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AUTHOR Rueda, Robert
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ABSTRACT

Although the special education system has become a central institutional mechanism for addressing school failure and low achievement, it is a system unresponsive to the needs of Chicano students. Despite the severity of problems of school failure for Chicano students, interactions with the special education system have largely been characterized by antagonism and apprehension. The potential of special education for addressing this issue is hindered by continued reliance on a paradigmatic model with roots in the medical treatment of severe and organic disabilities. This model continues to be influential although the population served now consists mainly of children with mild learning problems without medical basis and, increasingly, children with diverse cultural and linguistic backgrounds. This prevailing model tends to view culture as a minor factor in learning, and low achievement as a child-centered phenomenon, while emphasizing classificatory uses of student assessment with only minimal applicability to meaningful classroom practice. As a result of legal controversy, much of the work on Chicano students in special education has focused on assessment, specifically claims of bias in intelligence tests, and resulting restrictive and stigmatizing placements. However, a literature review suggests problems in referral, diagnostic, and instructional practices as well. Promising areas for research and policy development include examination of current eligibility determination procedures and funding mechanisms; merger of special, regular, and bilingual education; reconceptualization of low achievement from a broader perspective; and development of more useful assessment practices. Contains 74 references. (SV)

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Chapter 9

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TO THE DIMINISHED ACADEMIC ACHIEVEMENT
OF CHICANO STUDENTS**

Robert Rueda

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Chapter 9

An Analysis of Special Education as a Response to the Diminished Academic Achievement of Chicano Students

Robert Rueda

In the face of overwhelming evidence of diminished academic achievement at by Chicano and other minority students in the United States (Valencia, chapter 1, this volume), an increasing number of research and intervention efforts have begun to focus on the prevention of school failure. In much of this work, the primary unit of analysis consists of the individual student or his/her family. For example, in the literature examining the question of high school dropouts, a great deal of attention has been given to the personal attributes of students that are correlates of dropping out, such as low SES status, membership in single parent families or families in which one or both parents dropped out (Ekstrom, Goeritz, Pollack and Rock, 1986; Rumberger, 1983); low self-esteem (Sewell, Palmo and Manni, 1981); a sense of helplessness (Hill, 1979); an external locus of control (Ekstrom et al., 1986); and poor attendance and disciplinary problems (Peng, 1983). Indeed, it is very likely that individual and family-related factors are crucial aspects of diminished achievement for Chicano students. As an example, there is some evidence that Chicano students who remain in school receive a qualitatively richer social, emotional, and familial support from their parents to help them deal with school rules and conflicts (Delgado-Gaitan, 1988).

In contrast to approaches that examine the question of school failure from a preventative perspective and at the level of individual student attributes, the present chapter will focus on school failure after it is officially recognized and labeled by the educational system. In addition, the educational system itself, as opposed to the students, will be the major concern. More specifically, this chapter will explore the role of the special education system, as an institution, in dealing with low academic achievement of Chicano students once they are judged to be beyond the scope of normal educational interventions by the regular classroom teacher. Embedded within this topic are major policy and research issues that have significant implications related to attempts to study and alleviate Chicano school failure.

The major questions to be addressed in this chapter are as follows: What is the historical relationship between Chicano students and the special education

system? How do Chicano students enter the special education system, and what happens to them once they do? What are the emerging issues and changes which have occurred in special education, and what potential and actual impact do these have with respect to the low achievement of Chicano students? Specifically, what does past and current research suggest about the effectiveness of the special education system (referral, assessment, and intervention)? How has this body of research influenced policy and practice? Given this body of research, what is the appropriate role of special education in addressing lowered academic achievement? What are the policy implications of a closer correspondence between research, policy, and practice? Should the special education system (and the theoretical paradigms upon which it is structured) be improved or eliminated? Using these questions as a basis, this chapter will explore the function of the special education system in dealing with diminished academic achievement with particular attention to Chicano students. Included in this review and analysis will be a discussion of suggestions for laying the foundation for closer correspondence between research, theory, policy, and practice in the 1990s and beyond in addressing this long-standing problem.

Before beginning consideration of the above issues, a brief introduction and sketch of certain pertinent features of the special education system with relevance to the present discussion will be provided.

A Brief Look at Special Education: Past and Present

There are many misconceptions among the public, and even among many educators, with respect to the nature and clientele of the special education system. For example, many equate 'handicap' with debilitating physical anomalies such as blindness, deafness, or the need for wheelchairs or other prosthetic devices. In addition, many tend to think of 'handicap' as denoting severe and profound impairments that require intensive services on a permanent, lifelong basis, with diminished access to normal life activities. Although special education began with a concern for students such as those described above, there have been radical changes as special education has passed through its relatively short period of development.

