, 63–92.

- Hoetker, J., & Ahlbrand, W. P. (1969). The persistence of the recitation. American Educational Research Journal, 6, 145–167.
- Hollingshead, A. B. (1949). Elmtown's youth: The impact of social classes on adolescents. New York: Wiley.
- Hudelson, S. (1989). Teaching English through content-area activities. In P. Rigg & V. Allen (Eds.), When they don't all speak English (pp. 139-151). Urbana, IL: National Council of Teachers of English.
- Hull, G. (1989). Rethinking remediation: Toward a social-cognitive understanding of problematic reading and writing (Technical Report 19). Washington, DC: Office of Educational Research and Improvement.
- Hull, G., Ball, C., Fox, J. L., Levin, L., & McCutchen, D. (1985). Computer detection of errors in natural language texts: Some research on pattern-matching. Paper presented at the annual meeting of the Educational Research Association, Chicago, IL.
- Jacob, E., & Jordan, C. (1987). Moving to dialogue. Anthropology & Education Quarterly, 18(4), 259–261.
- Jensen, A. R. (1969). How much can we boost IQ and scholastic achievement. Harvard Educational Review, 39(1), 1-123.
- Johnson, N. B. (1985). Westhaven: Classroom culture and society in a rural elementary school. Chapel Hill, NC: University of North Carolina Press.
- Kerr, S. T. (Ed.). (1996). Technology and the future of schooling: Ninetyfifth yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press.
- Koschmann, T. (1996). CSCL: Theory and practice of an emerging paradigm. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kozol, J. (1991). Savage inequalities: Children in America's schools. New York: Harper Perennial.
- Krashen, S. (1980). The theoretical and practical relevance of simple codes in second language acquisition. In T. Scarcella & S. Krashen (Eds.), *Research in second language acquisition* (pp. 7–18). Rowley, MA: Newbury House.
- Kroeber, A. L., & Kluckhohn, C. (1963). Culture: A critical review of concepts and definitions. New York: Vintage Books. (Original work published 1952)
- Kyle, W. C., Jr. (1984). What became of the curriculum development projects of the 1960s? How effective were they? What did we learn from them that will help teachers in today's classrooms? In D. Holdzkom & P. B. Lutz (Eds.), *Research within reach: Science education*. Charleston, WV: Appalachia Educational Laboratory.
- Ladson-Billings, G. (1992). Reading between the lines and beyond the pages: A culturally relevant approach to literacy teaching. *Theory Into Practice*, XXXI(4), 312–320.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. American Educational Research Journal, 32(3), 465–491.
- Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (Eds.), Understanding practice: Perspectives on activity and context (pp. 3– 32). New York: Cambridge University Press.
- Lave, J., Duguid, P., Fernandez, N., & Axel, E. (1992). Coming of age in Birmingham: Cultural studies and conceptions of subjectivity. *Annual Review of Anthropology*, 21, 257–282.
- Law, B., & Eckes, M. (1990). The more-than-just-surviving handbook. Winnipeg, Canada: Peguis.
- Leach, E. (1976). Culture and communication: The logic by which symbols are connected. Cambridge, UK: Cambridge University Press.
- Levin, J., Boruta, M. J., & Vasconcellos, M. T. (1983). Microcomputer based environments for writing: A writer's assistant. In A. C. Wilkinson (Ed.), *Classroom computers and cognitive science* (pp. 219– 232). New York: Academic Press.
- Lucas, C. J. (1972). Our western educational heritage. New York: Macmillan.
- Luke, A. (1991). Literacies as social practices. English Education (October), 131-147.
- Majone, G., & Wildavsky, A. (1978). Implementation as evolution. In H. E. Freeman (Ed.), *Policy studies review annual 2* (pp. 103–117). Beverly Hills, CA: Sage.
- Mandinach, E. B., Cline, H. F., & Service, E. T. (1994). Classroom dynamics: Implementing a technology-based learning environment. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Matusov, E., Bell, N., & Rogoff, B. (1994). Collaboration and assistance in problem solving by children differing in cooperative schooling backgrounds. Unpublished manuscript.

