DOCUMENT RESUME

ED 246 635 EC 170 027

AUTHOR Rivera, Klaudia
TITLE State of the Art in Bilingual Special Education. Final Report, 9/3/81-9/2/82.
INSTITUTION Latino Inst., Reston, Va.
SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE Oct 82
GRANT G008100278
NOTE 117p.; The work was developed through the Research Division.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Bilingual Education; Delivery Systems; *Disabilities; Elementary Secondary Education; *Hispanic Americans; *Limited English Speaking; Student Evaluation; Student Placement; *Teacher Education; *Test Bias

ABSTRACT

This monograph presents a synthesis of information on the education of Hispanic handicapped children. The problem is set forth in Chapter 1 which also covers approaches used to obtain information on issues and trends in the field. Assessment issues are focused on in Chapter 2 which reviews basic assumptions underlying assessment as well as criticisms of testing practices, discusses criteria for non-biased assessment, and explores alternatives to standard testing procedures (such as culture fair tests). A chapter on language assessment addresses such topics as cognitive learning style, examiner characteristics, and teacher attitudes. Placement litigation touching on over- and under-representation of minorities in special education is reviewed in chapter 4 which also presents standards for placing limited English proficient students. Training issues and statements of teacher competencies are highlighted in the fifth chapter's discussion of personnel preparation. Issues in the delivery of services including the controversy over native vs. English-language instruction and linguistic considerations, are examined in chapter 6. A concluding chapter points out areas of information gaps (assessment, personnel preparation, delivery of services) and considers topics in need of research. (CL)

Acknowledgments

This report was written in partial fulfillment of a grant award (Grant No. G 008100276) from the Office of Special Education. It represents the only comprehensive review of the literature on special education as it relates to the bilingual child, more specifically, the Hispanic.

The report was principally written by Klaudia Rivera while she was an intern at the Latino Institute Research Division in Reston, Virginia, under the supervision of Abdin Noboa, the Director of Research.

The Institute extends special thanks to Blanca Facundo for many of the final revisions to the report. In addition, appreciation is given to Carol Frysinger, Darlene Glenn, and Mary Lou Lindquist for typing the manuscript, as well as to Kathryn Brue, who assisted with initial manuscript editing.

Abdin Noboa
Director, D.C. Office
Research Division

CFDA: 84.023H

TABLE OF CONTENTS

Chapter		Page
I	The Problem	1
	Definitions	2
	Methodology Used to Collect Information	3
II	Overview	5
	Views Regarding the Origin of Intelligence Test Construction	6
	Why Are Tests Created and Utilized?	8
	Psychometric Testing vs. Assessment	9
	Basic Assumptions Underlying Assessment	10
	Criticism of Testing Practices	11
	Legal Basis for Non-biased Assessment	12
	Criteria for Non-biased Assessment	17
	Alternatives to Traditional Testing Practices	24
III	Language Assessment	32
	Historical Perspectives on Linguistics	32
	Assessment of Communication in Bilingual Children: Factors to be Considered	33
	An Assessment Model Based on Language Function/Communicative Competence	36
	Examiner Characteristics and Teacher Attitudes	37
	Cognitive Learning Style	39
	Assessment Models	41
	Test Reviews Available	44

IV [illegible] 47

[illegible] 47

Litigation 47
Overrepresentation in Special Education 49
Underrepresentation 51
Inappropriate Placements 52
Labelling 55

Standards for the Placement of CLEP Children 56

V Personnel Preparation 60

Training Issues 62
Recruitment of Students 62
Connections among Regular Education, Bilingual Education and Special Education 62
Teacher Attitudes and Expectations 65
Identification of Instructional Materials 65

Recommended Competencies for Bilingual Special Education Personnel 66
Teachers 66
Psychologists 68
Parent Participation 68

VI Delivery of Services 70

Introduction 70
Issues in Delivery of Services 70

Native vs. English Language Instruction: A Review of the Literature 71

Bilingual Education Studies 74

Linguistic Considerations 75

Bilingual Special Education Model Programs 77

[illegible] [illegible]

[illegible] [illegible] and Research Recommendations [illegible]

[illegible]

Information Gaps [illegible]
Assessment [illegible]
Personnel Preparation [illegible]
Delivery of Services [illegible]

[illegible]
Assessment [illegible]
Placement [illegible]
Personnel Preparation [illegible]
Service Delivery 89

References 90

List of [illegible] 109

Figure

Figure 1 Cascade of Services 58

Table

Table 1 Number of Hispanic Handicapped Students in Four States with the Highest Number of Hispanic Students 60

INTRODUCTION

This monograph, State of the Art in Bilingual Special Education, is written for classroom teachers, teacher trainers, psychologists, parent organizers, administrators, [illegible] interested in the education of Hispanic handicapped children. The author has synthesized existing information on the education of Hispanic handicapped children in the hopes of presenting a comprehensive understanding of the issues involved.

The monograph consists of seven chapters. The first chapter offers a statement of the problem, definitions of bilingual education, special education, bilingual special education, and a brief description of the methodology used in preparing the monograph.

The second and third chapters review the general area of assessment. Topics include intelligence, testing practices, non-biased assessment, criteria for non-biased assessment, language assessment, cognitive learning styles, and assessment models. Brief descriptions of test reviews are provided. Because there is little literature in the area of assessment that addresses the specific needs of Hispanic handicapped students, much of what is included in this chapter relates to the assessment of minority handicapped (principally black) children and regular bilingual education. To the extent possible, the material was analyzed from the perspective of its applicability to the education of Hispanic handicapped students.

Chapter IV sets forth the issues involved in the placement of Hispanic children in special education programs. These issues include legislation, over- and under-representation of Hispanics in special education, inappropriate placements, and the unfortunate effects of labels. This chapter also provides a list of non-biased standards for placing children with limited English proficiency (LEP).

Chapter V presents the current state of affairs in the preparation of personnel in bilingual special education. Specific issues in the chapter include the need for such personnel, recruitment of students, the common concerns of regular education, bilingual education, and special education, and professional competencies recommended for such staffing.

In Chapter VI, the delivery of services to Hispanic handicapped students is discussed, including native vs. English language instruction and linguistic considerations. Model programs in bilingual special education are briefly described and summarized.

Chapter VII offers conclusions and summarizes findings. Highlighted in this [illegible] what there is a significant need for basic and applied research.

CHAPTER I

THE PROBLEM

The education of minority language and handicapped students represents a true challenge to educational systems throughout the country. Both minority language and handicapped students are currently the focus of educational and legal controversy. Litigation and visible advocacy groups have brought the needs of these children to the public eye, highlighting the failure of school systems to provide appropriate educational programs (Bergin, 1980).

The Education of All Handicapped Children Act (P. L. 94-142) requires that each state that receives funds under this Act guarantees a free, appropriate public education to all handicapped children. This law specifies that assessment instruments and procedures used in classifying and placing handicapped children must be selected and administered to avoid racial and cultural discrimination. This law includes the child's right to be evaluated in his or her native language (Sapir and Wilson, 1978). Furthermore, one of the important philosophical viewpoints contained in this legislation stresses that, to the maximum possible extent, handicapped individuals should be included in everyday activities. The law also specifies that parents receive all oral and written communication in their own language if such communication concerns the referral, evaluation, and placement of their children, as an important aspect of their involvement in the education of their children (Access, 1981).

The issues presented in P. L. 94-142 that relate to non-discriminatory assessment and placement practices have promoted extensive litigation on behalf of linguistic minorities at the state and local levels. Presently, California, Louisiana, Massachusetts, and New York City require that bilingual goals, programs, and services be included in the Individualized Education Programs (I.E.P.) of bilingual handicapped students (Baca, 1980b).

As a result of litigation in recent years, minority language handicapped students have been legally guaranteed equal access to education. Educational personnel and parents have come to the realization that special education and bilingual education

[illegible] to be equitable in the education of all handicapped children, as required by the Fourteenth Amendment to the Constitution of the United States, 1954).

A major challenge facing educators is to determine processes by which bilingual Spanish-speaking students can be provided an effective and "appropriate" education (Cordon, Peters, and [illegible], 1979). The extent of this challenge is evidenced by the thousands of Hispanic students currently participating in special education programs throughout the United States. In the four states with the highest numbers of Hispanic students, the number of Hispanic handicapped students has been [illegible] (15,402); and Illinois (3,[illegible]40).

In order to provide an appropriate educational program for this population, a critical need exists for adequately prepared personnel in areas such as bilingual teaching, assessment, speech and language development, psychology, and curriculum. At present, many school districts have staff with little, if any, formal training in either bilingual education or special education to work in these programs. Also, there is an immediate need for basic and applied research in areas such as assessment of handicapping conditions, first- and second-language acquisition, the assessment of bilingual handicapped students, personnel training models, and service delivery models.