Although educational services for students with learning problems have existed for some time, it is only relatively recently that these have become mandatory and not discretionary on the part of public schools. In California, for example, students with health problems, contagious diseases, physical handicaps, mental illness, or mental retardation were excluded from public school education as a matter of policy in the 1874 revision of the school code, and this remained essentially unmodified for the next fifty years (Mercer and Rueda, unpublished manuscript). When special education was finally funded by the state, in the 1920s and the 1930s, only medically-based biological disabilities were included. The earliest special education services, then, were primarily directed at students with sensory and physical handicaps. It was not until much later, with the advent and popularization of intelligence testing, growth of the field of school psychology, and more permissive legislation, that special education services were provided to students without recognizable biologically-based learning problems.

The most pronounced development of special education was triggered by

the implementation of Public Law 94-142, the Education for All Handicapped Children Act (*Federal Register*, 1977). This law, which represents the current legislative basis for special education at the federal level, was the equivalent of a civil rights law for handicapped students, with the most important provision being the guarantee of a free, appropriate public education for all handicapped students. In essence, this law formalized the right to educational services without regard to the degree of impairment. There were, however, other far-reaching provisions, including the right to due process, the right to nondiscriminatory assessment, the right to an individual education program, and an emphasis on providing services within the least restrictive environment that have played a particularly important role with respect to language minority students.

One of the major changes in special education as a result of this legislation has been in the types and numbers of students served by the system. Currently, there are nearly 4.4 million children with handicaps receiving services, representing slightly less than 11 per cent of the school-age population nationwide (U.S. Department of Education, 1987). Yet, contrary to what many believe, mildly handicapped students make up the largest part of the special education population. These are students who fall in the categories of learning disabilities, mental retardation, serious emotional disturbance, and sometimes language impaired (MacMillan, Keogh and Jones, 1986). In a recent tabulation of national prevalence figures, Forness and Kavale (1989) document that the four categories just mentioned account for over 90 per cent of all children served in special education, while all other types of handicaps (e.g., hearing impaired) account for less than 10 per cent. Moreover, these authors indicate that the category of learning disabled now accounts for 4.7 per cent of the total school enrollment, having experienced a 135 per cent gain in the period from 1976 to 1986. In some areas such as California, the growth is even more pronounced: in this same ten-year period, the numbers of learning disabled students grew by 185 per cent, and represent 5.1 per cent of the school population (Forness and Kavale, 1989). What this means in practical terms is that the majority of students served by the special education system are primarily characterized by low academic achievement and do not fit the traditional stereotype of the more impaired student! This important change has resulted in a great deal of discussion about the development and current role of special education, and will be discussed later — particularly in relation to Chicano students. As the later section exploring the relationship between Chicano students and the special education system points out, this change has profound implications for conceptualizing and dealing with the issue of diminished achievement.

In addition to the fact that most special education students are mildly handicapped, another important change is reflected in the ways that services are provided. Special education has traditionally been structured around a categorical framework. That is, in order to be served, a given student must be diagnosed as qualifying under the eligibility criteria for a specific category such as mental retardation, learning disabilities, serious emotional disturbances, blindness, deafness, etc. Once qualified for services, students are then provided educational services in a variety of settings. More severely impaired students, for example, are often instructed in special education schools, which serve this group of students exclusively. Less impaired students are usually served in self-contained classrooms, which comprise special education students but within a

regular school. Finally, most mildly handicapped students are mainstreamed while receiving services on a pull-out basis. That is, they spend a variable portion of the day in the regular classroom, with the remainder of the time spent in a special education setting.

Although Mercer (1973) and others have documented the rather restrictive classroom settings into which many special education students were placed in the past, it is much more usual for most special education students to be mainstreamed for some part of the day. As an example, Forness and Kavale (1989) present data indicating that for learning disabled and speech impaired students, 77 per cent and 91 per cent respectively are in mainstream (regular classroom) settings. In addition, 34 per cent of mentally retarded students and 46 per cent of seriously emotionally disturbed students spend at least a portion of the school day in regular classrooms. It should be recalled that these four categories represent by far the largest portion of the special education population.

In sum, the numbers of students being served by the special education system is increasing. By far the largest part of this group comprise mildly handicapped students. For most of these students, there is no readily apparent biological, neurological, or other physical basis that can be directly related to impaired learning. Rather, they are characterized primarily by low academic achievement and the prospect of continued failure without special educational assistance. As will be seen, these rather significant developments with respect to the special education system are important in understanding both past and present interactions of Chicano students with this system.

Chicano Students and the Special Education System: A Brief Historical Perspective

The focus on Chicano and other minority students in special education is a relatively recent phenomenon. A significant force in bringing about increased concern with both disabilities in general — as well as on minority students within special education — was the Civil Rights Movement during the period of the 1960s. Even as early as 1968, for example, Dunn criticized the practice of placing mildly mentally retarded students in self-contained classrooms. It was not, however, until presentation of empirical data by Mercer (1973) documenting ethnic and racial overrepresentation in certain special education categories such as mental retardation that widespread attention was directed to these issues. For example, Mercer found three times more Mexican American students in self-contained classes for mildly mentally retarded students than would be expected based on their numbers in the general population of the community studied.

