

Can Cultural Psychology Help Us Think About Diversity?

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My purpose today is to explore implications of cultural psychology for guiding educational practice, especially educational practice in settings where the children come from many different home cultures, ethnicities, and social classes. You will note that I phrased my topic as a question. Many scholars, including myself, have raised questions about how classical cultural–psychological ideas handed down from early in this century need to be supplemented and modified to deal with diversity. I do not have a pat answer. But I am convinced that there is an urgent need for educational researchers to work with teachers to find a way to deal productively with the cultural diversity characteristic of many American classrooms. And, as professionals, my colleagues and I use one branch of cultural psychology that I call cultural–historical activity theory (CHAT) to organize new forms of educational activity for children. Organizing activities that make diversity a resource rather than a problem is always at the center of our attention.

CHAT is part of a large and diverse set of discourses in which psychologists, sociologists, linguists, anthropologists, and others seek to formulate a theory of human nature that places culture at the center of its concerns. Inspired by the writings of Vygotsky and his colleagues, CHAT has come to be recognized as a broad, international, theoretical movement. It is but one of the family of approaches known as cultural psychology. In the remarks to follow, I do not pretend to speak for my cultural–psychological kin, who might approach the issue differently. But I hope that they would not disapprove of what I say.

SOME BASIC PRINCIPLES

1. The basic premise of a CHAT approach is that human beings have the need and ability to mediate their interactions with each other and the nonhuman world through culture.

2. Culture is conceived of as human being's "social inheritance." This social inheritance is embodied in artifacts, aspects of the environment that have been transformed by their participation in the successful goal-directed activities of prior generations. They have acquired value.

3. Artifacts, the constituents of culture, are simultaneously material and ideal/symbolic. They are materialized in the form of objects, words, rituals, and other cultural practices that mediate human life. They are ideal in that their form has evolved to achieve prescribed means to prescribed goals, and they have survived to be tools for our use, "partial solutions to previously encountered problems." Culture is exteriorized mind; mind is interiorized culture.

4. The "effective environments" of mental life are taken to be the different practices or forms of activity the person engages in. That is, human psychological processes are acquired in the process of mediating one's interactions with others and the physical world through culture and its central medium, language. Humans are created in joint, mediated activity.

5. Consequently, it is by analyzing what people do in culturally organized activity, people-acting through mediational means in a context, that one comes to understand the process of being human. Mediation of action through culture in social interaction is the essential precondition for normal human development.

6. Because cultural mediation is a process occurring over time, a CHAT perspective emphasizes that it must be studied over time. Time itself is conceived of with respect to four embedded domains: *phylogenesis*, the history of our species; *cultural-history*, the history of the cultural group into which we are born; *ontogeny*, the history of an individual human being; and *microgenesis*, moment-to-moment interactions that are the proximal locus of experience. An implication of this view is that all human beings are fundamentally hybrids of the phylogenetic and the cultural.

7. In addition to focusing researchers on time and change, a CHAT perspective requires them to focus on the social/spatial ecology of the activities they study—the relation of activities to their institutional arrangements. With respect to formal education, for example, instructional interactions are constitutive of lessons, which along with other forms of activity, are constitutive of classrooms that are constitutive of schools that are parts of communities, and so on. Here one quickly encounters issues of diversity not only between communities but within them. There are many kinds of history, embodied in many different cultural traditions. There are many kinds of history associated with social class, ethnicity, religion, and language to be found in virtually every town and city in this country.

8. A CHAT perspective places a special emphasis on the principle of *multivoicedness*, the principle that every form of human interaction contains within it many different selves, arranged in multiple, overlapping, and often-contradictory ways. The contradictions, experienced by us as conflicts, are a major source of change. It is diversity all the way down.

9. The acid test of the theory is its success in guiding the construction of new, more humane forms of activity.

SOME HISTORICAL CONTEXT

I interrupt myself at this point and note a few salient features of the local social ecology for those of you who have come from afar and do not know our local history. CHAT research principles do not only tell us to start with history and context. I think that by situating this talk in its local historical and geographical context I can give you a better sense of why I believe there is an urgent need for educational researches to deal seriously with diversity.