Definitions

For the purposes of this monograph, special education, handicapped bilingual education, and bilingual special education are defined as follows:

1. **Special education** is defined as the "individualized application of techniques, procedures, instructional materials, and equipment, designed to accommodate to unusual forms or rates of cognitive, affective and motor status or development, to sensory deprivation, to lack of earlier schooling, to ineffective earlier instruction, or to any other personal or environmental conditions that stand in the way of a broad and thorough education" (Reynolds and Birch, 1977).

Handicapped children include those who are retarded, blind, partially sighted, deaf, hard of hearing, crippled, neurologically impaired, disturbed, speech and language impaired, learning disabled, developmentally troubled, and others, plus combinations of these (Reynolds and Peterson, 1977).

Bilingual education is defined as "the use of two languages, one of which is English, as mediums of instruction for the same pupil population in a well organized program. This encompasses all or part of the curriculum and includes the study of the history and culture associated with the mother tongue of the students. A complete program develops and maintains the children's self esteem and a legitimate pride in both cultures." (U.S. Office of Education, 1971).

4. **Bilingual Special Education** is defined as "those teaching strategies which allow for the development of personal identification, self-worth, and achievement of culturally and linguistically different exceptional children. Under this definition, each child would be provided an individual educational program utilizing the preferred language and/or mode of communication" (Access, 1981).

Methodology Used to Collect Information

The following procedures were used to gather information on current issues, trends, and practices in the education of Hispanic handicapped students.

1. A brochure was prepared describing the goals of this project and requesting assistance from researchers, practitioners, and local service agencies to share special reports, research papers, recent publications, or any other documentation that could be included in the monograph (see Appendix A).

2. This brochure was mailed to all persons who attended the national conference on The Bilingual Exceptional Child, sponsored by the Council for Exceptional Children in the Spring of 1981.

A computerized bibliographic search was conducted. The ERIC system at the libraries of the Council for Exceptional Children (CEC) and the National Clearinghouse for Bilingual education (NCBE) was used

Information about federally funded bilingual special education service-delivery model programs and personnel-preparation programs was supplied by the U.S. Department of Education's Office of Bilingual Education and Language Minority Affairs, and the Office of Special Education, Division of Personnel Preparation.

CHAPTER II

ASSESSMENT

Overview

Since the early 1920's, educational institutions have found standardized testing useful and convenient. In the United States alone, more than five million standardized tests were being administered annually by 1929 (Houts, 1975). At the present time, more than two hundred and fifty million standardized tests of academic ability and achievement are administered in the United States annually (Brim, Glass, Neulinger, Firestone, and Lerner, 1969). In recent years, public and professional attitudes toward tests have changed due to a greater awareness of the social consequences of the large-scale normative use of standardized tests (Bernal, 1977).

Interest in studying the testing of "foreigners" living in the United States and other countries began in the early 1920s. Condon, Peters, and Sueiro-Ross (1979) reviewed the literature concerning the testing of non-English speakers from 1920 through the 1970s. Their review included some of the following studies: Pintner and Keller (1922), Davenport (1932), Garth, Elson and Morton (1936), Mahakian (1939), Manuel and Hughes (1932), Carlson and Henderson (1950), Darcy (1946), Pasamanick (1951), Anastasi and Cruz (1953), Cohen (1969), Arnold and Wist (1970), Grotberg (1965), Kittell (1963), Peal and Lambert (1962), Arnold (1969), Bowd (1974), Lesser, Fifer and Clark (1965), Lesser and Stodolsky (1967), Laosa, Schwartz, and Diaz Guerrero (1974), Killian (1971), and Philippus (1967).

The evidence accumulated during this period reveals a danger inherent in the use of tests as well as other measurement tools administered to limited English-speaking children: The results tend to discriminate against such children (Condon, Peters, and Sueiro-Ross, 1979).

concerning the nature of intelligence tests and the mental abilities they actually measure. In 1954, Wechsler defined intelligence operationally "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment". In 1967, Guilford described the structure of the human intellect as consisting of four categories - cognition and memory, convergent thinking, divergent thinking, and evaluation. Even though many scholars tend to agree that intelligence is determined by the interactions between a person's innate ability and his or her experiences, controversy regarding the nature-nurture issue continues today (Samuda, 1975). Assumptions concerning intelligence and predetermined development existed prior to 1900 and through the second World War period (Hunt, 1961). According to Oakland (1977), these assumptions were used to justify the idea that intelligence was an innate dimension of the individual's capacity and that it increased at a fixed rate to a level predetermined at birth. On the other side of this issue, environmentalists refute the hereditarian's concept of a genetically determined intelligence and maintain that environmental deprivation factors can explain differences in intellectual performance (Samuda, 1975).

An article by Arthur Jensen, published in the Winter 1969 issue of the Harvard Educational Review, prompted much of the renewed interest in the nature vs. nurture controversy (Samuda, 1975; Oakland, 1977). In the article, "How much can we boost IQ and Scholastic Achievement?" (1969), Jensen discussed the effects of genetic and environmental factors on intelligence. His research suggested that IQ is determined more by genetic than environmental influences. Many professionals interpreted Jensen's argument to imply that observed differences in cognitive performance are largely genetic in origin and that very little could be done to reduce these differences through educational interactions. Furthermore, Jensen implied that the reported difference in average IQ between black and white children in the United States was probably due to a large genetic component.

This argument concerning the origins of intelligence has indirectly involved standardized tests, particularly the interpretation placed on scores obtained by

opportunities will be limited or even denied (Oakland, 1980). Most of the definitions of intelligence fail to recognize that what constitutes an act of intelligent behavior is inescapably linked to and determined by the values and standards of society (Samuda, 1975). As a culture-bound concept, intelligence is inseparable from any given setting or environmental milieu (Samuda, 1975).

Test Construction

Anastasi (1976) has defined a psychological test as an objective and standardized measure of a sample of behavior. A test that falls within the parameters of this definition must meet the criteria of objectivity. standardization, reliability, and validity (Oakland, 1980; Perrone, 1977; and Olmedo, 1977).

Objectivity is met if everyone takes the test under the same basic conditions. One format that supports the criteria of objectivity is the multiple-choice test, which is limited by a "right" answer pattern (Perrone, 1977). However, it is important to note that objectivity does not relate to the fairness nor the quality of the test.

A test is standardized if norms have been established for a large group of subjects representative of the individuals for whom the test was designed (Olmedo, 1977). In a standardized test, the score of an individual has meaning only within the context of the norm against which it is compared. Scores earned on a standardized test reflect the pupil's performance relative to the performance of those on whom the test was standardized (Duffy, et al., 1981). Therefore, if a test is not properly standardized for a particular student, such comparisons will be meaningless. In other words, examining the standardization sample of a test is a prerequisite for a nonbiased assessment of a student (Oakland, 1980).

The concept of reliability refers to the consistency of the scores obtained by the same student in the same or equivalent test (Olmedo, 1977). Some of the popular

[illegible] do not measure areas considered [illegible] to large numbers of people who either use or take the test. Salvia and Ysseldyke (1978) have stated that many of the norm-referenced tests used to make decisions about minority students lack necessary reliability. The results of such tests promote decisions based more on errors than on actual characteristics (Duffy et al., 1981).

In simple terms, validity refers to "the degree to which a test measures what it is supposed to measure and/or to the degree to which the scores derived from a particular test can be related to what the test is supposed to be measuring" (Perrone, 1977). Unlike reliability, the validity of a test is difficult to establish. Although there are various types of test validity, only content validity has been established for most standardized tests used in elementary and secondary schools. People who criticize tests as biased basically question the lack of content validity by claiming that the test content does not represent the socioeducational experiences of minority children (Perrone, 1977). If a test is likely to be biased against certain minority groups, or if its validity for minority groups has not been determined, it should be clearly stated in the test manual (Fishman, 1978b).

Why Are Tests Created And Utilized?

The use of standardized tests has served two important functions in public education. Historically, the primary function of tests has been the classification of children to determine their eligibility for placement in educational programs (BASE, 1982; Williams, 1972).

When tests are used primarily to classify students, critics have demonstrated how tests serve to dehumanize minority children, restrict their educational and vocational opportunities, and maintain prejudicial attitudes (Oakland, 1973). Intelligence tests were originally developed to identify children who would not benefit

from instruction in the regular classroom and who therefore should be placed in special schools (Binet and Simon, 1905). These tests historically have been used to exclude [illegible] from school programs. While these practices may have been beneficial to the

[illegible] and results of assessment. Unfortunately, assessment in order to acquire information has usually not been considered as important as assessment to classify and place children. Further discussion of this function follows in another section.