In addition to documenting ethnic imbalances in placement distributions, Mercer went a step further and argued that prevailing assessment practices were largely responsible for the overrepresentation that existed. Then, as now, the initial entry point for special education placement is based on teacher referral due to lowered academic achievement, or other factors that might interfere with learning such as behavioral problems or speech and language difficulties. However, placement is not formalized until individual psychological assessment is completed, most often by a school psychologist in conjunction with other ancillary personnel. Mercer's data (and subsequent research by other investigators)

ed that students were often inappropriately tested in English in spite of limited-English proficiency, administered poorly translated or spontaneously translated tests, compared to inappropriate norm groups, etc. In short, the initial entry gate into special education placement was (and continues to be) through the use of standardized tests in individual psychological assessment.

As a result of Mercer's investigation, intensified scrutiny was given to existing testing and placement practices for Chicano and other minority students. One consequence of this work — namely a series of court suits and other legal initiatives challenging public school policies, in particular those related to assessment and placement — has been perhaps the most visible and publicized aspect of Chicano students' participation within special education.

Two of the most far-reaching cases dealing specifically with the evaluation and placement of Chicano and other minority students were *Diana v. California State Board of Education* (1970) and *Larry P. v. Riles* (1979). The prime issue in the *Diana* case was the appropriateness of assessment conducted in a student's native language, while the content of intelligence tests with respect to cultural bias was a major issue in the *Larry P.* case. Although a more extensive discussion of these cases is beyond the scope of this chapter, examination of these and a myriad of other significant court suits on behalf of Chicano (as well as American Indian, Asian and Black) students suggests that both prevailing assessment procedures as well as the assessment instruments themselves (specifically the intelligence test) have been justifiably singled out as largely responsible for unrepresentative special education placement patterns, particularly in classes for the mildly mentally retarded. (More extensive discussion of these and related cases, as well as analysis of their impact on educational practice is found in Cummins, 1984; and Valencia and Aburto, this volume.)

One of the more widely disputed issues has been overrepresentation of minority students in EMR (educable mentally retarded) classes. An early impetus for this concern was publication of data by Mercer (1973), which demonstrated that while Chicano students made up 9.5 per cent of the population in the small California community which she studied, they comprised 32 per cent of those labeled and placed in classes for the mentally retarded. Significantly, because there was little of the due process and procedural protections that currently exist, oftentimes parents and community members were unaware that a given student had been tested, labeled, and placed. Moreover, 62 per cent of those labeled mentally retarded exhibited no 'symptoms' of deficiency except the low IQ score.

Although Mercer's (1973) study focused a great deal of attention on this problem, later studies suggested that in spite of increased awareness of possible abuses, problems continued to exist. For example, Finn (1982) conducted a study using the 1978 OCR (Office of Civil Rights) data, and examined various indices of disproportion. In addition, data were examined across and within geographical location, by size of school district, size of the Hispanic population, and availability of bilingual educational options. The results of this analysis suggested that minority students were overrepresented in classes for the mentally retarded (EMR and TMR), as well as in classes for the emotionally disturbed. Importantly, there were effects due to district size and size of minority enrollment. Moreover, the highest EMR disproportions for Hispanic students occurred where there were small or nonexistent bilingual programs.

Forness and Kavale (1989) point out that nationally, the EMR category has experienced a 29 per cent loss from 1976-77 to 1985-86, and accounts currently for only approximately 1.7 per cent of the school population. However, recent data suggest that overrepresentation in this category continues to be a problem for Chicano and other Hispanic students, although there is wide variation among individual states and school districts (Finn, 1982; Heller, Holtzman and Messick, 1982; Twomey, Gallegos, Andersen, Williamson and Williamson, 1980).

Interestingly, while overrepresentation of minority students in EMR placements may have decreased, there is some evidence that the numbers of minority learning disabled students is increasing (Ortiz and Yates, 1983; Tucker, 1980). For example, Ortiz and Yates (1983, 1984) have reported data from Texas suggesting that Chicano students are dramatically overrepresented in programs for the learning disabled. The 2 per cent estimated incidence figure turned out in actuality to be 6.3 per cent exceeding the expected incidence by 215 per cent. In California, Rueda, Cardoza, Mercer and Carpenter (1984) reported data from several school districts of a sample of approximately 1,300 Hispanic students referred for special education placement over the 1984 school year. It was found that the most frequent diagnostic classifications were learning disabilities (63 per cent of the sample) and language impairments (20 per cent of the sample). Although the purpose of the study was not to examine overrepresentation *per se*, it did reveal marked changes in placement patterns in the direction of dramatic increases in learning disabilities and a concomitant decrease in EMR placements. Although the question of overrepresentation of Chicano students has been among the most widely publicized issues, the participation of minority students in special education has raised a host of other controversies as well. One of the major areas of contention is focused on the conceptualization, measurement, and interpretation of IQ and differences in IQ as a function of SES, race, ethnicity, or language background. It is clear that the notion of IQ is central in the conceptualization and definition of the categories that have been the most problematic with respect to overrepresentation of Chicano students, specifically learning disabilities and mental retardation. Moreover, this is almost exclusively operationalized in the form of an individual IQ test.