- McCarty, T. L., Wallace, S., Lynch, R. H., & Benally, A. (1991). Classroom inquiry and Navajo learning styles: A call for reassessment. *Anthropology & Education Quarterly*, 22(1), 42-59.
- McDermott, R. (1993). The acquisition of a child by a learning disability. In S. Chaiklin & J. Lave (Eds.), Understanding practice: Focus on activity and context (pp. 269–305). Cambridge, UK: Cambridge University Press.
- McDermott, R., & Varenne, H. (1995). Culture as disability. Anthropology & Education Quarterly, 26(3), 324-348.
- McDermott, R. P., Godspodinoff, K., & Aron, J. (1978). Criteria for an ethnographically adequate description of concerted activities and their contexts. Semiotica, 24(3-4), 245-275.
- Mehan, H. (1979). Learning lessons. Cambridge, MA: Harvard University Press.
- Mehan, H. (1997). The study of social interaction in educational settings: Accomplishments and unresolved issues. Unpublished manuscript, University of California San Diego, La Jolla.
- Mehan, H., Hertweck, A. J., & Meihls, J. L. (1986). Handicapping the handicapped: Decision making in students' careers. Stanford, CA: Stanford University Press.
- Mehan, H., Hubbard, L., & Villanueva, I. (1994). Forming academic identities: Accommodation without assimilation among involuntary minorities. Anthropology & Education Quarterly, 25(2), 91–117.
- Mehan, H., Lintz, A., Okamoto, D., & Wills, H. (1995). Ethnographic studies of multicultural education in classrooms and schools. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 129–144). New York: Macmillan.
- Mehan, H., Villanueva, I., Hubbard, L., & Lintz, A. (1996). Constructing school success: The consequences of untracking low achieving students. Cambridge, UK: Cambridge University Press.
- Michaels, S. (1981). "Sharing time": Children's narrative styles and differential access to literacy. *Language in Society*, 10, 423–442.
- Moll, L. C. (1990). Vygotsky and education: Instructional implications and application of sociohistorical psychology. Cambridge, UK: Cambridge University Press.
- Moll, L. C. (1996, February). Inspired by Vygotsky: Ethnographic experiments in education. Paper presented at the Vygotsky Centennial Conference: Vygotskian Perspectives on Literacy Research. Sponsored by the Research Assembly of the National Council of Teachers of English, Chicago, IL.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, XXXI(2), 132-141.
- Moll, L. C., & Diaz, S. (1987). Change as the goal of educational research. Anthropology & Education Quarterly, 18, 300-311.
- Moll, L. C., Diaz, S., Estrada, E., & Lopes, L. M. (1992). Making context: The social construction of lessons in two languages. In M. Saravia-Shore & S. F. Arvizu (Eds.), Cross-cultural literacy: Ethnographies of communication in multiethnic classrooms (pp. 339-363). New York: Garland.
- Moll, L. C., & Greenberg, J. B. (1990). Creating zones of possibilities: Combining social contexts for instruction. In L. C. Moll (Ed.), Vygotsky and education: Instructional implications and applications of sociohistorical psychology (pp. 319-348). Cambridge, UK: Cambridge University Press.
- Moore, D. T. (1980). Having it BOTH ways: The reproduction and transformation of schooling. Anthropology & Education Quarterly, XI(3), 153–172.
- Morine-Dershimer, G. (1985). Talking, listening, and learning in elementary classrooms. New York: Longman.
- Navarro, R. (1997). Commentary. Anthropology & Education Quarterly, 28(3), 455–462.
- Neuwirth, C., & Wojahn, P. (1996). Learning to write: Computer support for a cooperative process. In T. Koschmann (Ed.), CSCL: Theory and practice of an emerging paradigm (pp. 147–170). Mahwah, NJ: Lawrence Erlbaum Associates.
- New Lexicon Webster's Dictionary of the English Language (encyclopedic ed.). (1988). New York: Lexicon Publications.

Nieto, S. (1992). Affirming diversity. New York: Longman.

- Ninio, A., & Bruner, J. (1978). The achievement and antecedents of labeling. Journal of Child Development, 5, 1-15.
- Noble, D. (1998). The automation of higher education. First Monday

[On-line serial], 3(1). Available: http://www.firstmonday.dk/issues/ issue3\_1/index.html (accessed September 1, 1998). intermediate-grade readers. Journal of Reading Behavior, XXII(4), 395-411.