Other reasons that schools administer tests include: 1) to motivate student learning; 2) to individualize instruction; 3) to cooperate with test publishers in the norming of new tests and 4) to comply with the official requirements of state and federal agencies (Dyer, 1980).

Psychometric Testing vs. Assessment

Psychometric testing is basically an objective procedure that involves the administration and scoring of tests (Oakland, 1980). Assessment is defined as "a multifaceted process that considers many sources of data in developing recommendations" (BASE). Practices limited to psychometric testing usually focus on the need to categorize, label, and sort students, while assessment practices emphasize the continuous gathering of information to further the development and evaluation of educational programs for students. Assessment includes the interpretation of data derived from psychometric testing as well as other means of collecting information on a student. Assessment must include educational programming, decision making, and intervention. As Bernal (1977) has stated, "Testing is not equivalent to assessment, and assessment is not an end in itself."

It is extremely important that educational diagnosticians not limit their evaluations to standardized scores such as IQ percentiles, grade levels, etc. It is crucial that school psychologists' reports be individually meaningful, leading to specific recommendations for educational interventions. Alvarez (1977) has stated

that "the days of one-shot evaluations that end in a carefully composed Psychological Report are gone." Frequent observations are required during the assessment process, and these observations should occur in settings other than the examination room or the

[illegible] is more important than discovering new [illegible] with respect to group norms describing the child's functioning in terms of global, undifferentiated measures (Alvarez, 1977). Assessment involves the analysis of every aspect of the child's educational experience, not only for the purpose of knowing what and how s/he needs to learn, but frequently to change the school situation, be it the grade, the teacher, or the program (Strong, 1973).

Basic Assumptions Underlying Assessment

A fundamental principle underlying psychological testing is that in order for the scores to be valid, certain assumptions must be met (Dent, 1976). Some of these assumptions refer to the use of particular tests and how they are usually discussed in the test's manual. Newland (1973) discusses two basic assumptions that are particularly relevant to testing Hispanics and other minorities. The first assumption states that the examiner must be skilled and knowledgeable in administering and scoring tests, in analyzing the results, and in establishing and maintaining rapport with students (Oakland, 1977). The results obtained from a Spanish-speaking student are affected by a complex interaction among linguistic, cultural, and psychological factors. Olmedo (1977) has listed some of these factors as: a) ethnic background, sex, and testing style of the examiner; b) degree of acculturation of the examinee; c) whether the test is administered in English, Spanish, or both (and if so, in what order); and d) whether a bilingual interpreter is used in addition to a monolingual examiner.

The second assumption is that there is a commonality of experiences shared by all those who take the test (Dent, 1976). Stated differently, it is assumed that the child being tested has been exposed to comparable acculturation patterns relative to

the standardization sample. The acculturation patterns of many Hispanic children with respect to child-rearing practices, language, culture, and informal and formal learning experiences are not directly comparable to those of typical white, middle-class [illegible]. This second assumption fails to take into consideration that

Other assumptions taken for granted when testing Hispanic students include the following: a) all students taking the test have equal facility in the English language; and b) all students share the same value system. In other words, the first assumption implies that a child from an English-speaking home has the same level of English language proficiency as a child from a non-English speaking home. The second assumption does not recognize the fact that differences in socio-cultural background may influence the student and his or her family's values.

The assumptions discussed above must be carefully considered when assessing Hispanic children. A child's potential may be severely underestimated if based on scores from tests which have been standardized on culturally different populations or administered by improperly trained examiners.

Criticisms Of Testing Practices

The criticisms directed at the use of standardized tests have been derived in part from the basic logic of measurement of human abilities and in part from the social consequences of this type of measurement procedure (Oakland, 1977). The following enumerates some of the criticisms aimed at testing that have been discussed during the last decade:

1. Standardized tests are highly loaded with items based on white, Anglo-Saxon middle-class values and experiences (Samuda, 1976; Sabatino, Kelling and Hayden, 1973; Mercer and Lewis, 1978; Hickey, 1972).

2. Standardized tests are unfair to persons from cultural and socioeconomic minority backgrounds since they do not reflect their linguistic and

cognitive experiences (Oakland, 1977; Williams, 1970; DeAvila, 1976; Ramirez, et al., 1974).

3. Standardized tests sample cognitive styles that are directly opposed to those of most children from culturally diverse groups (Ramirez, et al., 1974).

5. Most standardized tests have not been validated or designed for use with Hispanics (Ramirez, et al., 1974).

6. Traditional tests often use language that is not understood by Hispanic children. Either the test's vocabulary is unfamiliar or in many instances, the young child does not understand nor speak English (Ramirez, et al., 1974). Furthermore, using an unfamiliar dialect of Spanish to test a Hispanic child is comparable to administering the test in a language that is totally foreign to him or her (Gonzalez, 1974). When such tests are used with language minority children, the scores obtained do not adequately indicate their learning abilities, but rather reflect their unfamiliarity with the dominant culture and the English language (Sabatino, Kenting, and Hayden, 1973).

7. The testing situation is often foreign and threatening to Hispanic students (Ramirez, et al., 1974).

8. Educational personnel tend to overrate the information provided by standardized test scores. There seems to be something seductive about the apparent objectivity and simplicity of a score derived from a paper and pencil test (Frechtling, 1982).

9. Tests are sometimes administered by incompetent persons who do not understand the culture and language of the student and are therefore unable to assess the child's underlying competence (Oakland, 1977).

10. Norm-referenced measures are not useful for educational purposes (Oakland, 1977; Sapir and Wilson, 1978).

11. Standardized tests are based on the premise that human beings have only innate and fixed abilities and characteristics (Oakland, 1977; DeAvila and Havassy, 1975).

Legal Basis for Non-biased Assessment

The legal basis for equal education for handicapped children came in part from the 1954, Brown v. Board of Education, Supreme Court decision:

> In these days it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms (Brown v. Board of Education, 1954, 347 U.S. 483, 74 S.CT. 686, 98 L.ED. 873)

Lawsuits and decisions that have dealt with the legal rights of handicapped children The legal principle is equal protection under the law, which originates from the Fourteenth Amendment of the United States Constitution. This requires that where the state has undertaken to provide a benefit such as public education to the people, the benefits must be provided to all the people in the absence of a compelling reason to do otherwise.

Against the background of Brown v. Board of Education, a federal district court in Washington, D.C., heard Hobsen v. Hansen (1967), the first case in which a court directly dealt with the testing controversy. The court undertook to determine if ability grouping or "tracking", a form of classificatory activity, has a rational basis. The court asserted that discrimination on the basis of ability could be defended only if judgments about ability were based on measures that assessed children's innate endowment or capacity to learn, not their present level of skills. The law has a special concern for victims with long histories of purposeful and malicious discrimination, as is the case of most racial minorities. The school system was asked to explain why black (and poor) children disproportionately populated the lower tracks of the educational system. The court statement, which was to have a profound effect on the use of educational and psychological tests to this day, reads as follows:

> The evidence shows that the method by which track assignments are made depends essentially on standardized aptitude tests which, although given on a system-wide basis, are completely inappropriate for use with a large segment of the student body. Because tests are standardized primarily on and are relevant to a white middle class group of students, they produce inaccurate and misleading test scores when given to lower class and Negro students....These students are in reality being classified on factors which have nothing to do with innate ability.

One of the most important of the post-Hobson cases is Larry P. v. Riles (1972). This case began in 1971 as a class action suit initiated on behalf of black children placed in classes for the educable mentally retarded (EMR), supposedly because their I.Q. scores were lower than 75 on state-approved intelligence tests, predominantly the [illegible] plaintiffs claimed they were not mentally retarded and [illegible] for placement of children in special education classrooms.

In the case of Diana v. Board of Education of California (1973), action was brought by nine Mexican-American children whose predominant language was Spanish. Following traditional testing procedures, these children had been placed in classes for the mentally retarded. The children were retested in Spanish and the majority scored within the "normal" range. Even though the case was settled out of court, it revealed the bias of test scores when children are examined in a non-dominant language (Gallegos, Garner, and Rodriguez, 1978).