In spite of the relatively major role played by IQ in special education practice, a great deal of criticism has been leveled at the viability of IQ as a measurement concept (Mercer, 1988). For example, there exists a great deal of controversy regarding the appropriate interpretation and use of IQ tests with various ethnic and linguistic minority groups. Some have argued that the predictability of IQ scores with respect to school achievement may be a function of bias both in the predictor (IQ score) and the criterion (most often standardized academic achievement tests or even school itself). In addition, Mercer and Lewis (1979) and others have argued that some of the major assumptions of IQ tests, for instance that students from different groups have had equal exposure to the knowledge and experiences reflected in the test, are invalid, and further, the real issues are sociopolitical rather than psychological.

Perhaps the debate over the IQ issue would not be so spirited were it not for the fact that there are important social and educational consequences that result from the use of IQ and other standardized assessment measures (see Valencia and Aburto, this volume). For Chicano students, the most obvious concern from a historical perspective has been the stigmatizing or restrictive nature of some

special education placements (Heller, Holtzman and Messick, 1982), leading many researchers and practitioners to address the problem of differentiating language and culture from handicap (Polyzoi, Holtzman and Ortiz, 1987) through the use of more comprehensive, culturally sensitive procedures. Understandably, these problems have generated a wide variety of proposed solutions, from closer monitoring of schools in complying with current law, to banning, adapting, or modifying assessment instruments, to the adaptation of more culturally and linguistically sensitive practices. As one illustration, for example, Ortiz and Maldonado-Colon (1986) and Ortiz and Garcia (1988) have described a comprehensive referral process aimed at reducing inappropriate referrals of Hispanic and other minority students. These authors distinguish between three types of learning problems. These include problems that occur when students are in classroom environments that do not accommodate their individual differences or learning styles, problems due to mild to moderate achievement difficulties which are not the result of handicapping conditions, and problems due to major disorders which interfere with the teaching-learning process. These authors argue that only the last group of students fall into the appropriate realm of special education education, while students in the first two groups more likely represent the results of faulty or inappropriate instructional histories. The model presented by these authors is reflected in a sequential set of questions that must be addressed before a referral to special education can be appropriate, and can be seen as a representative example of attempts to reduce inappropriate referrals and separate linguistic and cultural factors from handicapping conditions.

More recently, others have begun to focus on instructional variables such as the use of native language instruction (Ortiz, 1984), and the use of appropriate instructional models to account for language and cultural differences (Cummins, 1984). For example, Cummins has discussed the notion of students who represent 'curriculum casualties', that is, those students whose apparent learning handicaps are 'pedagogically induced'. The low level, remedial, decontextualized skill-oriented approaches often provided to special education students characterize a 'transmission' oriented approach, in which knowledge is seen as a commodity to be transferred from the teacher to the student. In contrast, 'reciprocal interaction' approaches see knowledge as something to be personally constructed by each student based on interactions with persons and materials (Cummins, 1984; Tharp and Gallimore, 1988).

In summary, it can be argued that linguistic and cultural diversity have not been well tolerated within the special education system. The relationship between Chicano students and the special education system has often been adversarial and plagued at times by inappropriate assessment practices, stigmatizing and restrictive placements, English-only instructional practices, and resulting legal controversy. Perhaps because these issues have been the center of legal controversy, much of the work on Chicano students in special education has focused on assessment — specifically claims of bias in IQ tests — and resulting restrictive and stigmatizing placements. There appear, however, to be problems not only in the area of assessment, but in referral, diagnostic, and instructional practices as well. In spite of these problems, a great deal of change has taken place through litigation and legal mandate. For example, the data presented by Forness and Kavale (1989) shows that most mildly handicapped students now spend a signifi-

fiant amount of time in the regular classroom as opposed to self-contained settings. However, most efforts directed at reform have been externally imposed on the educational system. Moreover, in a recent critical analysis, Rueda (1989) has argued that to date, almost all reform efforts have focused on proposing 'fixes' for elements of the current system which are perceived as problematic, while basically leaving intact the institutional structure and model upon which these are based. The implications of this for Chicano students will be explored in the following sections.