- Oakes, J. (1985). Keeping track: How schools structure inequality. New Haven, CT: Yale University Press.
- Oakes, J., Gamoran, A., & Page, R. N. (1992). Curriculum differentiation: Opportunities, outcomes, and meanings. In P. Jackson (Ed.), *Handbook of research on curriculum* (pp. 570–608). New York: Macmillan.
- Ogbu, J. U. (1974). The next generation: An ethnography of education in an urban neighborhood. New York: Academic Press.
- Ogbu, J. U. (1978). Minority education and caste: The American system in cross-cultural perspective. New York: Academic Press.
- Ogbu, J. U. (1983). Minority status and schooling in plural societies. Comparative Education Review, 27(2), 168–190.
- Ogbu, J. U. (1987). Opportunity structure, cultural boundaries, and literacy. In J. Langer (Ed.), *Language, literacy, and culture: Issues of* society and schooling (pp. 149–177). Norwood, NJ: Ablex.
- Ogbu, J. U. (1991). Immigrant and involuntary minorities in comparative perspective. In M. Gibson & J. U. Ogbu (Eds.), *Minority status* and schooling: A comparative study of immigrant and involuntary minorities (pp. 3–36). New York: Garland Publishing.
- Ogbu, J. U. (1992). Understanding cultural diversity and learning. Educational Researcher, 21(November), 5–15.
- Ogbu, J. U. (1996). Frameworks—Variability in minority school performance: A problem in search of an explanation. In E. Jacob & C. Jordan (Eds.), *Minority education: Anthropological perspectives* (pp. 38–107). Norwood, NJ: Ablex.
- Ogbu, J., & Simons, H. (1998). Voluntary and involuntary minorities: A cultural-ecological theory of school performance with some implications for education. *Anthropology & Education Quarterly*, 29(2), 155–188.
- Opie, I., & Opie, P. (1959). Lore and language of schoolchildren. Oxford, UK: Oxford University Press.
- Paley, V. G. (1986). Mollie is three: Growing up in school. Chicago: University of Chicago Press.
- Panofsky, C. P. (1994). Developing the representational functions of language: The role of parent-child book-reading activity. In V. John-Steiner, C. P. Panofsky, & L. W. Smith (Eds.), Sociocultural approaches to language and literacy: An interactionist perspective (pp. 223-242). Cambridge, UK: Cambridge University Press.
- Panofsky, C. P. (1995, May). Struggles, visible and invisible: Conflict and identity in a sociocultural theory of learning. Paper presented at the Conference on Discourse and Mind in Honor of Courtney Cazden, Clark University, Atlanta, GA.
- Panofsky, C. P. (2000). Toward rewriting our narrative in early literacy research: The case of parent-child book reading activity. In M. A. Gallego & S. Hollingsworth (Eds.), What counts as literacy: Challenging the school standard (pp. 190–212). New York: Teachers College Press.

Papert, S. (1993). The children's machine. New York: Basic Books.

- Pease-Alvarez, C., & Vasquez, O. (1990). Sharing language and technical expertise around the computer. In *Computers in schools* (Vol. 7, pp. 91–107). New York: Haworth.
- Philips, S. U. (1983). The invisible culture: Communication in classroom and community on the Warm Springs Indian Reservation. Prospect Heights, IL: Waveland Press.
- Portes, P. R. (1996). Ethnicity and culture in educational psychology. In D.C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 331–357). New York: Macmillan Library Reference USA.
- Postman, N. (1995). The end of education: Redefining the value of school. New York: Knopf.
- Putnam, J. W. P. D. (Ed.). (1993). Cooperative learning and strategies for inclusion: Celebrating diversity in the classroom. Baltimore, MD: Paul H. Brookes Publishing.
- Rappaport, A. (1976). Sociocultural aspects of man-environment studies. In A. Rappaport (Ed.), *The mutual interaction of people and their built environment: A cross-cultural perspective* (pp. 7–35). The Hague: Mouton.
- Reinking, D., & Rickman, S. S. (1990). The effects of computermediated texts on the vocabulary learning and comprehension of