During the period from 1971 to 1975, the U.S. Congress passed landmark legislation dealing with many of these same issues. Most significant to date was the passage of Public Law 94-142 in 1975, which required that the states, to remain eligible to receive federal financial aid for education programs for handicapped children, comply with a series of regulations. Earlier legislation (P.L. 93-380) had specified that any assessment device used for the purposes of classification and placement of handicapped children will be selected and administered so as not to be racially and culturally discriminatory. In November 1974, the Bureau for the Education of the Handicapped issued guidelines that interpreted the legislative intent (Sapir and Wilson, 1978). According to these guidelines, an evaluation must include the three following criteria and should be completed prior to classification and placement:

1. A comprehensive view of the child from the perspective of the school, house, and community, utilizing a full range of interviews, observations, tests, developmental scales, and physical screening to determine the child's abilities and adaptive behavior in each setting;

2. Culturally and linguistically appropriate measures (i.e., intelligence tests) administered and interpreted by persons qualified to take cultural differences into account in interpreting the meaning of multiple sets of data from both the house and the school; and

3. A local school district evaluation and placement team composed of all persons who directly or indirectly are involved in or influence the child's educational success, including the parents and their community [illegible] school psychologist, speech therapist, counselor, and nurse. In addition community related personnel, including social worker, minister, and family physician might also be appropriate.

Public Law 94-142 and its implementing regulations reaffirmed this mandate concerning nondiscriminatory assessment and specified the meaning of this requirement as follows:

> Procedures to assure that testing and evaluation materials utilized for the purposes of evaluation and placement of handicapped children will be selected and administered so as not to be racially or culturally discriminatory. Such materials or procedures shall be provided and administered in the child's native language or mode of communication, unless it clearly is not feasible to do so, and no single procedure shall be the sole criterion for determining an appropriate educational program for the child (Federal Register, August 23, 1977).

In addition to the evaluation safeguards discussed above, this law also requires state plans to include the following procedures to insure that handicapped children and their parents are guaranteed procedural safeguards in decisions regarding their evaluation:

> (Due Process Guarantees) - (i) prior notice to parents or guardians when a change in the child's placement is proposed; (ii) opportunity for parents or guardians to obtain an impartial due process hearing, examine all relevant records, and obtain an independent evaluation of the child; (iii) protection of the child's rights when his parents or guardians are not known, available, or he is a State ward; and (iv) provision to insure that the due process decisions in (ii) are binding on all parties (U.S. Congress, P.L. 93-380, Sec. 614, Part d.).

In order for school districts to comply with these federal regulations regarding nondiscriminatory assessment, it is of utmost importance that parents be informed of their children's pending evaluation, and they be allowed to review test findings. Providing parents with knowledge of their rights under the law, thereby focusing on

procedural guarantees, is one way of insuring that psychoeducational assessment will not have a discriminatory impact on minorities.

In New York City, recent litigation, such as Lora v. Board of Education of City of New York (1979) and Jose P. v. Board of Education of City of New York

[illegible] students claimed that their disproportionate referral [illegible] assignment to special day schools, which removed them from the mainstream of general education was discriminatory. Because of vague and subjective criterion for identification, evaluation, and placement, the plaintiffs charged that they were treated less favorably than white students who were more likely to be placed in classes for the emotionally handicapped rather than in separate schools. Part of the plaintiffs' complaint was that inadequate and improper evaluations led to these disparities (Oakland, 1980).

In the Jose P. v. Ambach court case, the judgments required the Board of Education to make many changes in its special education division, including the following:

1. To provide parents a copy of "Your Child's Rights to Special Education in New York City" upon referral of their child, and to provide these documents to Spanish-speaking parents in Spanish.

2. By January 9, 1980, to plan for temporary and permanent procedures for evaluating and placing students with limited English proficiency in their native language or mode of communication.

3. By February 1, 1980, to invite parents to attend each Committee on the Handicapped (COH) meeting held to discuss their child's needs.

One recent case battle that will continue to impact on non-biased assessment of minority children is Pase vs. Hannon (1978). In July, 1980, a federal district court judge decided that the Chicago Public Schools should be allowed to continue use standardized intelligence tests as a basis for making placement decisions concerning black children in special education classes for the mentally retarded. The judge reviewed the WISC-Revised, WISC, and Stanford Binet Intelligence Tests, item by item. In an 82-page opinion, he stated that he had found only a few items that he

believed would place black students at a disadvantage and concluded it is not the test itself that accounts for the large number of black students in classes for the mentally retarded. He agreed with the board of education position that I.Q. differences are caused by socio-economic factors that interfere with the development of intellectual skills. Since it is generally agreed that children in classes for the mentally retarded

Laws, court decisions, and supplementary guidelines have created a certain "anxiety" among professionals involved in meeting the needs of Hispanic handicapped children. According to Sapir and Wilson, "some professionals are concerned about fear of prosecution, loss of funds, or embarrassing scrutinizing; and others are concerned with avoiding misclassification of children" (1978). Fortunately, others are viewing in "these legal events the opportunity to re-evaluate the whole of special education" (Bernal, 1972). Federal legislation has provided the opportunity for parents and professionals to reassess the assessment process. Hopefully, the force of law will continue to support them as they struggle on behalf of the individuality of exceptional children, so that evaluation tools and procedures can become a useful, valid, and integral part of their education.

Criteria for Non-biased Assessment

This section will review criteria for non-biased assessment as presented in the literature. Even though many instances are found in the literature where testing of minority children is considered to be biased. only a few authors have provided actual guidance as to which standards or criteria determine whether an instrument or procedure is biased and how to eliminate any bias that may exist. Alternatives to standardized testing that have been proposed in the literature will be discussed in the next section.

A nondiscriminatory measure has been defined as "one which results in similar performance distribution across cultural groups" (Alley and Foster, 1978). While these groups may differ with respect to language/dialect, cultural experiences, values, and learning styles, in order for a test to be considered nondiscriminatory, it should result in distributions that are statistically equivalent across the groups tested. If the

[illegible] stated that bias in assessment can be eliminated only by developing culturally relevant tests designed to tap the experiences and abilities of the students who will be assessed. Along this same line of thought, Oakland (1980) believes that "the fundamental principle underlying a non-biased assessment program is that, if necessary, some attempts will be made to facilitate children's development".

Cleary, et al. (1975), stated that no objective measures have been developed to assess the intellectual abilities of bilingual children. Cleary and his colleagues believe that testing in both languages is an essential criteria for the non-biased assessment of bilingual children. Furthermore, test administrators should realize that either language score, standing alone, is clearly an underestimate of the bilingual child's current repertoire. Test instruments should assess the use of both languages in different contextual settings and take into consideration the child's dialect, socioeconomic, familial, and cultural background (Mowder, 1979).

When a test with an inappropriate standardized sample is used, assessment is also considered to be biased. Knowing the reliability, validity, and standardization sample of a test before using it is a prerequisite for a non-biased assessment (Oakland, 1980; Fishman, 1978).

Gliedman and Roth (1980) have presented a new approach that should be considered seriously when assessing handicapped minority students. They state that assessment procedures used at the present time measure the child's mental ability or social development according to norms established for able-bodied members of his or her social group. They strongly believe that there is currently a critical need to

develop tests that take into consideration the unique socialization experiences of handicapped children from a variety of cultural backgrounds. Those few tests that have been developed specifically for minority children have been designed for the able-bodied students. Black and Hispanic children with handicapping conditions are therefore judged by the same ethnic group norms as their able-bodied peers. In their book, The Unexpected Minority, Gliedman and Roth state that, whenever possible, handicapped children should be assessed by pluralistic norms that explicitly compare them to children with similar handicaps and similar socio-cultural backgrounds.

Sapir and Wilson (1978) discuss important developmental principles that should be considered when diagnosing a child. Among these principles, the following are of particular importance when conducting a non-biased comprehensive assessment of minority children:

- The child must be seen first as a person, not a patient.
- The child's functioning is never static; it is a circular dynamic flow in which change is constantly taking place.
- The child's cognitive and emotional development affects and is affected by the attitudes, frustrations, and disappointments of the important people in his or her life; the child's place in the family; the family members; communication with each other (verbal and nonverbal); and the ego strength of each family member.
- The child develops compensatory systems that help or hinder growth with different degrees of awareness.
- All children have some emotional strength and resiliency that permit them to function. Given support, they are able to function at a higher level.
- Any stress situation evokes extremes of behavior. Children will behave differently in the doctor's office, with parents, while playing with other children, and while doing skill work in school. The child's functioning and behavior will change dramatically with alterations of the environment.
- The examination should begin with pleasing, nonstressful activities; more difficult demands should be interspersed carefully.

Rivera (1981) has presented the following standards for non-biased assessment of limited English-speaking students:

1. When students from culturally or linguistically different backgrounds are assessed, a professional of the same background should be involved in the choice of the assessment procedures to be used and in the interpretation of the data collected. Determination of language dominance should be established through use of multiple tests and procedures, including language samples.

