A Sociocultural Perspective on Learning and Learning Disabilities

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In this article we propose that a sociocultural perspective on learning and learning disabilities is essential for understanding learning problems within culturally diverse groups. We argue that knowledge about learning disabilities and cultural diversity has been limited in two primary ways: the use of ethnicity as a proxy for culture and the assumption of homogeneity of members within ethnic and cultural groups. Selected findings from research in anthropology and social cognitive psychology are considered as they relate to learning and learning problems of children in different cultures. Implications of a sociological approach for the definition of learning disabilities and for assessment and instruction are discussed.

The historical approach to learning disabilities has focused almost exclusively on the individual-more specifically, on the neurobiological or organic bases of the problems. The field is rooted in the biological and neurological tradition, and as a consequence a good deal of the research on learning disabilities has been directed at specifying the underlying neural processes that "explain" specific learning problems. A somewhat different approach to understanding learning disabilities comes from a sociocultural perspective. A sociocultural perspective is critical if we are to address learning disabilities and cultural diversity, the focus of this issue of Learning Disabilities Research & Practice.

From a sociocultural perspective it is impossible to separate the learning competencies and problems of individual children from the contexts in which they live and function. Rogoff and Chavajay (1995) emphasized that "the intellectual development of children is inherently involved with participation in sociocultural activities" (p. 871). By implication the development and expression of learning disabilities are also "inherently involved" with the nature of children's sociocultural activities. This is not to deny or to denigrate the powerful effects of neurobiological conditions on children's development or on their problems in development. But like all children they are, in Super's (1987) phrase, "a biological organism participating in cultural reality" (p. xii), and children with learning problems are going to be deeply affected by that cultural reality.

How people think, remember, reason, and express their ideas varies widely in cultural communities around the world (Cole & Means, 1981; D'Andrade, 1995). What is not clear, however, are the pathways that lead to different developmental and educational outcomes. And it is not clear what contributions to educational competencies and problems are related to the individual and what are related to sociocultural conditions in which children are reared. We suggest that understanding learning disabilities and what to do about them requires a conceptual framework in which both are taken into

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account. Adoption of a sociocultural perspective has implications for the definition and study of learning disabilities as well as for assessment and intervention efforts.

DEFINITIONAL CONSIDERATIONS

Given the current definitions, it is apparent that learning disabilities are found primarily in societies in which literacy is central and in which schooling is emphasized. Whatever the specifics of definitional statements, the critical component in defining learning disabilities relates to educational adequacy, operationally expressed as at least normative performance in reading, mathematics, and other academic areas. These criteria are of course, embedded in Western cultures but may have little relevance to cultures in which developmental competencies are defined by other criteria. Literacy has an intrinsic value as a way of acquiring information, but it is not the only tool for subsistence survival. Does this imply, then, that there are no learning disabilities within some cultural groups, or does it mean that our definitions must be recognized as being culturally specific?

Research by anthropologists provides some information relevant to the question. Berry (1981), for example, has shown clear differences in cognitive abilities and socialization for competence in culturally different groups. J. Whiting and Whiting (1975) and B. Whiting and Edwards (1988) found that children in primarily horticultural or agricultural subsistence ecologies were assigned tasks and responsibilities by age 7 or younger; in such groups, judgments about intelligence and competence depended on whether the children could do such tasks independently and whether they acted appropriately in a complex kin and social world (Serpell, 1993; Super, 1983). What cultures deem desirable and important to learn, and how such things are to be learned, interact with in-child neurological and biological status to affect children's development. Thus, it is impossible to consider development or problems in development without taking both into account.

If learning disabilities are primarily neurobiological in basis, theoretically, at least, there should be evidence of learning disabilities in all cultures. Yet acknowledging the differences in culturally defined competencies mandates a broader range of definitional criteria and may force a reconsideration of the relative contribution of biologically based and culturally based conditions. We suggest that recognition of the important role of sociocultural influences on children's learning and learning problems has major implications for understanding learning disabilities. We note, also, that cultural diversity is explicitly ruled out in the current definitions.