- Reyes, M. de la Luz. (1992). Challenging venerable assumptions: Literacy instructions for linguistically different students. *Harvard Educational Review*, 62(4), 427–446.
- Reynolds, J., & Skilbeck, M. (1976). Culture and the classroom. London: Open Books.
- Riel, M. (1992). Making connections from urban schools. Education and Urban Society, 24(4), 477–488.
- Riel, M. (1993). Global education through learning circles. In L. Harasim (Ed.), Global networks: Computers and international communication. Cambridge, MA: MIT Press.
- Riel, M. (1996). Cross-classroom collaboration: Communication and education. In T. Koschmann (Ed.), CSCL: Theory and practice of an emerging paradigm (pp. 187–207). Mahwah, NJ: Lawrence Erlbaum Associates.
- Riel, M., & Fulton, K. (1998, April). Technology in the classroom: Tools for doing things differently or doing different things. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Rist, R. C. (1970). Student social class and teacher expectations: The self-fulfilling prophecy in ghetto education. *Harvard Educational Review*, 40(3), 411–451.
- Rogoff, B. (1993). Children's guided participation and participatory appropriation in sociocultural activity. In R. H. Wozniak & K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 121–153). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture, and Activity*, 1, 209-229.
- Rosaldo, R. (1995). Foreword. In L. Canclini (Ed.), Hybrid cultures: Strategies for entering and leaving modernity (pp. xi-xvii). Minneapolis, MN: University of Minnesota Press.
- Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). Fifteen thousand hours: Secondary schools and their effects on children. Cambridge, MA: Harvard University Press.
- Sadker, M., & Sadker, D. (1994). Failing at fairness: How America's schools cheat girls. New York: Scribner.
- Sandholtz, J. H., Ringstaff, C., & Dwyer, D. D. (1992). Teaching in high-tech environments: Classroom management revisited. *Journal* of *Educational Computing Research*, 8(4), 479–505.
- Sanford, J. P., & Evertson, C. M. (1981). Classroom management in a low SES junior high: Three case studies. *Journal of Teacher Education*, 76, 140–147.
- Santayana, G. (1906). The life of reason: Or, the phases of progress (Vol. 5). New York: Scribner.
- Sarason, S. B. (1971). The culture of the school and the problem of change. Boston: Allyn & Bacon.
- Sarason, S. B. (1996). Revisiting "The culture of the school and the problem of change" New York: Teachers College Press.
- Schlesinger, A. M. (1992). The disuniting of America: Reflections on a multicultural society. New York: W. W. Norton.
- Schofield, J. W. (1995). Computer and classroom culture. New York: Cambridge University Press.
- Schoggen, P. (1963). Environmental forces in the everyday lives of children. In R. Barker (Ed.), *The stream of behavior* (pp. 42–69). New York: Appleton-Century-Crofts.
- Schoggen, P. (1979). Environmental forces on physically disabled children. In R. G. Barker (Ed.), *Habits, environments, and human behavior* (pp. 125–145). San Francisco: Jossey-Bass.
- Schwartz, T. (1978). The size and shape of culture. In F. Barth (Ed.), Scale and social organization (pp. 215-252). Oslo: Universitetsforlaget.
- Scott, T., Cole, M., & Engel, M. (1992). Computers and education: A cultural constructivist perspective. In G. Grant (Ed.), *Review of re*search in education (Vol. 18, pp. 191–251). Washington, DC: American Educational Research Association.
- Seeger, F., Voigt, J., & Waschescio, U. (1998). The culture of the mathematics classroom. Cambridge, UK: Cambridge University Press.
- Shultz, J. J., Florio, S., & Erickson, F. (1982). Where's the floor? Aspects of the cultural organization of social relationships in communica-

tion at home and in school. In P. Gilmore & A. A. Glatthorn (Eds.), *Children in and out of school* (pp. 88–123). Washington, DC: Center for Applied Linguistics.