Rationale: Behavior that would be considered normal or typical by one ethnic or socioeconomic group may be considered abnormal or deviant by members of another ethnic or socioeconomic group. Individuals who are unfamiliar with these ethnically or economically related behavior patterns may misinterpret them and/or consider them inappropriate or seriously deviant. When the educational personnel who gather and interpret data on children do not come from the same ethnic group as the children whom they are assessing, this fact substantially increases the risk of bias and discrimination. Thus, precautions must be taken to reduce the chances that cultural, ethnic and economic factors influence the perceptions and interpretation of assessment data. One such precaution is to include professionals from the same ethnic background as the children being assessed - both when formulating assessment plans and when interpreting assessment data. Professionals charged with determining language dominance should have the special training and competence used for this complex task.

2. Parents should understand and approve the procedures to assess their child's adjustment in school.

Rationale: At the time parental permission is sought for assessment, assessment personnel should show parents samples of the instruments to be used, describe the procedures to them, and answer any questions they may have. If assessment personnel think it would be useful to use other assessment procedures than those initially approved, they should seek parental consent to the change in plan. Example: Parents who have approved an assessment of their child for language problems should be consulted again before the child is administered any other battery of psychometric tests.

3. Discussion of assessment procedures with parents should take place in their dominant language. Assessment personnel should be sensitive to misunderstandings that might result from cultural differences. If qualified assessment personnel are not available, and interpreters are used, the reasons for the failure to use qualified personnel should be noted and explained in the case record.

Rationale: Problems have arisen in communication between parents and assessment personnel as well as between assessment personnel and students. It is the responsibility of the schools to address these problems.

4. Assessment should be in the student's dominant language, and assessment personnel should have documented fluency in that language. When personnel lacking language competence are used, the efforts made to locate suitable personnel should be documented and an interpreter provided.

Rationale: The use of linguistically appropriate assessment instruments is not sufficient to establish that the procedure is non-discriminatory. Providing assessment personnel who can communicate with students in their dominant language is also the responsibility of school personnel.

5. Assessment personnel should be familiar with and sensitive to the cultural identification of students. These qualifications of assessment personnel should be documented in assessment reports.

Rationale: Cultural differences between assessment personnel and students can be a major barrier to communication. Again, the resolution of such problems is the responsibility of school personnel.

6. Assessment personnel will conduct structured observations of a student in multiple settings.

Rationale: By conducting structured observations in more than one setting, decision-makers will be better able to ascertain that the student has a serious life-adjustment problem that is not specific to a single set of circumstances. A basic assumption regarding the classification of persons who are seriously emotionally disturbed is that problem behavior occurs in multiple settings. Example: A student's problem behavior may occur only during a third period Math class with a particular instructor and group of peers. This becomes clear only when s/he is observed in other classes as well.

7. Assessment personnel will conduct multiple structured observations in at least the primary setting.

Rationale: Day to day variability of human behavior is a well-established fact. Any single sample of behavior obtained during a structured observation may fail to represent thoroughly the average frequency, duration, and intensity of an individual student's behavior in a school setting. Thus, multiple samples are needed if decision-makers are to have confidence that assessment data accurately portray the student's current functioning level.

8. Assessment personnel will collect at least two types of data (teacher ratings, direct observations, test scores, self reports).

Rationale: All data are potentially subject to problems of reliability and validity. For example, data obtained through direct observation may be colored by the perceptions of the observer. Teacher judgments (behavior rating scales or checklists) are clearly subjective in nature and thereby subject to individual bias. The potentially destructive influence of any single type or source of data is reduced by the existence of data of other types

or from other sources. Thus, as decision-makers have access to a variety of data about an individual student they are less likely to rely overly on any single data source that might include biased or discriminatory information.

The following standards are among those used in Massachusetts to evaluate Limited English Proficient (LEP) handicapped students (Landurand, 1978):

1. Each evaluation TEAM for a limited English speaking child includes at least one person fluent in the child's primary language.

2. For a limited English speaking child, assessments of language dominance and proficiency are completed prior to any other testing.

3. All persons conducting health and family history assessments are fluent in the parents' primary language and if such personnel is not available, efforts to locate fluent persons are documented and an interpreter is provided.

4. The tests selected for a cultural/linguistic minority child are appropriate and assessors are fluent in the primary language of student.

5. Each Individualized Education Plan (IEP) for the limited English speaking child shows dominant language of child and primary language of home on the front page.

6. The personnel selected by a Special Education Administrator to deliver services to the limited English speaking children are fluent in child's dominant language.

7. All efforts to contact a parent are in the parent's primary language.

8. The IEP and parent letter are in the primary language of the home or they are explained by an interpreter familiar with procedures.

9. The annual review for a limited English speaking child must include a reassessment of language proficiency.

The following standards for evaluation are presented as a checklist in the nondiscriminatory assessment guide developed by the San Diego Department of Education in California (Watson, et al., 1980):

1. Are all purposes of the test clearly defined and stated?

2. Does the manual outline possible limitations or misuses of the test?

3. What is the most recent revision of the test?

4. Are the standardization populations, including the following, adequately defined and delineated?

   a. Number of subjects,
   b. Sex of subjects,
   c. Ethnicity of subjects,
   d. Age or grade of subjects,
   e. Region of the country where the subjects were obtained,
   f. Socioeconomic status of subjects, and
   g. Specification of special conditions, such as handicaps.

5. Are standardization groups for test development, reliability, and validity clearly differentiated from each other and adequately described, as in #4?

6. Is the child being tested represented by the standardization groups in terms of background, culture, etc.?

7. Are theoretical constructs and their relevance to behaviors measured by the test clearly explained?

8. Are the time of administration and method of administration appropriate to the child's:

   a. Development level,
   b. Cultural background,
   c. Dominant language, and
   d. Special limitations, i.e., handicaps, etc.?

9. Is there reliability data reflecting:

   a. Test-retest reliability,
   b. Alternate form reliability, and/or
   c. Split-half or internal consistency?

10. Is the reliability correlation coefficient of sufficient strength to establish consistency, i.e., + .80 or higher?

11. Does the manual provide standard errors of measurement for:

   a. Each subtest and total score,
   b. Each age/grade level,
   c. Both sexes,
   d. Each ethnic group, and
   e. Any other subpopulation?

12. Does the test manual provide validity data for:

   a. Each intended use of the test,
   b. Each subpopulation in the standardization group,
   c. Face validity,
   d. Criterion validity, including predictive and concurrent, and
   e. Construct validity?

Are test content appropriate for:

a. All subpopulations,
b. Developmental levels of children on whom test will be used,
c. Language skills of children on whom test will be used, and
d. Cultural values of children on whom test will be used?

Alternatives To Traditional Testing Practices

In this section, the various alternatives to standardized testing procedures that have emerged during the past several years will be presented and critiqued. This new trend in assessment practices may be explained by a combination of interrelated factors: 1) The variability in cultural and linguistic patterns of this society are increasingly recognized and accepted; 2) New views of educational practices are evolving; and 3) Litigation, legislation, and actions by professional organizations have provided pressure that have required responses (Oakland, 1977).

The following alternatives represent new trends that are particularly relevant to bilingual children:

1. Culture Fair Tests: These tests de-emphasize factors of speed, item content, and stress on verbal content, since these factors are believed to mitigate against the performance of minority group children. A test is judged to be culture-fair if it meets the following conditions: a) The mean scores and standard deviations for all racial, ethnic, and social-class groups within one country are the same; b) The standardization sample includes persons from various racial, ethnic, and social class groups; c) The items are presented primarily as non-verbal tasks; and d) It does not involve strict time limits (Oakland, 1980).

In culture-fair tests, directions are given orally, in simple and clear fashion, and materials consist of pictures, drawings, and diagrams. All the items selected represent knowledge, skills, and experiences that are equally common to all groups (Samuda, 1975; Sabatino, Kelling, and Hayden, 1973). Among the culture-fair tests reviewed by Samuda (1975) are the following: 1) The Cattell Culture-Free Intelligence Test; 2) The Davis-Eells Games; 3) Ravens Progressive Matrices; 4) Leiter

[illegible] Performance Scale, Goodenough Draw-A-Man Test, and d) Pulon's Semantic Test of Intelligence.

At the present time, culture-fair tests have proved disappointing, since minority children have been shown to perform, if not more poorly, at least just as badly as they do on traditional standardized measures (Samuda, 1975). Various writers agree that this type of test is extremely difficult to construct (DeAvila and Havassy, 1974; Samuda, 1975; Mercer, 1973). According to Padilla and Garza (1975), "culture free" tests are not a plausible alternative because there is no such thing as culture free learning. Learning occurs in environmental contexts.

2. Establishment of Regional and Ethnic Norms: According to Bernal (1977), establishing regional and ethnic norms is a malpractice that consists of awarding bonus points to scores of Hispanic students to compensate for their "deprived background." He believes this is basically a way of making low scores among ethnic minorities more palpable, since it does not increase the test's validity. Usually, ethnic norms do not take into consideration the complex reasons why minority children score lower than middle-class Anglos. DeAvila (1973) believes such norms are potentially dangerous, since practitioners tend to claim that lower scores are indicative of lower potential.