We are sitting in an historical corridor of immigration that began flowing from North to South many thousands of years ago until it reached Tierra del Fuego. The southern two thirds of this territory were subsequently subject to Iberian colonialism, and the northern parts were overrun by people from Northern Europe, followed by waves of immigration both voluntary and forced from other parts of Europe and Africa. One hundred and fifty years ago, the Northern, English-speaking area won a war over the Southern Spanish-speaking areas that gained them political control north of the Rio Grande River, in a line that runs from the Gulf of Mexico to the southern reaches of San Diego. A few years later, the Northern area engaged in a fratricidal civil war that ended slavery and accelerated the mass migration of people into what became the Western United States. From the time when the United States wrested control, but in swelling numbers over the last several decades, those who found themselves south of the U.S. border began migrating north, legally when they could, illegally when they were sufficiently desperate. They and their descendants are a very large proportion of our local school-age population. But they are not the only immigrant groups who reside here. As a result of involvement with the United States, many Southeast Asians who found themselves in danger at home have settled in Southern California. The result is a local school-age population of astonishing diversity, within many schools, as well as between schools.

The current wave of concern over immigration combined with the differential educational failure of prominent immigrant groups has emerged as a major political issue. My university finds itself in a paradoxical situation. On one hand, we are barred from using affirmative action measures to increase the diversity of our student body and our faculty. On the other hand, our Regents demand that we have a diverse student body and faculty, saying, in effect, that the university must find a new means of achieving the goal of diversity. These political pressures have been sufficient to induce my university, against many of its basic instincts, to commit itself to taking responsibility for educating its own future generations of students from diverse ethnic and social class backgrounds.

So, questions of education and diversity are more than a hypothetical issue locally. They are loaded with energy and fueled by conflicts over resources and their distribution. They directly impact the course of my work.

DIVERSITY: MAKE IT GO AWAY, OR HARNESS IT?

It seems to me that there are, crudely speaking, two broad views about how to deal with the diversity our area's teachers encounter daily. One is to make it go away and the other is make use of it.

The "make the diversity go away" perspective is politically embodied in a ballot initiative that would mandate an English-only curriculum in California's schools after 1 year of an immersion curriculum.¹ For many, the "English-only" "throw them in the water" perspective is based on a straightforward assimilationist model of education designed to create a common, American culture, generally one that is Anglo-Saxon in origin, and Christian. It is an approach that finds advocates not only among native speakers, but among many Latino parents anxious for their children to "make it" in the United States as well.

A second "make it go away strategy" is adopted by some who favor bilingual education. They argue that bilingual education can serve as a cultural-linguistic bridge that leads to enhanced academic achievement and speeds the process of assimilation.

¹ Proposition 227, the English-only mandate for California schools, has now been passed.

In so far as the "bridge" is seen as leading one way, away from the home language to English and a stereotyped view of the proper citizenship, "English-only" and "bridging bilingual" programs can be considered two different tactics but a common strategy for dealing with diversity. Both want to make it go away.

The second broad view, which I personally advocate, is to focus on the opportunity provided by the rich cultural resources that immigrant children and their families bring to California and the nation. If it were up to me, I would choose a bridging program in which traffic on the bridge moved in both directions. In this approach, the bridge is a medium for two-way exchange, what my colleague Vasquez (1996) referred to as *reciprocal relations of exchange* and what Au (in press) referred to as a *diverse constructivist orientation*.

Here is where my doubts arise. To be really useful, CHAT should be able to provide ways to think about how to organize educational activity for diverse populations, no matter which of the aforementioned orientations one prefers. It will not do to dismiss an immersion/transition strategy as unworthy of thought simply because I fear the political policies that will ensue and the exacerbation of race and class-based educational inequality. If the antibilingual measure passes, many thousands of teachers are going to be faced with a very difficult situation. They should have tools to deal with it and we should help them develop those tools. At the same time, we as theorists should be able to provide clear-cut alternatives of demonstrated effectiveness, which will be readily at hand whenever our citizens become disenchanted with the consequences of their decisions.

In the remainder of this article, I suggest how CHAT might be applied using each of the basic approaches outlined in Figure 1. I begin with some theory. In particular, I develop a rationale for taking activity systems or cultural practices as the unit of analysis for thinking about classrooms constituted of children from many populations groups. Second, using basic principles, I suggest ways to design instruction given two extreme cases. In the first, I focus on the kind of design system that might be appropriate if the voters decide on an immersion program and exclusion of the home culture. In the second I focus on approaches that promote adaptive multiculturalism through reciprocal relations of exchange.