- Silberman, C. (1970). Crisis in the classroom. New York: Random House.
- Silverstein, J. M. (1979). Individual and environmental correlates of pupil problematic and nonproblematic classroom behavior. Unpublished doctoral dissertation, New York University, New York.
- Sobul, D. (1984). Bilingual policy and practice: Loose coupling among curriculum levels. Unpublished doctoral dissertation, University of California, Los Angeles, CA.
- Sobul, D. (1994). Strategies to meet the goals of SDAIE. Paper presented at the California Association for Bilingual Education, San Jose, CA.
- Speece, D. L., & Keogh, B. K. (Eds.). (1996). Research on classroom ecologies: Implications for inclusion of children with learning disabilities. Mahwah, NJ: Lawrence Erlbaum Associates.
- Spindler, G. D. (Ed.). (1987). Education and cultural process: Anthropological approaches (2nd ed.). Prospect Heights, IL: Waveland Press.
- Spindler, G. D. (Ed.). (1997). Education and cultural process: Anthropological approaches (3rd ed.). Prospect Heights, IL: Waveland Press.
- Stocking, G. W., Jr. (1966). Franz Boas and the culture concept in historical perspective. American Anthropologist, 68, 867–882.
- Stoll, C. (1996). Silicon snake oil: Second thoughts on the information highway: New York: Doubleday.
- Suarez-Orozco, M. M. (1989). Immigrant adaptation and schooling: A Hispanic case. In M. A. Gibson & J. U. Ogbu (Eds.), *Minority status* and schooling: A comparative study of immigrant and involuntary minorities (pp. 37–62). New York: Garland Publishing.
- Tharp, R. (1993). Institutional and social context of educational practice and reform. In E. A. Forman, N. Minick, & C. A. Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 269–282). New York: Oxford University Press.
- Tharp, R. G., & Gallimore, R. (1988). Rousing minds to life: Teaching, learning, and schooling in social context. Cambridge, England: Cambridge University Press.
- Thomas, W. I. (1923). The unadjusted girl. Boston: Little Brown.
- Thorne, B. (1993). Gender play: Girls and boys in school. New Brunswick, NJ: Rutgers University Press.
- Tylor, E. B. (1903). Primitive culture: Research into the development of mythology, philosophy, religion, art, and customs. London: John Murray. (Original work published 1871)
- Vaughn, S., & Schumm, J. S. (1996). Classroom ecologies: Classroom interactions and implications for inclusion of students with learning disabilities. In D. L. Speece & B. K. Keogh (Eds.), *Research on classroom ecologies: Implications for inclusion of children with learning disabilities* (pp. 107–134). Mahwah, NJ: Lawrence Erlbaum Associates.
- Vélez-Ibáñez, C. G. (1988). Networks of exchange among Mexicans in the U.S. and Mexico: Local level mediating responses to national

and international transformations. Urban Anthropology, 17(1), 27-51.

- Vélez-Ibáñez, C., Moll, L. C., Gonzalez, N., & Neff, D. (1991). Promoting learning and educational delivery and quality among "at-risk" U.S. Mexican and Native American elementary school children in Tucson, Arizona: A pilot project [Final report to W. K. Kellogg Foundation]. Tucson, AZ: University of Arizona, Bureau of Applied Research in Anthropology.
- Vogt, L. A., Jordan, C., & Tharp, R. G. (1987). Explaining school failure, producing school success: Two cases. Anthropology & Education Quarterly, 18(4), 276–286.
- Volk, D. (1997). Questions in lessons: Activity settings in the homes and school of two Puerto Rican kindergartners. Anthropology & Education Quarterly, 28(1), 22–49.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1981). The genesis of higher mental functions. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 144– 188). Armonk, NY: M. E. Sharpe.
- Vygotsky, L. S. (1987). Thinking and speech. New York: Plenum.
- Waller, W. (1965). The sociology of teaching. New York: Wiley. (Original work published 1932)
- Wallace, A. F. C. (1961). The psychic unity of human groups. In B. Kaplan (Ed.), *Studying personality cross-culturally* (pp. 129–163). Evanston, IL: Row, Peterson.
- Walkerdine, V. (1989). Counting girls out. London: Virago.
- Weis, L. (1988). Class, race, and gender in American education. Albany, NY: State University of New York Press.
- Wells, G. (1986). The meaning makers: Children learning language and using language to learn. Portsmouth, NH: Heinemann.
- Willes, M. J. (1983). Children into pupils: A study of language in early schooling. London: Routledge & Kegan Paul.
- Williams, R. (1976). A vocabulary of culture and society. New York: Oxford University Press.
- Willis, P. (1977). Learning to labor: How working class kids get working class jobs. New York: Columbia University Press.
- Wittrock, M. C. (Ed.). (1986). Handbook of research on teaching (3rd ed.). New York: Macmillan.
- Wolcott, H. F. (1987). The anthropology of learning. In G. D. Spindler (Ed.), *Education and cultural process: Anthropological approaches* (2nd ed., pp. 26–49). Prospect Heights, IL: Waveland Press.
- Wolcott, H. (1991). Propriospect and the acquisition of culture. Anthropology & Education Quarterly, 22(3), 251–273.
- Yinger, R. J. (1977). A study of teacher planning: Description and theory development using ethnographic and information processing methods. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.
- Yinger, R. J. (1979). Routines in teacher planning. Theory Into Practice, 18(3), 163–169.