3. Culture-Specific Tests: These are tests developed for a specific racial or ethnic group having a common, identifiable cultural background. An example of a culture-specific test is the Black Intelligence Test of Cultural Homogeneity (BITCH) for adolescents and adults. This is a vocabulary test consisting of 100 multiple-choice items obtained from black culture and is biased in favor of black people (Williams, 1972). Williams developed this measure to emphasize the need to revalidate conventional tests to responses of black persons on "white-oriented tests" (Alley and Foster, 1978). The Enchilada Test (Ortiz and Ball 1972) is another example of a culture-specific test. It consists of 31 multiple-choice items that are based exclusively on the experiences common to a child growing up in a Mexican American barrio.

Culture-specific tests have demonstrated low predictive validity and have been rejected by the dominant cultural group (Duffy, et al., 1981). Duffy states that it is

difficult to develop culture specific tests, since no single test can satisfactorily assess the heterogeneous groups of children found in any cultural or ethnic group.

4. Pluralistic Assessment Procedures: This approach has been supported and developed primarily by Jane Mercer and her associates at Riverside, California. It calls for a "pluralistic socio-cultural" perspective on the testing of minorities by taking into account the individual's socio-cultural characteristics when evaluating scores on standardized tests (Oakland, 1977; Samuda, 1975). This approach requires that a culturally aware pluralistic interpretation would thus evaluate the intelligence of each person only in relation to others who have come from similar socio-cultural backgrounds, and who have had approximately the same opportunity to acquire the knowledge and skills to answer questions on an intelligence test designed for an Anglo-American society (Mercer, 1971).

This perspective implies that norms must be developed for each distinct sociocultural group within the ethnic group to which the individual belongs. In the case of Hispanics, separate norms would have to be developed for Mexican Americans, Puerto Ricans, Cubans, Columbians, etc.

Mercer and Kewis, (1978) developed the System of Multicultural Pluralistic Assessment(SOMPA). This instrument utilizes the WISC-R as a cognitive measure and norms have been developed in relation to students with similar cultural backgrounds, thereby offering the opportunity to compare a child's overall cognitive performance against similarly matched peers (BASE, 1982). Separate regression equations are used to compute the estimated learning potential of children from black, Anglo, and Chicano groups.

Twomey, et al, (1980) have stated that the SOMPA represents a well-developed alternative to traditional testing and is not as widely used as it should be. On the other hand, Duffy, et al. (1981), believe that a procedure such as the SOMPA fails to account for the extremely heterogeneous nature of any one cultural or ethnic group. Alley (1976) believes a limitation of such an approach is that it solidifies the status quo of minority children. To use one of Mercer's own examples, a Mexican American child

scoring an IQ of 75 is interpreted as normal performance relative to the sociocultural group of which he or she is a member (Mercer, 1979). It may be implied that since children from that particular group would always perform poorly, no attempt should be made to determine the child's areas of strength or to search for defects in the test (Alley and Foster, 1978). Furthermore, "this procedure does not consider the language structure of the items or the learning styles of the minority children" (Garcia, 1976).

5. Linguistic Translation of Existing Tests: The translations of existing intelligence tests for use with non-English speaking children represent another response to the criticisms of testing practices with minority groups (Oakland, 1977). In most cases, this practice has not included subsequent modification and validation of the test (Bernal, 1977). The procedure entailed in translating literally the Stanford-Binet, [illegible]ren, Peabody Picture Vocabulary Test, etc., into Spanish appears to be a simple and efficient method of equating the language difference of majority group children with minority group children (Alley and Foster, 1978). It is specifically stated in P.L. 94-142 that this procedure meets one of the requirements of nondiscriminatory testing. However, various writers have affirmed that language differences can not be equated by this procedure when one takes into consideration the complex language, idioms, collequialisms, words with multiple meaning, and words with similar but not identical meaning that characterize all languages (Alley and Foster, 1978; Sabatino, Kelling and Hayden, 1973; Garcia, 1976; Samuda, 1975).

In addition to the linguistic factors discussed above, test translations fail to equate for the differing cultural information, learning styles, and value systems unless the test items are changed to reflect these factors (Alley and Foster, 1978; Samuda, 1975). The available evidence indicates that test translations have not been successful because of differences between the Spanish spoken at home and the Spanish used in tests (Samuda, 1975; Bernal, 1977).

In the process of translation, the meaning of test items is often changed. In those instances where meaning is retained, a test item may not preserve its original level of difficulty when translated into another language, thereby destroying the order of item difficulty (Sabatino, Kelling and Hayden, 1973; Bernal, 1977). In addition, in

many referenced norms for the Spanish version are not established, and test users are left to assume that the English norms are applicable (Bernal, 1977). The predictive validity of a translated test to measure success in a monocultural school system is very low (Duffey et al., 1981).

Laosa (1977) believes that more than translation and superficial adaptation is necessary before a test can be considered appropriately equivalent. According to DeAvila and Havassy (1974), the following summarizes some of the problems of test translations: 1) Regional linguistic differences make it difficult to use a single translation; 2) Since a bilingual child's language may be a combination of two languages, simple monolingual translations are inappropriate; and 3) Many bilingual children do not read in their dominant, spoken language. For a more complete discussion of the pitfalls of test translations, refer to Samuda (1975) and Bernal (1977).

6. Criterion-Referenced Measures: As opposed to a norm-reference measure, which compares one child's performance to that of others on the same measure, criterion-referenced measures are those that are used to ascertain an individual's status with respect to an established criterion or standard of performance. This approach "interprets achievement by describing in behavioral terms the student's performance regarding a particular instructional objective without reference to the level of performance of other members of the groups" (Oakland, 1977). The goal of these tests is to obtain measures of achievement that can be expressed on the basis of student performance on already specified educational tasks.

The use of criterion-referenced testing has been considered a potentially appropriate alternative to traditional testing practices for use with bilingual children (Laosa, 1973; Martinez, 1972). The SABER-Espanol (Cornejo, 1974) represents one attempt to develop a criterion-referenced system designed to provide a comprehensive assessment of Spanish reading.

Although, generally speaking, criterion-referenced evaluations have received significant support (Drew, 1973; Samuda, 1975), the method is not free from problems. A development of a good criterion-referenced test requires that the following

questions are addressed: 1) Who determines the objectives? 2) Who sets the behavioral criterion levels? 3) What constitutes a sufficient sample of criterion levels? 4) Do the test scores obtained describe an individual's response pattern? (Bohen, 1973; Oakland, 1977; Laosa, 1976; Drew, 1973).

7. The Piagetian Alternative: In contrast to the psychometric approach, the Piagetian theoretical proposes that intelligence must be studied through the examination of intra-individual, rather than inter-individual, approaches (DeAvila and Havassy, 1974). Research results seem to indicate a similarity in the cognitive development of children from diverse cultural backgrounds when it is determined by performance on Piagetian tasks. In another study by DeAvila and Havassy (1975), the researchers did not find differences in level of cognitive developmental performance between Anglo and Mexican American children. DeAvila and Havassy concluded, "Mexican-American children develop cognitively the same as, and at basically the same rate as, Anglo-American children."

The following are among the results of research on the neo-piagetian approach to testing conducted by DeAvila and Havassy (1974): 1) Performance of Mexican American children is developmentally appropriate; 2) Scores of children taking the test in English, Spanish, or bilingually are not significantly different; 3) No ethnic differences were found on the neo-piagetian measures of cognitive development; and 4) No meaningful differences were found between the sexes.

8. Matching the Background of the Examiner and Student: Garcia and Zimmerman (1972) conducted a study to determine the relationship between the ethnic and language background of the examiner and the performance of bilingual children. They found that children performed significantly better when the examiner was of the same ethnic and linguistic background. Mowder (1979) has stated that, even though the relationship between the examiner's background and the performance of the child being assessed is unclear, it is evident that bilingual examiners are necessary to determine bilingual children's language usage. Bilingual examiners are also necessary to accurately determine handicapping conditions in children of limited English proficiency.

Alley and Foster (1978) believe that even though many Anglo teachers associated with minority group children neither understand nor communicate well with them, the solution of providing a minority group examiner when assessing a minority child is simplistic. They state three conditions that have been overlooked by advocates of this procedure. In the first place, attitudes of one person toward another may reflect social class differences to a greater extent than racial or ethnic differences. Wagner [illegible] cites three reasons why minority group examiners should not be used when assessing minority group children:

> Many of today's scholars and teachers came from culturally deprived backgrounds. Many of these same individuals, however, when confronted with students whose present social and economic predicament is not unlike their own tend to escape the painful memory of their own prior lower status.