ASSUMPTIONS ABOUT ETHNICITY AND CULTURE

Educators, especially special educators, have become sensitive to cultural differences, usually phrased as awareness of "cultural diversity." The result has been a number of research efforts and publications directed specifically at special education with different ethnic and cultural groups (see Exceptional Children [Obiakor, Patton, & Ford, 1992]; Gartner, Lipsky, & Turnbull, 1991; Lynch & Hanson, 1992; Paul & Simeonsson, 1993). We applaud these efforts but argue that our understanding to date has been limited in two ways: (a) the assumption that ethnicity and culture are the same and (b) the assumption of homogeneity of members within ethnic or cultural groups. We note also that the bulk of the published literature on cultural diversity has been conceptual rather than empirically based.

Ethnicity and Culture

The assumption that ethnicity and culture are isomorphic is widely held, and using ethnicity as a marker for culture is a convenient shorthand method for classifying individuals and groups. Certainly ethnicity and culture are correlated in many ways, yet a voluminous anthropological and sociolinguistic literature documents important differences among groups with the same ethnic backgrounds. For example, the designation Native American includes many tribal groups whose lifestyles and cultures vary dramatically. Consider the differences among Navajos, Hopis, Cherokees, and Paiutes, or between Native Americans in urban settings and those in isolated rural areas. Consider differences in the cultures of Asian immigrants from mainland China and those from Thailand or Korea. Note the variations in life styles among Euro Americans from different European countries. The American part of ethnic group labels can soften European-origin differences, yet culturally based influences are still present in family and subgroup experiences. Protestant Finnish American, Jewish German American, and Catholic Italian American families differ from each other in ways that may well matter for children with learning disabilities. Such potentially meaningful differences in culture are lost in the ethnic identity Euro-American.

In their discussion of Hispanic students "at risk," Fradd and Correa (1989) correctly pointed out that the practice of defining ethnic and cultural status according to family name excludes many students and erroneously identifies others. To use identification as Hispanic, Asian, African American, Native American, and Anglo-American or Euro-American as proxies for culture is clearly imprecise and inaccurate. Yet,

the bulk of the literature on cultural diversity has done just that and in our view has lead to serious limitations in findings and questionable inferences and generalizations. We underscore the need to disentangle relevant aspects of ethnicity and culture—to "unpackage" these categories to make them useful and precise (B. Whiting, 1976).

Heterogeneity Within Cultures

Closely related, the assumption of homogeneity of characteristics of subgroups and of individuals within particular ethnic and cultural subgroups has sometimes led to educational responses that are based on unproven overgeneralizations about groups rather than individuals. Tharp (1989) emphasized that

within any cultural group, motivation, social organization, and ways of speaking and thinking vary with education, income, and class status ... [and that] ... broad educational prescriptions [for groups] ... are often, and rightly, resented by cultural members who are not well described by these generalizations. (p. 357)

Research on conventional and nonconventional Anglo-American families consistently shows clear differences in parenting and in children's developmental outcomes in a variety of domains, including schooling, drug or alcohol use, political attitudes, and goals of children themselves. Weisner and Garnier (1992), for example, found that within their Anglo-American study sample different values orientations and family lifestyles contributed to school achievement in high school, after there was control for socioeconomic status and IQ.

The point is also illustrated in recent research by Reese and Gallimore (1995), who studied literacy activities within a seemingly homogeneous ethnic group of Mexican immigrants to the United States. These investigators found differences in the ages that parents initiated reading activities with their children, differences that were related to the parents' backgrounds in Mexico—specifically, whether they grew up in small rural hamlets and farms (ranchos) or in larger pueblos or communities where there was opportunity to attend school. It was the nature of the parents' culture, not their ethnic identity, that affected the literacy experiences they provided their children. Weisner, Gallimore, and Jordan (1988) also observed heterogeneity in literacy practices among Native Hawaiians, noting that everyday life varied both across and within families.