CULTURE AND ACTIVITY

My colleague, Roy D'Andrade, has referred to culture as an immense, distributed, self-regulating system consisting of partial solutions to previously encountered problems. I take that to be an appealing way to talk about the idea of culture as the artifact-saturated medium of human life.

It is widely recognized that this semiorganized hodgepodge of the social inheritance has to be packaged to be usable and cannot affect everyone equally. Rather, our exposure to it, our involvement in it, what parts of it we come to master, and what parts we remain ignorant of are widely distributed in patterned but loosely connected ways. It is these patterned ways of co-confronting life with one's social group that serve as the "units of selection" by which parts of the vast pool of cultural knowledge are made a part of the conduct of current actions. These units are what I have referred to as *activities*, or as *cultural practices*.

The choice of activities or cultural practices as a basic unit of analysis has important implications for how to think about diversity in classrooms, so it is worth pausing to examine it a bit. Happily, because we are concerned here with both culture and psychological processes, there is a

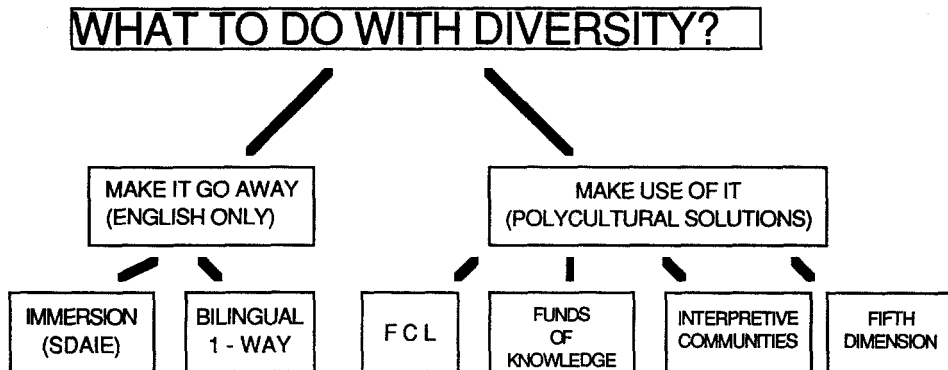


FIGURE 1 Schematic diagram of alternative strategies for dealing with diversity in the schools.

productive convergence of anthropological and psychological thinking that considers activities as the proximal unit of interaction enabling and enabled by both mind and culture.

Anthropological Approaches

In an article titled "Toward a *Working* Theory of Culture," Goodenough (1994, p. 265) explicitly argued that culture is necessarily diverse among people within a society because it 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 his words,

the cultural makeup of a society should not be seen as a monolithic entity determining the behavior of its members, but as a melange 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,

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. (Goodenough, 1994, p. 266)

He went on to argue that

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)²

²Goodenough's view that cultural knowledge is at best partially shared has been widely substantiated by others (D'Andrade, 1989; Hutchins, 1995).

Goodenough's emphasis on activity as the locus of cultural creation and use is perfectly complemented by CHAT's assumption that human psychological functions develop through participation in culturally organized activities. As Gallimore and Goldenberg (1993) put it, "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" (p. 315).

Rogoff (1993), who also drew on the cultural-historical tradition, offered a very similar unit of analysis in her work on communities of learners. She noted the close affinity of CHAT with the work of Dewey, which emphasizes coparticipation in joint activities as the core educational practice:

The social environment ... is truly educative 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 emotional spirit. (Dewey, as cited in Rogoff, 1993, p. 141)

The work of Jean Lave and her students on learning as changing modes of participation in a social group also focuses on the level of culturally mediated activity systems (Lave, 1996).

Let me take it as a given that starting an analysis of how to organize diversity in educational settings should focus on the level of activities because activities are the locus of culture creation and use. This applies to all forms of activity, but it is of course educational activity that is the focus of our attention. So, let us turn to examine how an activity-based, cultural-historical theory can provide us with tools and pedagogical strategies associated with different goals and strategies for dealing with diversity.

USING AN "IMMERSION-ENGLISH ONLY STRATEGY"

If those who want to make diversity go away via a single year of immersion instruction get their way, many teachers will be placed in the position of creating an environment that is meaningful to children who do not speak their language. Moreover, in many cases, there will be several mutually incomprehensible languages in the room. Exactly how teachers are to succeed in effecting the language transition in a single year, if they do, will depend on how they organize the children's classroom activity and the kind of culture that develops there. One thing seems very clear—the typical American classroom, where the teacher does the talking an overwhelming proportion of the time—will not suffice. Immersion, if the metaphor means anything, signifies a broad process of enculturation in which the child must be an active participant—a talker as well as a listener. Consequently, when one examines the best practices of those who currently run immersion programs in the United States, one finds that they are organized in terms of small group activities, not as whole group lessons.