A second reason refers to some practitioners' attitudes as characterized in the following statement:

> "I came from a neighborhood like this, and I pulled myself up without all the help which has been provided to you; you can pull yourself up too;" and (then they) drive away to their suburban houses.

The third reason is that representing the same cultural group as the student is not enough to assure nondiscriminatory testing. A minority child is not able to display his or her strengths on conventional tests, regardless of the examiner's ethnic background. Only by providing the minority examiner with alternative measures that can tap the child's potential can nondiscriminatory results be obtained.

9. Psychological Factors Affecting Student Performance: It is generally agreed that teachers' attitudes are directly effected by children's characteristics. Children who are considered bright, linguistically motivated, compliant, and academically motivated tend to be preferred and favored by educators (Oakland, 1980). In the previous section, it was noted that teachers perceive students who speak in nonstandard English less favorably than students who speak standard English. Laosa (1978) writes:

[illegible] Mexican American students possess a disproportionately high share of other characteristics associated with less favorable treatment in the classroom; the Mexican American student is less likely to experience the quality of interaction and opportunity in the classroom that is experienced by students who are either Anglo or high achieving or of higher socio-economic status or who speak standard English."

Negative perceptions of teachers towards Hispanic students are significantly increased when they face children with either what is perceived as or, in reality, is a [illegible] the handicapped minority child faces the following conflicts:

1. Inconsistency in environments - Chan and Rueda (1979) have indicated that a conflict arises when the school requires a learning style which is not consistent with the learning styles required in the home and community.

   Development of a positive self-concept - Garwood (1979) suggested that the minority child may be hampered by feelings of inadequacy and depressed self-concept resulting from marked differences between his customary social environment and that of the school.

3. Considerations on specific handicapping conditions - When "normal" bilingual children are placed in classes for the mildly handicapped based on biased assessment measures, the child is faced with the added conflict of being not only linguistically and culturally different but different in "other" ways looked upon as negative by teachers and peers. Those bilingual children with real physical, cognitive, sensory and/or emotional problems need to develop and relate in two languages and cultures while they deal with their handicapping condition.

When a child believes that he or she is being evaluated to determine his or her deficits, it is natural that such a threat will limit the student's responses to those s/he feels truly confident about (Herbert, 1979). In terms of language, this means that bilingual children may hesitate to use idiomatic or nonstandard forms of both languages, seeking to give those forms and structures that s/he believes are acceptable in school. This limitation will have an obvious impact on the child's performance and his or her learning abilities and true learning potential may not be accurately demonstrated.

CHAPTER III

LANGUAGE ASSESSMENT

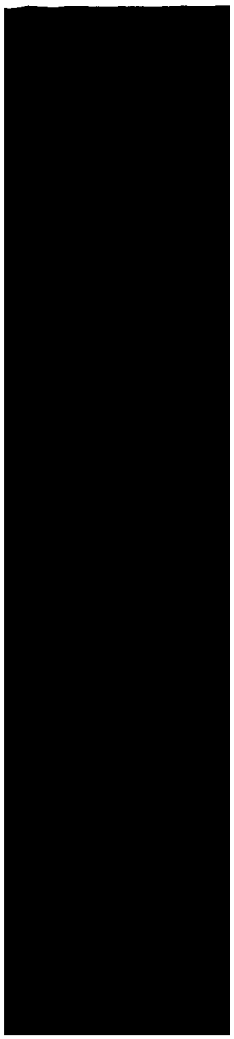
Historical Perspectives on Linguistics

The literature on language development and assessment has increased significantly during the past ten years. This section discusses the language assessment of bilingual children within the framework of current psycholinguistic and sociolinguistic theory as presented by Erickson and Omark (1981) in Communication Assessment of the Bilingual Bicultural Child: Issues and Guidelines.

During the 1950s, structural linguistics became prominent (Day, 1981). The structural view of language, based on the behaviorist school of psychology, states that what a person hears or speaks represents language ability. First and second language acquisition develops as a result of habit formation. Furthermore, language was seen as a series of district structural units (e.g., phonemes, monophonemes), and mastery of the language was seen as equivalent to mastery of each of these separate units (Day, 1981). There was very little concern with the process of language acquisition and its effect upon language ability (Erickson and Omark, 1981).

A reinterpretation of the nature of language was proposed by Chomsky's (1965) cognitive orientation. His transformational-generative point of view suggested that each individual possesses a basic competence for language that underlies the generative nature of language performance. The psycholinguistic interpretation proposed by Chomsky was extended by others into discussions such as the cognitive view of linguistic structures, the existence of language universals, and the idea that each one of us is born with a language acquisition device that predisposes us to language learning (Bloom, 1970; Slobin, 1971; Brown, 1973).

During the past decade, researchers have become increasingly concerned with the sociological orientation for first and second language learning. The importance of the social setting interactors and topic of discussion has been studied by Cazden (1970; 1972a; 1972b). A focus on minority dialects and bilingualism has been studied by



Assessment of Communication in Bilingual Children: Factors to be Considered

One of the most important needs for a diagnostician working with bilingual children is to identify a test, method, or procedure to determine which children are in need of bilingual services (Woodford, 1977). Traditionally, this has consisted of the use of commercially developed tests of language dominance and language proficiency. The following is one of many definitions provided for language dominance:

> "...language dominance is defined as the higher of two proficiency scores in English and Spanish. Dominance in a given language, however, does not necessarily mean proficiency in that language, since a child with a genuine language handicap may not meet criterion performance for proficiency" (Bernal, 1977).

From the point of view of Lau v. Nichols (1974), the only defensible reason for testing is to determine which children do or do not have the requisite skills to allow them to participate in the mainstream monolingual classroom (DeAvila and Duncan, 1978). Given this legal precedent, many have interpreted this by simply determining a child's "dominant" language. DeAvila and Duncan (1978) believe that language dominance testing may satisfy legal requirements but that it tells nothing concerning the educational needs of an individual child. In reference to LEP handicapped students, Bernal (1977) has noted that "for eligibility for special education, language dominance is not the issue; proficiency is. Thus tests which do not explicitly measure proficiency should not be used."

According to Burt, Dulay, and Hernandez (1976), the parameters that comprise language dominance are the following: lexicon, structural proficiency, chronological control, fluency, and communicative skills. Dominance in one of the parameters does not imply dominance in the others. That is to say, a child may be dominant in one aspect of the first language and dominant in a different aspect of the second language. Therefore, for a measure of language dominance to be considered appropriate, it would have to take all these factors into consideration, as well as determining the bilingual

Bernal (1977) criticizes language dominance tests because of their failure to adequately sample the receptive and productive domains of language. He further affirms that these measures do not cover a sufficiently broad range of syntactic structures and rely too heavily on vocabulary-related skills. Furthermore, language dominance tests do not use validated criteria nor standard scores for their operational definition of language dominance, but instead, determine language dominance on the basis of raw scores. Bernal (1977) believes that assessment of language dominance made without an examination of language proficiency has supported two beliefs that have desensitized teachers to the individual needs of children. The first belief is that children can not be proficient in th[illegible]guage in which they are not dominant; the second, that children must be competent in their dominant language. Bernal further states that some bilingual children with true language dysfunctions lack linguistic competence in their dominant language.

Another factor that must be discussed when considering language dominance and proficiency is that all Spanish-speaking bilinguals do not form a homogeneous group. Laosa (1975) notes that there are several distinct Spanish-American groups in the United States (Mexican-American, Cuban-Americans, and Puerto Ricans), each with different cultural, linguistic, and socio-economic characteristics. He found, for example, that Cubans and Puerto Ricans generally use their parents' language pattern in the familial context, but that Mexican-American children tend to use a mixture, even if their parents use Spanish at home.

There is a general agreement that the assessment of bilingualism is a very complex and difficult task and that the present state of language assessment of bilingual children is a very sad one (Bernal, 1977; Mowder, 1979; Twomey, et al., 1980; Shuy, 1977; Pedraza and Pousada, 1980).

For the past several years, many linguists have agreed that it is not possible to determine language dominance through the use of a standardized testing procedure. In

> Bilingual education programs repeatedly have to assess the language skills of their students, both for placement purposes and for evaluating individual and program success. Most attempts to examine children's language repertoires depend on data from one context alone - either standardized tests of language dominance or check of home language use.
>
> However, children are subject to competing influences from home, community, and school; and in order to accurately assess their linguistic performances and/or capabilities, it is vital to consider the entire scope of their language experiences in and out of school. Tests determine only a very restricted type of language ability (and that only if the child is able to get over his fear of the test situation and respond more or less naturally). Home language surveys are answered by parents who are asked to determine their children's language proficiency. Most are exceedingly brief and go no further than ascertaining the language most frequently used or the language preferred in the home.