DISTINGUISHING ETHNICITY AND CULTURE

In the social sciences, ethnicity has multiple referents: identity, feelings of belonging and continuity through time, shared meanings and traditions, and self-ascribed genealogical and social affiliations, including related forms of family and group affect. Ethnicity serves a number of important functions, including political and educational change. For example,

ethnic identity has effectively been used in the United States to monitor and enforce laws requiring equity in regard to nondiscriminatory assessment, equal school funding, college admission practices, tracking discrimination, and the like. On the other hand, ethnicity has been used to track, control, and discriminate as well. Whether self-identified or other-ascribed, ethnicity marks boundaries and in- and out-group membership (Roosens, 1994).

Ethnic identity and boundary markings tend to persist through time, whereas culture changes as individuals and groups modify beliefs and practices as a matter of survival and adaptation. Culture is the storehouse of tools for adaptation, and these tools evolve over many generations; they are the hard-won solutions to many different challenges. Consider the differences in lifestyles, expectations, and values of new immigrants to the United States and their third-and fourth-generation offspring. Culture provides cognitive models of how things work and what is ideal. Culture changes as circumstances change, although the changes are slow and are often unseen and unnoticed.

One of the dilemmas of a multicultural society is how to take account of cultural and ethnic diversity in the education of youth. On one level the issue is simple: Everyone's heritage is due respect, and the ideal is to find strength in diversity and to capitalize on rather than stigmatize differences. On another level there is often an unrecognized paradox in well-intentioned efforts to be sensitive to diversity. We refer to the treatment of individual students as if they shared common traits with all others of a similar background. A fundamental question for educators is: How can we take instructional advantage of variations in aggregate or group level similarities in learning characteristics without stereotyping individual students? We reiterate that one way is to carefully distinguish ethnicity and culture in educational practice. This distinction allows acknowledgment of variations at three levels: among ethnically defined groups, within ethnically defined groups, and among individuals within ethnic and cultural groups.

We illustrate with a brief discussion of reading achievement by Hispanic children in schools in the United States. The poor achievement levels of Hispanic children as a group are often attributed to language differences and, pejoratively, to a lack of concern for literacy within their homes, both presumably tied to children's ethnicity. Yet, there are clear individual differences within and among children and families identified as Hispanic. These differences are based on a number of functional adaptations to their life circumstances. One of the differences already noted has to do with where families live. The competencies required for success in rural and urban settings are not all the same, and everyday life is organized differently.

Many families who emigrate from rural Mexico to the United States subscribe to a cultural model different from the academic and occupation model that is characteristic of industrialized societies (Goldenberg & Gallimore, 1995). In the agrarian cultural model that the immigrant families consistently endorse (Reese, Balzano, Gallimore, & Goldenberg, 1995), childhood is a prime period for the development of skills and abilities believed to prepare children for adult participation in the community. These include family solidarity, knowing right from wrong, and obedience and respect for elders. These are adaptive values in contexts in which skills

and abilities are acquired through participation of youth in joint everyday activity, for instance in contexts in which the family works together as an economic unit and in which children's domestic chores contribute to family subsistence (LeVine & White, 1986).

In contrast, the academic and occupational model characteristic of technological and industrial societies emphasizes the development of literacy and related developmental functions (Rogoff, 1990) and of independence and autonomy. From an early age, children are introduced to uses of language and print that are well-established precursors of early reading development (Adams, 1991). Just as in the agrarian model, the skills and functions needed for adult participation are well represented in the everyday life of small children. Literacy and its many uses are soaked into a technological and industrial society and, by reflection, become ubiquitous in the lives of the children. We emphasize that it is variation associated with cultural experience, rather than ethnic identity, which is the basis for individual differences in literacy activities. Thus, the ethnic marker has limited value in identifying and responding to educational needs and problems.