The Role of Special Education in Addressing Lowered Academic Achievement

What is the proper role of the special education system in addressing poor academic achievement among Chicano and other minority students? Certainly special education cannot be said to be a causal factor, in that academic problems do not reach the special education system until they are severe enough such that they cannot be handled through 'normal' educational channels. Yet, although it is not preventative, in the sense that Head Start and other early intervention programs are, and was not initially developed with a primary concern with minority students, it does represent one of the major educational structures set up to deal with diminished achievement. That is, it has become a major institutional response to lowered minority academic achievement once it is formally declared to be beyond 'normal' intervention channels in the regular classroom. Theoretically, one of the major goals is to provide assistance in order to facilitate re-entry and successful future outcomes in the regular classroom, and therefore special education could play a potentially critical role in addressing low achievement. Examination of the current status of the special education system, however, suggests that there are major problems regarding the delivery of services even when linguistic and cultural diversity are not factors. The literature suggests that currently, there are many questions relating to the efficacy of special education as currently structured (Gerber and Semmel, 1984; Ysseldyke, 1983; Will, 1986), especially for students who are mildly handicapped. As will be argued later in the chapter, the participation of Chicano students in the special education system cannot be considered apart from issues and problems which affect the field as a whole. Moreover, these issues have the potential for significantly impacting future research, policy, and practice agendas with respect to Chicano students.

What are these issues and problems, and what are the reasons for dissatisfaction with the current system? It appears that there are significant problems in the referral, assessment, and instructional areas. Rueda (1989) has provided an extensive review and summary of this literature, and these areas will be briefly discussed in the following sections.

The Referral Process

One of the first steps in a child's contact with the special education often begins with a referral by the regular classroom teacher. There is some evidence that teachers may sometimes evaluate a student's competence on the basis of a variety

or factors other than ability, such as race, sex, socioeconomic status, or language and cultural characteristics (Jackson and Cosca, 1974; Rist, 1970, 1982; Ysseldyke, Algozzine, Richey and Graden, 1982). These considerations would tend to place Chicano students particularly at risk for inappropriate referrals.

In addition, there is literature which suggests that the decision to refer a particular child for special education is heavily influenced by situational and contextual factors as much as by within-child characteristics, and is characterized by a great deal of 'social negotiation' (Mehan, Hertweck and Michls, 1986). Finally, even recent developments such as the use of preferential intervention systems, although promising with respect to reducing inappropriate referrals, still accept the basic notion of 'pure' or 'true' disability independent of the context or means of assessment, in spite of convincing arguments to the contrary (LCHC, 1982).

Assessment

As pointed out earlier, problems related to assessment have been particularly troublesome given the cultural and linguistic characteristics of Chicano students. However, it is increasingly clear that there are rather severe limitations in the ability to reliably and validly differentially diagnose mildly handicapped students who are mainly characterized by poor academic achievement (Ysseldyke *et al.*, 1982), even where cultural and linguistic factors are not involved. At least part of this is due to technical inadequacy of current assessment tools (Coles, 1978; Forness and Kavale, 1989; Shepard and Smith, 1981). In addition, the cost of referenced test results to classroom instruction have been criticized as well (Shepard and Smith, 1981).

reading or writing. Cummins (1986) has termed this instructional approach as 'transmission oriented' as opposed to 'reciprocal interaction oriented'.

One of the primary problems with this system as currently structured, it is proposed here, is the theoretical model upon which it is based. In reality, the model that most often guides contemporary policy and therefore practice in special education is a combination of the medical-diagnostic model adapted from medical roots, and the statistical psychometric model developed in psychology. Rather than one replacing the other, however, the statistical psychometric model has been superimposed on the medical diagnostic model, resulting in a psychomedical model with elements of both (Mercer, 1988). This psychomedical model is characterized by an emphasis on eligibility criteria, diagnostic psychometric assessment, classification, and intelligence testing (Mercer, 1973, 1988; Mercer and Lewis, 1979). Moreover, this model is so entrenched, for example, that given current definitions, the categories of learning disabilities and mental retardation could not exist without the conceptual notion of intelligence as distinct from achievement.

The rigidity which is inherent in this framework has particularly negative consequences in instances where diminished achievement cannot be fit into one of the predefined disability areas. Under the current system, for example, unless a student is certified as eligible for a given diagnostic category within state, federal, or local criteria, then no services can be provided, even where academic difficulties are well documented and where academic assistance would be beneficial. Perhaps this would not be so problematic in the absence of the problems related to referral, assessment, and placement alluded to earlier. Yet, as currently implemented, schools sometimes find themselves in the position of having to refer a child for special education and a possible label as the only means of securing additional resources for assistance.