I take as an example of a "best practice" Specially Designed Academic Instruction in English (SDAIE; pronounced "say-die") approach to English instruction. SDAIE has four goals for students: learn English, learn content, practice higher level thinking skills, and advance literacy skills (Law & Eckes, 1990).

Teachers in SDAIE classrooms are reported to use language to further knowledge acquisition rather than focus on language itself. In activity theory terms, they create situations where language

is a tool, a means, not an end. In these situations the “teacher-fronted” classrooms in which teacher talk dominates and directs the flow of information are converted into activity groups organized to afford cooperation among students. (The procedure illustrated by Fasulo and her colleagues in this issue provides a good example.) In activity theory terms, the joint activity of students and teacher is re-mediated—that is, mediated in a new way. Of importance, this new organization re-distributes the power relations between the actors in any given activity, a condition that affords active engagement and communication. The interconnection between changing means—ends relations and changing power relations is seen in reports that teachers in SDAIE classrooms focused on assisting students with the learning task rather than providing (language) error correction and gave fewer commands and imposed less disciplinary control.

In addition, teachers took advantage of the new system of mediation by altering the pace of lessons and used cues to support the language used in the classroom and 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.

Here, in activity theory terms, we see the creation of flexible systems of coordination, with a new division of labor and changed power relations between teacher and children that spontaneously create a rich culture of shared artifacts and meanings to help coordinate the children with the concepts and skills the teacher wants to see developed. In the new patterns of discourse the children are talkers as well as listeners; they have a chance of learning English.

One important change promoting the creation of shared meaning is the practice of giving every lesson twice. Because each lesson has a dual purpose (improved English language use and improved content understanding), the follow-up lesson provides an additional opportunity for students to test out their understandings and express their concerns and questions.

I do not know the current evidence concerning how quickly, and to what extent, SDAIE programs provide a way to transition quickly into English-only instruction. By design, they cover only half of the material in the regular English-only classrooms. But at least they seem to provide a comprehensible way to begin to deal with the social wrenching that is going to occur if bilingual education is banned in California.

What's Missing?

I have deliberately withheld the description of one feature of the SDAIE system that becomes apparent when you consider the list of characteristics of such systems proposed by Diaz-Rico and Weed (1995):

- 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: Students' prior knowledge of a topic may be activated through classroom activities drawn from a variety of language resources.

Active participation, social interaction, integration of the oral and written, and use of meaningful materials are all to be found in the idealized SDAIE system I described. All could be used to help teachers with their difficult task of arranging for the children to make appropriate meaning in a multicultural, multilingual classroom. As currently planned, however, the idea of building on background knowledge is explicitly *not* a part of the English-only proposal in California. Children are supposed to leave their culture at home as soon as possible, to participate in the new, presumably egalitarian culture that awaits them. Once they have been scrubbed up and taught to speak properly, they would be on an even playing field. This approach is at base subtractive and exclusionary, as Cummins (1986), among many others, pointed out. An analogous logic follows for native speakers of Black English. In either case, the result of subtractive approaches is to create disabled students. It will fail.

So, although we can provide guidance to thinking about how to organize an immersion program in the 1st year of schooling, we cannot see how such an approach can place children on an even playing field, even where that is the real goal of English-only advocates.

BILINGUAL ALTERNATIVES

As delegates to this conference are well aware, bilingual education is under attack not only in California, but in many states. When I read reports of these studies, I am always puzzled by what people think is happening in the average bilingual classroom. What mix of one-way, "transition" programs and two-way, inclusive bilingualism exists in the different classrooms sampled? What kind of pedagogy reigns in the classrooms with different long-term goals concerning diversity? Is the pedagogy the same in those cases where bilingual education seems to work and those where it does not? My own experience has suggested strongly that when voters are asked if they do or do not favor bilingual education, they have little idea of how to answer such questions. At the same time, Cummins, Au, and others have made strong arguments that transition-bilingual programs inevitably result in a high level of failure because they are motivated, at base, by an exclusionary politics of diversity.