CULTURAL DIVERSITY AND LEARNING DISABILITIES

We have suggested already that a sociocultural perspective on learning disabilities and on cultural diversity has important implications for definition as it allows, even mandates, a broader view of competence and of problems. It also has implications for assessment and identification as well as for instructional practices.

Assessment

Considering issues of assessment and identification first, it is well recognized that the usual psychometric approaches to psychoeducational evaluation are often inadequate and inappropriate for assessing children from many different cultural backgrounds (Figueroa, 1989; Harry, 1992; Hilliard, 1984). A critical question has to do with what is appropriate and fair. In our view the notion of "culture free" assessment is an oxymoron, as learning cannot be separated from the everyday culture in which the child lives. Thus, we propose that before designating a child as learning disabled based on standard measures, we must consider the kind and extent of children's preliteracy experiences, their opportunities for and exposure to reading, and other educationally relevant activities. In terms of prereading opportunities, Adams (1991) estimated that some children in the United States enter first grade with as little as only 25 hr of storybook experiences and about 200 hr of guided participation with the nature of print; other children enter school with hundreds of hours of literacy-related experiences. These differences may be ethnically as well as culturally associated, but they are not ethnically or culturally determined, and they carry clear messages about the need for different instructional responses. Thus, they must be considered when assessing children for identification as learning disabled and as needing special services.

We stress that the usual variables used to summarize literacy experiences (e.g., ethnicity, socioeconomic level, mother's education) are not valid indicators of children's status. Indeed, the use of such summarizing demographics may obscure real and important individual differences that affect children's responses to instruction. Recall that differences in reading activity among Mexican immigrant parents were related to rancho or pueblo living, not to ethnic or broadly defined ethnic and cultural status, underscoring the importance of exploring family as well as child characteristics relevant to educational achievement. In this regard, Langdon (1989) suggested that assessments of language skills of Hispanic students should include consideration of length of residence in the United States, the history of attendance or disruption of schooling, and the type of classroom attended.

Consideration of family and cultural variables substantially broadens the content of psychoeducational assessment. It also means that the traditional models of parent-professional relationships and interactions must be restructured (Harry, 1992; Patton, 1992). Such restructuring necessarily involves changes in professionals' views and beliefs about ethnically and culturally diverse children and families. Commenting on the roles of African American parents in the individual education plan (IEP) process, Harry noted:

It is true that a thorough assessment is expected to include a social history given by the parent, and state-of-the-art theory strongly recommends preevaluation, family focused assessment. However, in practice, this is often ignored, or implemented in such a way as to require parents simply to respond to constructs predetermined and presented by professionals. (p. 128)

A number of factors in addition to attitudes of professionals constrain comprehensive and effective assessment that takes cultural variables into account. These include legislative regulations, ethical considerations relating to privacy, demands of time, and parents' perceptions and cooperation.

There are also questions of the adequacy of measures and assessment techniques. Many of the descriptions of families have been limited to traditional demographics (e.g., socioeconomic status, fathers' income, level of mothers' education). Further, other than detailed and time-consuming observation, there are few well-tested and validated systems for gathering family data that are culturally sensitive and relatively few assessors with extended experience with students and families from culturally diverse backgrounds. There are, however, an increasing number of useful ways to describe family functioning, including those directed specifically at families with children with disabilities (e.g., Seligman & Darling, 1989; Singer & Irvin, 1989).

