

# Bilingual Education's Needed Third Dimension

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*Besides the linguistic and cultural components, bilingual education should include the psychoinstructional dimension.*

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Virtually all bilingual programs include cultural and linguistic components. Seldom, however, do they include a third dimension which a growing body of literature identifies as of critical importance for learning among ethnically different children: the psychoinstructional dimension.

In contrast to the linguistic component of bilingual education, the language and its use, and in contrast to the cultural component, current and historic aspects of the child's culture, this third dimension addresses the process of instruction. It is thus supplemental and complementary to the first two components.

The psychoinstructional dimension deals with the *intellectual* and *personality traits* of the child that derive from cultural and social class uniqueness (when compared to mainstream society) and that determine the instructional strate-

gies that will most effectively facilitate learning. It is, therefore, the psychological makeup of the child that is called to our attention, and the child's consequent need for an instructional approach that is sensitive to these traits.

## Cognitive Abilities and Processes

In their study of Jewish, Chinese, black, and Puerto Rican children, Stodolsky and Lesser (1967) found distinct cognitive patterns of abilities that differentiated each group from the other. Although social class influenced the level at which students scored on each of the four measures (verbal, reasoning, number, and space), social class did *not* affect the cognitive pattern found in each ethnic group; that is, regardless of social class each ethnic group maintained its own relative set of abilities. These findings suggest that different intellectual abilities are fostered by different cultural groups.

Similar conclusions were reached by Kleinfeld (1973) in the course of her study of Eskimos in Alaska. Kleinfeld reports that:

It is the concept of intelligence as a single general ability that is in large part responsible for the consistent findings of "intellectual inferiority" among most culturally different groups. . . .

The general point, however, is that different cultures may foster different types of intelligence, that is, particular abilities which are adaptive in coping with the demands of a particular environment.

Kleinfeld suggests that Eskimos may surpass westerners in such areas as memory for figural units. It seems clear that particular cognitive abilities (spatial, numerical, verbal, problem solving) are differentially fostered by different cultures, according to the value placed on them by the members of the ethnic community.

A related field is that of cognitive styles, dealing with differences in ways of perceiving data

in the environment and of processing those data within the brain. The cognitive style most thoroughly researched, for both the general population and ethnically different youth, is field independence/field dependence. Here, some researchers have found a consistent difference between mainstream, monolingual youth and Chicano (assumedly bilingual) youth (Ramirez and Castaneda, 1974). Researchers agree that while one style is not inherently superior to the other (neither style is more consistently correlated with high IQ than the other for younger students), children who are field independent consistently get better grades. The reason seems to be that the cognitive style of field independent students is matched by the cognitive style of the typical teacher, and this "cognitive fit" affords students a considerable advantage in the classroom.

Other cognitive styles also merit our attention. It may well be, for example, that such dichotomous dimensions as the analytic-descriptive and the reflective-impulsive also separate mainstream and ethnically different students.<sup>1</sup> If so, culturally sensitive instructional approaches in these areas also need to be developed before equal learning opportunities prevail in the classroom (Gray and Knief, 1975).

### Motivational Systems

In motivating students, there is no surer way to guarantee unequal outcomes than to treat unequals the same. Teachers who insist that what works for 90 percent of the class (who happen to be white and middle class) ought to work for the other ten percent (who happen to be of minority origin and lower class) are wrong in theory and practice. It is axiomatic that when children differ from one another along social class and/or cultural dimensions, different motivational and reinforce-

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ment techniques will be required of the teacher if those children are to be equally motivated. Differences in social class and/or culture assure that there will be differences in value systems, and motivation is dependent on the child's value system.

Take a simple case in which the teacher wishes to reinforce a child for doing well on a test. The teacher approaches the child, holds the paper up for all to see, and says, "Roberto, you did very well on this test. I'm proud of you," and hands Roberto the paper. Has the teacher reinforced Roberto? There is no way to know unless we understand something about Roberto's value system. If Roberto has accorded this female teacher a place of status in his system of values so that for her to tell him he did well in front of his peers makes him feel positive about himself, then the answer is yes. Note, however, that in this type of reinforcement it is assumed that Roberto has granted this female teacher a high place in his hierarchy of values.

However, if Roberto comes from a home where instruction and discipline are the role of the father but never the mother or other females (a typical situation in Hispanic homes), he may not be reinforced at all by this act on the teacher's part. What can the

teacher do? Clearly, the answer is to use motivational strategies based on Roberto's own value system. If Roberto is Hispanic, for example, it is quite likely that he is oriented to achieve for the sake of the family (Ramirez and Castaneda, 1974; Vasquez, 1979). To reinforce Roberto effectively the teacher should have said, "Roberto, you did very well on this test. Your father will be proud to see it."

Countless teachers throughout our country employ motivational techniques with their students because it is universally recognized that students must be motivated *in every task* if learning is to occur. Yet, in the case of ethnic minority children these efforts are largely fruitless because of false assumptions about their value systems. Teachers and other staff in bilingual programs must begin to make use of the value systems children bring with them from their homes and communities if they are to effectively motivate children.<sup>2</sup> This is an integral part of the psychoinstructional dimension in bilingual education.

<sup>1</sup> Holtzman and others as cited by Diaz-Guerrero (1977) found American students were more impulsive than Mexican youth.

<sup>2</sup> See Vasquez (1979) for a description of a procedure for motivating Chicano students based on a Chicano value system.

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Research has shown that students who see themselves as responsible for their grades are better learners than those who perceive that academic outcomes are controlled by external factors (Nowicki and Strickland, 1973; Vasquez, 1978). This is called locus of control, and research in this area has much to contribute to those concerned with improving the educational status of ethnic minority students (Coleman and others, 1966). Indeed, locus of control has been found to have "a stronger relationship to achievement than all other school factors together" (Coleman, p. 148).

In our society, those who perceive themselves to be in control of their academic reinforcements (called "internals") are usually white and middle class. Ethnic minority groups generally feel that outside factors such as luck, chance, "powerful others," and task difficulty are instrumental in determining grades, and that there is not much they can do to alter this situation. These individuals are called "externals."

Quite apart from basic intelligence, the internal individual is characterized by a number of traits that facilitate learning.<sup>3</sup> Included are such critical traits as persistence in the face of failure, self-reliance, higher aspirations, expectancy of success, achievement motivation, susceptibility to rein-

forcement, and test-taking skills. Not an educator in the country would question the importance of these traits in learning tasks; yet, few are aware that locus of control sharply divides students who have them in relatively high degree from those who do not.

Locus of control must become a familiar concept for teachers and an integral part of the traditional bilingual program. That is the only way we can begin to teach external children to believe in themselves again.

In addition to the traditional dimensions of instruction in the child's dominant language and the inclusion of the child's culture in the curriculum, the *psychoinstructional dimension* is needed in bilingual programs. This dimension deals specifically with the psychological distinctiveness of minority (and, in some cases, lower-class white) students in bilingual programs. As a starting point, sufficient research is available dealing with children's cognitive abilities



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and processes, value systems and resultant motivational orientations, and, finally, locus of control, for implementing such a component.

<sup>3</sup> There is no consistently found significant correlation between locus of control and IQ scores.

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