I am not an expert in the field of bilingual education, but from my own reading and from research by my colleagues at the Laboratory of Comparative Human Cognition (LCHC), I know that hidden under the label of "bilingual education" are a great variety of practices, some of which are demonstrably harmful to children, and some of which appear to be of great benefit.

ORGANIZATION FOR FAILURE: RE-MEDIATION FOR SUCCESS

One important lesson came when Moll and Diaz (1987) studied a group of children who were sufficiently bilingual in spoken English and Spanish as assessed by oral testing to have two kinds of reading lessons, half in Spanish, half in English. They began by observing lessons in the two classrooms with a single group of children. The teacher in Spanish language instruction was fully bilingual. The teacher in the English language classroom was a monolingual English speaker. In each class the children were grouped into a low-, medium-, and high-reading group.

They discovered that the predominant activity for all the children in the English language classroom focused on decoding the text phonetically. Particular attention was also paid to providing the children with practice in producing correct word sounds. In fact, all of the lessons emphasized pronunciation skills, and when, for the highest reading group, issues of comprehension did arise, the teacher provided structured questions that required only one- or two-word answers from the children.

When these same children were observed in the Spanish language program, the results were dramatically different. Here even the low group was involved in comprehension-directed activities, and phonetic drill was virtually absent. For the higher groups, the teacher demanded, and the children provided, inferences and generalizations that went far beyond simple information contained in the text. How could this happen? What could it mean for children to be able to speak and comprehend spoken English (according to test results), to be able to read for comprehension in Spanish, but to be at the very beginnings of "learning how to read" (which their teacher interpreted as phonics drills) in English?

The explanation, Moll and Diaz (1987) argued, arises for three interconnected reasons. First, the English language teacher adheres to a decoding-then-comprehension theory of instruction, and the children are kept at decoding because they still speak accented English. They appear, to the teacher, to be unable to decode correctly. Second, because the teacher does not know Spanish, he or she cannot test their own interpretation of what the children are capable of. Third, there was no communication between teachers in the two classrooms, so the English-speaking teacher did not know the pupils could read.

Moll and Diaz conducted a very simple intervention to demonstrate that the children's comprehension of English text was far greater than the teacher gave credit for. They asked the children to read the English texts silently and then allowed them to discuss the meaning of the text in either English or Spanish. Under these conditions the manifested reading levels of the children in English shot up by several grade levels and it became possible to instruct them appropriately.

This past week, Richard Riordan, the mayor of Los Angeles and by many accounts a man who cares about the welfare of the many immigrant and minority group living in his city, declared the state's bilingual program to be an "experiment that failed." I do not argue the statistics of the case here. But I strongly suggest that before treating what passes for bilingual education in many California classrooms as a failure, Mayor Riordan and the voters of California begin by looking at the variety of pedagogical arrangements that use presumed bilingual approaches. The evidence that good bilingual programs do work is persuasive to me. But making those successful innovations sustainable when they clearly break the boundaries between institutional structures that secured failure in the first place is a much more difficult problem.

POLYCULTURAL SOLUTIONS

Despite the difficulties involved in these highly explosive issues, I believe that a CHAT approach is a useful tool for analyzing the variety of classroom activities that go under the label "bilingual instruction." It is also useful for designing alternatives that are effective. But as I noted earlier, the "bilingual case," where only two languages are involved, is only part of the problem. In many classes we are dealing with multilingual, multicultural situations. Is SDAIE the way to go? And if so, how would it be differently implemented if it was tailored to the goal of two-way, inclusive,

multicultural relations of exchange? I have no direct answer to these questions, but I believe we can learn something about the answers by examining attempts to deal with different degrees of diversity through the lens of successful projects organized to the principles of my brand of cultural psychology.

The general strategy for redesign is the same as in the case of a “make it go away” approach to diversity, with the crucial exception that a CHAT approach, like Au’s “cultural constructivism,” uses a bridge strategy with two-way traffic. I propose the term “polycultural” to describe the strategy, in recognition that multiple cultures are present in every classroom, and that wherever culture-using creatures interact, they create between them a hybrid subculture, appropriate to the activities it mediates. These hybrids go by many names. Gutierrez, Rymes, and Larson (1995), at the University of California—Los Angeles, spoke of *third spaces*. We at LCHC speak of *tertiary artifacts* (Cole, 1996). Engeström (1998) used the term *change laboratories*. Star (1989), in science studies, and Thorne (1993), in gender studies, spoke of *border objects*. Many examples using this approach could be given in some detail. However, I have chosen to discuss examples with which I am familiar enough to summarize quickly for lack of time. I hope to learn about more such approaches as a result of this talk.