Instruction

Perhaps because of its medically-based roots, special education traditionally has not aligned itself closely with other school programs — such as bilingual education — that serve language minority students. There has been little if any reciprocal interaction between the bilingual and special education systems. Moreover, there has been little if any concern for language and cultural factors in special education instructional approaches. Although special education placements may have become less stigmatizing and less restrictive than in the past, the dominant instructional approach continues to be based on a 'bottom-up' conceptualization of the learning process, which is most often operationalized in English only, drill and practice repetitive workbook activities of a remedial nature (Cummins, 1984, 1986; Flores, Rueda and Porter, 1986). Put simply, a 'bottom-up' approach suggests that complex domains of learning can be hierarchically ordered, and that 'lower' skills need to be mastered as prerequisites to more complex or advanced skills. In reading, for example, such an approach might lead to an emphasis on mastery of sounds and letters of the alphabet before engaging in 'real'

Conclusions and Summary

When the entire context of special education is taken into account, many of the problems that have normally been associated with Chicano students in special education exist even when ethnic and language differences are not at issue. The preceding problems with the special education system referred to can be traced, at least in part, to the continued use of a psychomedical model, because past as well as current practice is still heavily influenced by this well-entrenched paradigm (Mercer, 1988; Rueda, 1989). The conclusion from these observations is that the influence of this model is a primary factor in limiting the usefulness of special education not only for Chicano students but for all students as well. At the policy level, this suggests two things. First, efforts to address the inadequacies of the special education system for Chicano students independently of the special education system itself may be misguided. As a prime example, developing a better intelligence test for Chicano students without examining the meaning and uses of intelligence testing in the first place would likely do little in terms of long-term solutions. Secondly, the role of special education in dealing with lowered levels of achievement is sorely in need of reconceptualization, beginning with the basic model that guides it. If the system is flawed, what should replace it?

Policy Issues and Implications

As this volume and other authors document (e.g., Arias, 1986; McCarty and Carrera, 1988), the issue of low academic achievement by Chicano and other minority students is a serious educational concern. As these data on academic achievement demonstrate, it would be ludicrous to suggest that Chicano students do not exhibit academic problems, or that the problems that do exist are solely the result of the inappropriate use of the psychomedical model. Moreover, given that diminished academic achievement will not disappear any time soon, and preventative efforts have not been entirely successful up to this point in time, what is the best educational response that schools can provide?

As suggested earlier, there are many indications that the current special education system has provided less than optimal means of addressing the educational needs of Chicano students who truly demonstrate learning problems in public schools. Although part of this negative perception can be traced to stigma and to the range of factors discussed earlier, the more fundamental problem can be traced to the continued use of an inappropriate paradigm to guide practice and research. In essence, the current model could be likened to the following analogy. It is as if a sinner who wanted to be forgiven had to first go through a long, complicated, and expensive pre-confessional ritual with a highly trained church official other than a priest in order to be declared a sinner. Then and only then could this sinner be allowed to see a priest to be forgiven. The label of sinner would do little to inform the sinner of his own status, in that he/she knew of the sinful behavior from the beginning. Moreover, the label of sinner would do little to inform the priest of the nature of the sinful behavior, the level of penance to recommend, or the nature of the counseling to provide to the individual sinner. If it later came to light that the long and complex process by which one is declared a sinner was largely inaccurate and highly variable, the question would be raised regarding the necessity of keeping this intermediate step between the sinful behavior and the confessional.

In a like fashion, the current eligibility determination procedures embedded in special education policy and legislation, including the long and expensive assessment process conducted by school psychologists, are equivalent to the 'pre-confessional' ritual described above. Moreover, the resulting special education eligibility determination and diagnostic categorization tend to confirm what was already known earlier by the teacher, parents, and the student him/herself at the point of referral, namely that low achievement exists and is a problem. Yet, the determination of eligibility does little in terms of informing the teacher about specific instructional interventions. As a final point of comparison in the analogy, the definitional and measurement problems associated with the special education eligibility determination process should lead to a critical review of current policy and practice especially in light of current research.

Although the current model may have been appropriate to special education during its early development, when severe handicaps were the exclusive or primary domain, by far the largest consumers of special education services at the present time are mildly handicapped students, who are chiefly distinguished by low academic achievement and not organic or biological problems. Moreover, not only are mild handicaps now the major focus of special education practice,

but culture and linguistic variety are the norm and not the exception in many public school settings and thus must be directly addressed.

Given these observations, the extension and continued use of the current model is increasingly problematic. Dissatisfaction both from within and without the system has led to a growing movement for reform (Reynolds, Wang and Walberg, 1987). Some efforts at reform, however, such as the use of school-level, informal prereferral teams or consultation models of special education service delivery have not gained wide acceptance (Herron and Harris, 1987; Idol, Paolucci-Whitecomb and Nevin, 1986). A likely reason for this is that the attempt has been made to superimpose those potentially valuable reforms onto the existing system on an extension rather than a replacement basis. As a result, these discretionary practices are rarely allocated resources (Gerber, 1984).