In work at the University of California, Los Angeles, Weisner and colleagues identified ecocultural variables that provide a systematic way to describe families' responses to a child with developmental or learning problems (Gallimore, Weisner, Kaufman, & Bernheimer, 1989; Nihira, Weisner, & Bernheimer, 1994; Weisner & Gallimore, 1994). Information about the eco-variables is gathered through structured interviews with parents, using the Ecocultural Family Interview. This interview is focused on family life, covering aspects of how everyday living is organized, the daily routines, and what

is problematic about the routines. Thus, it provides information about domestic workloads, childcare tasks, the use of services, sources of support, roles of spouse, and so forth, as well as information about the parents' perceptions and their short- and long-term goals for their children. The ecocultural interview has been adapted for use with other cultural and ethnic groups, including Chinese American, Japanese American, Mexican immigrant, and Navajo (Begay, Roberts, Weisner, & Matheson, 1996; Nihira, in press; Nihira, Sakagami, & Kananaga, 1995). Taken in concert with information about the child's aptitudes and problems, gathered through more traditional psychoeducational assessment, the system yields an in-depth picture of the culture of a family that can be the basis of intervention planning (Bernheimer & Keogh, 1995).

We acknowledge that assessing children for learning disabilities within the context of the family culture is difficult and will require new approaches and new techniques. It is not just a matter of different psychometric tests or modified norms. Rather, it requires taking a child's social-cultural history into account when making diagnostic decisions, including family-level differences. We suggest that there will continue to be errors in identification practices unless cultural variations are taken seriously in both assessment and interpretation. We wonder, for example, if the overrepresentation of children from culturally different homes in special education programs (Artiles & Trent, 1994) may be related to the nature of their early literacy experiences and to language and cultural differences rather than to in-child processing deficits. On the other hand, we suggest that some children with real learning disabilities may not receive needed special services because their learning problems are attributed to these differences. Both overrepresentation and underrepresentation are possible given the current procedures for identifying children from culturally different backgrounds.

Instruction

In terms of instructional practices, the usual approach to working with learning disabled students has been to focus on the presumed deficits of the child and to provide remedial or compensatory instruction. Relatively little attention has been paid to the culture of the school or to the nature of the instructional program, both of which may be contributors to a child's problems in learning (Keogh, 1995). Yet, there is increasing evidence that instructional programs and practices interact with children's learning styles to differentially effect achievement.

In a review of the literature on instruction that features conversation about texts, Tharp (1989) also identified a number of sociolinguistics features that can impact participation and learning of children from different cultural backgrounds. Native Hawaiian children from large families living in close proximity respond to small group conversations about shared texts with rapid-fire talk, overlapping speech, and joint narration of personal experience and text interpretation. In contrast, Navajo children from scattered households in Northern Arizona wait courteously until another speaker has clearly signaled an end to his or her contribution. Ideas are developed at great length by the Navajo children and have a more single-authored quality than the more closely articulated nar-

ratives that are typical of Native Hawaiian students. In both cases the behavior of the children reflect their cultural experiences, and in both groups there are broad differences among individual children in the ease and adaptivity of their learning. Clearly the nature of the instructional program is important, as evidenced in the major gains made by native Hawaiian children in the Kamehameha Early Education Project (Au & Carrol, 1996).

The impact of modifications in instruction was also evident in Goldenberg and Gallimore's (1991) study of reading in a group of young Hispanic children in southern California. Under a conventional readiness-oriented program almost half of the first-grade children were reading at the preprimer level and only 7% were at grade level. After 3 years of a different instructional program the figures were reversed. Over half of the children were at grade level and nearly one fourth were reading second-grade books.

In research directly relevant to learning disabilities, Stevenson, Lucker, Lee, and Stigler (1987) compared firstgrade and fifth-grade children in Taiwan, China, and the United States (Minneapolis) who were in the fifth or lower percentile on reading. They found that although all these students had poor cognitive functioning, poor readers of English had more reading-specific problems, whereas Chinese and Japanese children were more likely to have problems in mathematics as well. Furthermore, orthographic differences did not appear to make reading easier or harder; alphabetic writing forms were difficult for some Minneapolis children, but the other forms of writing produced serious reading problems for some children in China and Japan as well. These researchers did not find specific cognitive deficits among poor readers, but cautioned that only a limited number of cognitive abilities were assessed. They noted, however,

it appears likely that if such deficits are found in later studies they will differ according to culture.... Further investigation of the form and organization of cognitive abilities of poor readers in these three cultures would seem to be a productive topic for additional research. (pp. 175–176)