FOSTERING COMMUNITIES OF LEARNERS

The Fostering a Community of Learners (FCL) project designed by Ann Brown and Joe Campione is a system of interacting activities designed to create a self-consciously active and reflective learning environment. I mention it first because, although the system is designed for any children, it was implemented successfully in a community of working-class African American children. This degree of cultural/linguistic variation is, given the spectrum, rather small. Hence, it can provide a kind of benchmark against which to inquire into how different degrees and varieties of variation might be taken into account in designing for more complex conditions of marked language difference. In this light it makes an interesting “border case” that might be used with either a “make it go away” or “make use of it” perspective.

In FCL classrooms, the role of the teacher is key to organizing the activities in the classroom. Brown and Campione (1994, 1996) dodged the dichotomy between discovery learning and didactic instruction by arguing in favor of a middle ground that they referred to as *guided discovery*. In guided discovery the teacher acts as a facilitator, guiding their students’ learning. FCL teachers seek to promote guided discovery by drawing on the expertise among the students (enhancing recognition of diversity) and the wider community beyond the classroom itself. At its simplest level there are three key parts to the FCL instructional approach: (a) 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; (b) the division of labor requires that children share their expertise with their classmates; (c) 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 requires all students to have learned about all aspects of the joint topic. The cycles of research–share–perform are the “backbone” of FCL (Brown & Campione, 1996).

During the research phase, students form separate groups, each assigned responsibility for one of the five or so subtopics. 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 on the complete unit. Consequently, the burden of teaching others and learning from others’ expertise is a real one, and a mainstay of these classrooms (Brown & Campione, 1994).

Brown and Campione (1994, 1996) identified five features that characterize the ideal FCL classroom.

- Individual responsibility coupled with communal sharing, which results in increased diversity of experience/knowledge expertise among the classroom members.
- The use of ritual and familiar participation structures and routines to enable children to make the transition from one participation structure to another quickly and effortlessly. That is, as soon as students recognize a participant structure, they understand the role expected of them.
- A community of discourse guides the development of normative discourse operating 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.
- The role of the teacher is to “seed” new ideas and concepts into the classroom and allow those that will to migrate and be appropriated differently among the children, thus cultivating and enhancing the diversity of expertise in the classroom.

Using a similar approach also referred to as *community of learners*, Rogoff (1994) extended the notion of transforming roles to include parents and the relationships between teachers and neighborhood representatives. This approach to a community of learners provides opportunities for teachers and parents to inform each other regarding their respective knowledges and requires both to “transform” the traditional boundaries associated with their roles as teachers and parents (for more details, see Matusov, Bell, & Rogoff, 1994; Rogoff, Matusov, & White, 1996).

FUNDS OF KNOWLEDGE

For the past several years, Luis Moll and his colleagues have been using CHAT principles to take advantage of the diversity of pedagogically rich learning experiences that can be arranged if parents and other members of the children’s community are linked to schoolchildren to teach about their areas of expertise (Moll, 1996). To capitalize on the wealth of knowledge in local communities, Moll and his colleagues follow a three-part approach in which all three parts are put into play simultaneously in collaborations involving school teachers, university researchers, and parents. The first part takes teachers out of the classroom and into the community to make an ethnographic analysis of the students’ homes and communities that identifies local funds of knowledge and expertise created in productive activities and highlights social networks through which such knowledge is exchanged among families. The social networks serve as a buffer against uncertain and changing economic circumstances and serve to “penetrate” labor markets by acting as a pipeline to

formal and informal jobs. They also serve important emotional functions most prominent in child care and rearing.

The second part of the funds of knowledge approach is to create an after-school activity (similar to the "change laboratories" created by Engeström and his colleagues in their research on adult work settings) where researchers and teachers discuss how to link the information emerging from research in the community to research on classroom instruction. This is a hybrid system, between school and community, designed to mediate between the two. The third part is to experiment with new forms of classroom activity using information from the other two parts as background and content, mediated by the new set of social networks they have created. The involvement of parents and community experts of various kinds in the classrooms is particularly important. The results of this approach are enhancement of a broad range of academic skills by the children, a transformation in the ways instructional discourse is organized in the classroom, and increased appreciation for the culture(s) of the local community on everybody's part.