What is the nature of other possibly more extensive reforms, and what are policy implications of these reforms for Chicano students? One widely discussed alternative is the proposed merger between special and regular education (Stainback and Stainback, 1984; Will, 1986). Although this move to integrate special and regular education has largely been developed outside the context of cultural and linguistic diversity, presumably it could be extended to include a merger of special, regular, and bilingual education as well. Clearly, from a policy perspective, a move to eliminate or reconfigure some aspects of the structure or of specific activities (but not the function) of special education would not be acceptable in the absence of a redistribution of at least an equivalent amount of resources to deal with poor achievement in new and innovative ways. For example, there presently exists a rather formidable arsenal of educational tools from behavioral technology (Howell and Morehead, 1987; White, 1986), to cognitive psychology (Gelzheiser and Shepherd, 1986), to more holistic and contextually sensitive instructional models (Cummins, 1989; Diaz, Moll, and Mehan, 1986; Poplin, 1988b; Tharp and Gallimore, 1988). Although low achievement should not be conceptualized entirely as a within-child phenomenon, independent of social and institutional factors (Ogbu and Matute-Bianchi, 1986), the coupling of existing technology with innovative service delivery models offers a great deal of promise.

As one example, Cummins (1989) has reviewed various instructional models and projects that have been especially successful with bilingual students. In the Desubrinitento/Finding Out Program, students are assisted in the acquisition of math and science concepts (as well as in the development of language proficiency) through the active use of oral and written language within the context of small group cooperative activities and critical inquiry (DeAvila, Cohen, and Intilli, 1981). In the Pajaro Valley Family Literacy project, rural, poorly educated Spanish-speaking parents have been provided the opportunity to meet and have dialogue on a regular basis about children's literature and to read stories and poems written both by their children and, eventually themselves. The results of participation in this project have included not only increased literacy development on the part of the parents, but have also included turning parents into effective sources of literacy development and experiences for their children (Ada, 1988a, b). Finally, The 'Orillas' project is an example of an effective vehicle for the promotion of English and Spanish literacy through the sharing of elementary school children's writings in both languages across widely scattered geographical

regions such as Puerto Rico, Connecticut, San Diego, and Mexico (Sayers, 1986a, 1986b, 1988). In each case, there is evidence that these enriching educational environments have had positive benefits with Chicano students who are likely to experience school failure. Conversely, there is little in the literature to suggest that these types of enriching environments would be any less effective with most special education students who have already been placed.

As previously noted, the current system is dependent on the use of eligibility criteria and categorical labels for the distribution of resources. Given a reconfiguration of the system, how would resources be distributed in an equitable fashion? Specifically, one argument against the elimination of the burdensome eligibility and classification process as it currently exists is that it provides an orderly and systematic way of distributing financial and other resources, for example, the allocation of special education supplementary funds to local school districts based on the number of eligible students identified. This question entails major policy considerations, given that the distribution of educational resources across ethnic, social class, and gender lines has been a significant problem in the United States for some time. If the number of students formally certified as eligible for special education services were not used to distribute supplementary resources to school districts, what would replace it?

One possible alternative would be to eliminate the concept of eligibility in the formal sense as currently existing. In such a system, any time a student experienced difficulty in a given classroom, this would constitute a 'call for assistance' or need for service (Gerber and Semmel, 1984). This would entail reconceptualizing the concepts of low achievement and learning handicaps from within-child, stable characteristics to variable attributes that need to be evaluated with continuous monitoring of academic outcomes. For Chicano students, this would mean greater integration between bilingual and special education specialists, as opposed to the current situation where services in one specialty effectively remove the student from consideration for services in the other. One consequence of such changes, of course, would be the social changes which could be expected as a result of redefining or even eliminating the roles of the myriad of specialists who have developed around various disability categories, and the ways in which they interact with bilingual specialists. (For further discussion of the economic considerations associated with special education funding practices, refer to Hartmann, 1980, and Magnetti, 1982.)

At a more fundamental level, a major policy issue concerns the question of what should replace the predominant psychomedical model as a basis for educational policy and classroom practice. One answer might be found in current discussions about new paradigms upon which to reconceptualize special education. Several authors have argued for a paradigmatic shift (Mercer, 1988; Poplin, 1988a; Skrtic, 1988), suggesting that it has not been profitable to view diminished achievement from under a psychometric lens. These authors have criticized traditional approaches for, among other things, being reductionistic and obsessively focused on low achievement as primarily an individual failure. In special education, this has translated into a focus on quantifying discrete learner charac-

teristics through standardized test batteries, with particularly negative consequences for Chicano students (see Valencia and Aburto, this volume).

As an example of an alternative, Poplin (1988b), for instance, has presented the rudiments of a holistic/constructivist paradigm of teaching and learning that emphasizes learning as the construction of meaning in authentic activities. One likely benefit of such a model is that it is much better able to take into account cultural and linguistic diversity on the part of individual students, given the focus on the personalization of knowledge acquisition. In a similar vein, other theorists have begun to call for more comprehensive perspectives on learning and development (Tharp and Gallimore, 1988) and learning problems in particular (Coles, 1987). That is, given a biomedical handicap such as neurological dysfunction or individual differences in learning, how did these develop over time? What has been the impact of the 'ecocultural niche' in mediating these differences (for example, family interactional patterns, language characteristics, etc.)? How are the child's abilities mediated by institutional arrangements? In terms of a research agenda, little is known about how learning difficulties are created by or mediated by out-of-school factors, and how in-school and out-of-school experiences can be coordinated to provide the most effective learning environments.