Cultural comparisons also reveal common problems across cultures, commonalties that implicate both child and family characteristics. Stevenson et al. (1987) noted:

There are common features across cultures in the characteristics of poor readers and their families: The children are not positive about reading and read less often than other children; they spend more time playing and less time at homework; their fathers are less likely to read than are the fathers of average readers; the mothers are more willing to look to the teacher than to themselves or their husbands as important contributors to their child's reading ability; and the mothers appear to be unaware of the severity of their children's reading difficulties. (p. 176)

Commonalties of features of children and families with poor reading across cultural groups suggest that some successful interventions, done in culturally appropriate ways, may lead to improved competence. In this regard Goodlad (1984) found that teachers reported that curricula and materials were appropriate for most students in predominantly Anglo schools, but for only 50% of the students in predominantly African American and Hispanic schools.

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Given these findings with African American, Hawaiian, Mexican, Chinese, Japanese, and European decent groups, we speculate that inappropriate instructional programs, not just processing deficits in children, account for at least some of the high numbers of problem learners in selected cultural groups. It is important to emphasize, however, that in the studies reported, a small number of students continued to be identified as problem learners even under optimal instruction. These may well be children with processing deficits characteristic of the traditional definition of learning disabilities. These children clearly require differentiated remedial instructional programs.

CONCLUSIONS

We subscribe to the reality of learning disabilities as a problem condition that affects the achievement and well-being of a substantial number of children, including those from diverse cultural backgrounds. Answers to questions of learning disabilities within the context of cultural diversity are difficult to sort out, however, and in our view are not well answered. We argue that our understanding of learning disabilities and cultural diversity has been limited in two primary ways: the use of ethnicity as a proxy for culture and the assumption of homogeneity of members within any ethnic and culture classification.

Classification according to ethnicity is based on a number of abstractions that presumably characterize a particular group and its members. We emphasize that abstraction and classification are necessary parts of the scientific effort, allowing information to be organized and generalizations to be drawn (see Blashfield, 1993, for discussion of models of classification). The problem comes when the abstractions and generalizations based on groups are applied to individuals for clinical purposes. Some, but not all, individuals within a given group will evidence some, but not all, of the abstracted characteristics. Further, the influence of the characteristics will vary selectively across different cultural activities. In regard to students with learning disabilities, the challenges are to determine which indicators of problems are learning disabilities based, which are culturally based, and in which cultural context a child's disabilities and competencies are salient.

Our review is not intended as a proposal to discontinue taking ethnicity seriously in programs or in policies relevant to learning disabilities. Rather, we suggest that the extent to which cultural features are in fact shared and homogenous across and within ethnic groups is an empirical question deserving of serious research effort. The unique features shared by ethnic communities should clearly be recognized and celebrated, but we need to be vigilant that ethnic trait labels are not used for invidious purposes or that learning disabilities and ethnicity are not confounded.

In a sense we have come full circle, as we began this article with the point that work on learning disabilities has traditionally been focused on the individual. We call for a similar emphasis, but we argue that understanding learning disabilities within culturally diverse groups necessitates getting at the functional context of an individual child's life. This involves consideration of aspects of family life and life in school, including the nature of the instructional program. Thus, as-

sessment procedures must be both broadened and refined. We underscore the importance of going beyond the narrow focus on in-child neurobiological processes to address a broader sociocultural approach. We recognize that this approach places additional burdens on professionals involved in assessment, diagnosis, and intervention, as well as on researchers who seek to abstract the critical aspects of learning disabilities within culturally diverse groups. We argue, however, that this change in perspective is essential if we are to understand learning disabilities in students from culturally diverse backgrounds.

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