INTERPRETIVE COMMUNITIES

Lee (1991) adopted a different strategy for creating continuity between children's home experiences and their experiences in school so that children are engaged in meaningful activity. Lee's basic premise is that "there are routine practices with the cultural life of communities that schools can draw upon to assist students in constructing concepts in a given domain the schools seek to teach" (p. 292). Her tool for creating the central activity, interpreting texts, is African American literature that is "speakerly," that is, texts that embody African American English with its "relish for playing on the meanings of words and [a] flair for figuration, innuendo, verve, and style" (p. 292). Lee paid special attention to the oral cultural practice referred to as *signifying*, a form of speech characterized by innuendo, circumlocution, and indirectness. She found that signifying creates the desired two-way bridge between home and school. Focusing on long passages of signifying in texts brings from the home an appreciation of this oral practice but through a critical analysis of these same passages, the content of the texts with its irony and hidden meanings, students are immersed in a scholarly critique of the sociopolitical realities that is the content of their daily lives.

So far as I know, there has been no larger scale study of this practice, but it stands as a demonstration proof of how to use a re-mediational strategy successfully. The result is a hybrid of "schoolish" abilities to analyze texts for meaning and "homish" funds of knowledge.

UNIVERSITY-COMMUNITY LINKS: INHABITING A FIFTH DIMENSION

Unlike the other educational activity systems I have described, the project known as the 5thDimension is designed for use by children during the after-school hours. The foundation of the 5thDimension approach is the creation of a reciprocal relation of exchange between universities and community institutions that care for children during the after-school hours. On the community side, 5thDimensions provide a safe, pro-social, educational environment during after-school hours. These activities mix play, learning, and involvement with older, college-attending peers using a combination of computers, computer networks, and off-the-shelf hardware. The activity system includes a system of rules and divisions of labor motivated by a CHAT theory of learning and development. It is designed to facilitate the development of local communities of practice that em-

phasize written and oral communication in an environment saturated with different forms of culturally valued knowledge. On the university side, the 5thDimension serves as a laboratory providing the essential resources for a theory-in-practice pedagogy.

Several major findings of this work are relevant to report in this context. First, despite important common origins in hardware, software, normative rules, and college course syllabi, every local 5thDimension is a unique variant on the prototype. Some reinventions of the 5thDimension are so different that they appear more as mutations than as the development of different phenotypes derived from the same genotype.

Second, the home culture/language of the children who attend the 5thDimension is not a determining factor in the language/culture that comes to typify that 5thDimension. The use of Spanish in four different 5thDimensions attended predominantly by Latino children mediated the local activities in four distinctive ways, varying from a one-way to a two-way inclusive model.

Third, the culture of each 5thDimension is strongly influenced by the cultural values of the community institution within which it is housed in combination with the values of the university faculty and students who coparticipate in its creation and maintenance.

Fourth, in one respect 5thDimensions do not appear to differ. The participating children, regardless of their ethnicity and social class, appear to achieve better in school, adopt a more positive attitude about learning, and develop skills in interacting effectively with other people.

Fifth, participation in the 5thDimension is a valuable educational experience for the students who participate in them, giving them a unique opportunity to engage in inquiry-driven, developmental education. In many cases, involvement in a University–Community Links program has led to significant institutional change at the university and in the schools where 5thDimension programs have been run during the after-school hours.

In short, the 5thDimension appears a useful addition to the toolkit of cultural psychology for theorizing cultural diversity and development.

My time is up and I rest my case here. The writings of early cultural–historical theorists must be supplemented and revised if we are to have ready-to-hand tools with which to think about the issue of educating for diversity. Contemporary CHAT is now a multinational, multidisciplinary, theoretical movement. It provides a systematic framework for such supplementing and experimentation because it draws on the rich array of conceptual tools and practical experience provided by an international set of common forebears, as well as colleagues in science studies, organizational learning, and gender and ethnic studies, as well as the traditional disciplines of psychology, anthropology, sociology, and education. Its basic strategy is based on an additive, inclusive approach to diversity in which new forms of activity are created that “re-mediate” social rules, the division of labor, and the way in which artifacts are created and used. These design features change in power relations, allowing the teacher to build on the strengths of children and communities who become active agents in the educational process.

So my answer is a tentative, “yes.” Cultural psychology can be a useful tool for dealing productively with diversity, if one chooses to pick it up and use it.

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