Although there is current debate about the exact role of cultural and linguistic 'mismatch' in achievement (Jacob and Jordan, 1987), there is evidence that when culture and language are taken into account, achievement can be raised. Some of the research results with bilingual students that support this notion are noted in Merino's chapter (this volume) on effective instructional programs. Interestingly, these findings do not appear to be confined to Chicano students. By way of example, one successful model that accommodates cultural differences, although outside of special education, is the Hawaiian-based KEEP work on reading comprehension (Tharp and Gallimore, 1988) with Native Hawaiian students.² Using the notion of 'assisted performance', the focus on higher-order cognitive abilities is integrated with culturally sensitive instruction, and impressive gains in academic achievement have been demonstrated. In contrast, special education has been dominated by a paradigm that concentrates on within-child dysfunction to the exclusion of cultural and linguistic factors. In attempting to directly translate the findings of these studies for Chicano students, however, it must be cautioned that in the case of the KEEP program and the other studies mentioned, a great deal of time and effort was spent on out-of-school observations before classroom modifications of culturally relevant instruction were attempted. What is missing in the case of Chicano students are data on how teaching and learning are organized in everyday settings as the basis for designing culturally relevant programs, and how learning handicaps may or may not interact with teaching and learning in these same settings. Currently, virtually all that is known about cognitive development and functioning for mildly handicapped students, Hispanic or otherwise, is derived from laboratory tasks or standardized tests (Rueda, Ruiz, and Figueroa, 1989). A major research agenda, therefore, with respect to the school failure of Chicano students, would consist of attempting to examine teaching and learning activities in real world settings, linking in-school and out-of-school learning and knowledge in a closer fashion, and exploring the effectiveness of alternative theoretical and paradigmatic models in conceptualizing and designing interventions for learning handicaps.

Summary

In the preceding pages, it has been suggested that although the special education system has become one of the central institutional mechanisms for addressing school failure and low achievement, it is a system unresponsive to the needs of Chicano students. Further, in spite of the severity of the problems of school failure and lowered achievement levels for Chicano students, interactions with the special education system have largely been characterized by adversity and apprehension. Lastly, it was argued that the potential of the special education system for addressing this issue is hindered by continued reliance on a particular paradigmatic model. This model, which has its roots in the medical treatment of severe and often organic disabilities, continues to exert its influence in spite of the fact that the population served now consists of mainly children with mild learning problems without a medical basis, and increasingly children with diverse cultural and linguistic backgrounds. This prevailing model tends to view culture as a minor factor in learning, low achievement as strictly a child-centered phenomenon, and emphasizes the classificatory "of assessment of discrete individual abilities with only minimal applicability to meaningful classroom practice.

Although these factors have become problematic for all students served by the special education system, it has had particularly negative effects on Chicano students — sadly in the face of increasing school failure.

Although the research reviewed here suggests that there are problems with the current system, there are a number of research areas that could be fruitfully explored in addressing this problem. For example, although paradigmatic shifts such as those alluded to earlier appear promising, they do not have sufficient empirical backing to warrant wholesale adoption. What are the instructional implications of conceptualizing low achievement from a broader perspective — that is, to take into account out-of-school knowledge, present and past teaching and learning practices, and familial and cultural interactional features? How can alternative paradigms contribute to the development of more useful assessment practices? What are the effects, at the institutional level, of reconfiguring special education to coordinate with other facets of the educational system that deal with the diminished achievement and school failure of Chicano students? If categorical labeling were to be eliminated as a feature of the current system, how would funding resources be fairly and appropriately distributed, especially given the unequal distribution of academic success across ethnic, SES, and geographic boundaries?

It is clear that special education has not lived up to its potential to deal with low-level levels of Chicano academic achievement. In essence, current policy in this area is not aligned with available research. The system has operated as an isolated system, often negatively perceived, and only recently has it begun to deal with issues of language and cultural diversity. Because of dissatisfaction with the current system and in light of the students currently being served, there is increased movement toward reconceptualizing the guiding assumptions, structure, and even the function of special education. The eventual resolution of the policy questions raised as a result of these developments will play a significant part in the role that public schools play with respect to Chicano academic outcomes. Moreover, these developments have the potential to transform special education from a negatively perceived, stigmatizing, and reactive system to one

Notes

- 1 There is still a great deal of controversy regarding the role of neurological and other biological factors in mildly handicapping conditions. This is especially true in the case of learning disabilities. See Coles, (1987), for a review of the evidence and controversy related to neurological factors in learning disabilities.
- 2 An important part of this program has been the conceptualization of instruction and assessment as intricately linked. Consistent with recent developments in cognitive psychology, this work suggests that assessment should be 'on-line', or 'dynamic' (Palinscar and Brown, 1984), contrasting with the state of current practice, that tends to focus on quantification of discrete skills and abilities on static tests.

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