Pedraza and Pousada believe that what is needed is an interdisciplinary approach to language assessment with a strong ethnographic base. It is difficult to establish an objective standard by which to measure ability when more than one variety of each language exists in the same community. Speakers may also vary in their abilities at different levels of linguistic competence, e.g., oral language, reading, writing, etc.

Shuy (1977) believes that measuring functional language use provides a more realistic alternative to dominance testing for the classroom situation. He states that "Functional language competence is the underlying knowledge that allows people to use their language to make utterances to others in terms of their goals. It includes a knowledge of what kinds of goals language can accomplish (the functions of language) and of what are permissible utterances to accomplish each function (language strategies)."

McCollum (1981) points out that, unlike grammatical and phonological competence, functional language use is not restricted to a certain developmental period. Children learn strategies such as attention-getting and interrupting at a young age. Presently, there is a lack of commercial tests that measure first-language

levels" (Shuy, 197...

Even though such tests are only in the developmental stage, they promise to be of more value than traditional language dominance tests in providing teachers an estimation of a child's language development level and how effectively the child communicates and accomplishes goals in a second language (McCollum, 1981).

Until such instruments are available, there are several techniques teachers may use in obtaining the information needed to enhance the perception of a child's language capabilities. Pedraza and Pousada (1980) have outlined the following strategies, which may be used until such tests become available: (1) Teachers may check the validity of a child's language assessment by listening to the child interact with his peers in a variety of settings, particularly those settings which are not teacher controlled, e.g., lunchroom or playground; (2) Teachers may get a sense of the child's home language environment by talking to parents, visiting the home, and seeing the child interact with his or her family. If home visits are not possible, the teacher may observe the child with his or her parents at dismissal time; and (3) Teachers should listen to the children's code-switching in and out of the classroom. Both the amount and type of switching can be indicators of the dominance of the child and the level of development of each of his or her languages.

An Assessment Model Based on Language Function/Communicative Competence

Today, only discrete point language tests are being used in most second language and bilingual programs. Despite current linguistic theory and federal legislation that have pressured school districts into developing instruments that determine a child's ability to function in a second language, the great majority of the test instruments currently in use are essentially discrete point in nature (Day, 1981). These tests arose out of the thinking of structural linguistics prominent in the 1950's as discussed above. Particularly in the field of English-as-a-second-language, assessment approaches are

(1981). According

(1981). Some examples of those types of tests include the Test o
Comprehension of Language (Carrow, 1973), the Del Rio Language Scree
(Toronto, et al., 1975), and the James Language Dominance Test (James, 1975), which have Spanish and English versions for testing a child's lexical and syntactic ability.

The discrete point approach to testing has been widely criticized. DeAvila and Duncan (1978) are in agreement that vocabulary tests are inappropriate when evaluating the cognitive development of limited English-speaking children. In one of their studies, an analysis was made of forty-six currently available language assessment instruments. They found that forty-three of the forty-six tests claimed to measure various levels of lexical ability, defined as "the ability to respond to isolated words."

It is generally agreed that there is a critical need for new methods of assessing language competence that more closely reflect contemporary linguistic research and theory. Erickson (1981) has developed a language assessment model that "samples communication in a natural setting and obtains supportive information from integrative testing and interviews, including probes into specific functions and forms of language use." The model focuses on the assessment of language function or communicative competence. This approach reflects the nature of the communication process and evaluates the major use of language, "that of a verbal/social communicative interaction in a natural setting" (Erickson, 1981).

Examiner Characteristics and Teacher Attitudes

Whether the ethnic and linguistic background of the examiner make a difference in children's test performance is a question often asked in the bilingual special education field. DeAvila and Pulos (1976) and Oakland (1977) have noted that the assessment process involves a complex social interaction between three potentially distinct cultures as reflected by the examiner, examinee, and the test itself. The rapport that

[illegible] maintained, and the examiner's expectations of and attitudes toward

[illegible]

processes and who have a deep respect for children will seek to use tests in ways that will enable them to obtain the full promise that America holds out for them (Fishman, 1978).

Research examining the relationship between the examiner's race and test performance of minority children is inconclusive. As previously stated, Garcia and Zimmerman (1972) investigated this relationship and found that Mexican-American children performed significantly better when the examiner was of the same ethnic background and spoke the same language they did. Mowder (1979) states that, even though the relationship between examiner's ethnicity and student performance is unclear at this time, it is clear that bilingual examiners are necessary in order to determine bilingual children's communicative competence.

Ramirez and Gonzalez (1972) have argued that Chicano children perform better on tests if the examiner reflects behaviors similar to those found in field-sensitive teachers. Field-sensitive persons tend to be holistic, inductive thinkers and sensitive to environment. On the other hand, many research studies reveal no general tendency for minority children to score higher or lower when tested by an Anglo or a group examiner of the same ethnic background (Pryswansky, 1974).

On the issue of teacher expectations and attitudes, DeAvila and Havassy (1975) believe that teacher attitudes toward students are as important in non-biased assessment as are the tests. Oakland (1980) has written that an individual's behavior tends to move toward the expectations of others. A child who is expected to fail on a test is very likely to underperform. Low expectations from examiners and teachers tend to exacerbate other problems and decrease the validity of test data.

Some of the problems that teachers and students experience with one another may result from differential role expectations (Henderson, 1980). This is particularly true in the case of families from subcultural groups that do not completely share the

[illegible] forms [illegible] govern school practices, including testing. Mercer (1971)

Results of at least three studies (Choy and Dodd, 1976; Ramirez, Arce-Torrez, and Politzer, 1976; Williams, Whitehead, and Miller, 1972) suggest that teachers perceive students who speak nonstandard English less favorably than students who speak a standard version of the English language. Lower expectations and negative attitudes on the part of teachers and examiners lead to the biased labeling of bilingual children. Gillend and Rucker (1977) found that labels carry a negative connotation that results in lower teacher expectations for both regular and special education teachers. In their study, teachers perceived a child described with a label as having more severe academic or behavioral problems and requiring more intensive special services than the same child described without a label.

In reference to bilingual handicapped students, the examiner must be bilingual in the same language to accurately differentiate language deficits from language differences and to identify the child's educational needs. However, even if the examiner is bilingual, problems may still occur. "The examiner's dominant language may not be the same as that of the child being assessed, or even if the dominant languages are the same, the dialect, regional, and cultural background may differ" (Mowder, 1979). Ideally, the diagnosticians will be thoroughly familiar with the dialect and cultural background of the children they assess. However, as Sabatino, Kelling, and Hayden (1973) have noted, there is a critical lack of diagnosticians and special educators with fluency in a second language. The status quo of test administration with bilingual children is often defended because of personnel shortage. These writers strongly urge institutions of higher education to address this problem by offering training programs that will develop bilingual psychologists and other personnel.

Cognitive Learning Style

In the past ten years, researchers have been interested in studying the concept of cognitive style from a cross-cultural perspective (Ramirez and Castaneda, 1974).

Social scientists argue that, as a result of different socialization experiences, children [illegible] (Henderson, 1980). It has been suggested that, in an

The two cognitive learning styles that have been isolated through extensive research are field-independent and field-sensitive. In general terms, the field-independent person perceives and responds to events and objects in his or her environment independent of the total field. This style is oriented toward an analytic approach to information processing that emphasizes the individual facts of a whole one. The field-sensitive style is characterized by an integrative approach to information processing. Field-sensitive individuals organize their world in terms of wholes or totalities and are generally sensitive to the overall context (such as social atmosphere) of objects or events (Ramirez, 1973).

Ramirez (1973) asserts that the relative failure of Mexican-American children is a product of their field-sensitive cognitive style and the bias of Anglo-American schools toward achievement via a field-independent cognitive style. On the other hand, a study conducted by Sanders and Scholz (1976) examined the hypothesis that field-dependent Mexican-American children tend to make better academic progress when matched with teachers with the same cognitive style, and found that field-dependent children matched with field-independent teachers gained more than those with field-dependent teachers.

Ramirez and Castaneda (1974) have observed that the more bilingual and bicultural a child is, the greater his or her bicognitive abilities. When compared to monolinguals, bilinguals have a greater ability to switch between a field-sensitive and a field-independent approach. Furthermore, bicognitive children are able to combine elements of both cognitive styles to develop new coping and problem-solving strategies. Findings by Bain (1974, 1975) support the notion that bilingual/bicultural children have more cognitive flexibility.

techniques, and procedures, as well as a definition of what is considered normal and abnormal. The most commonly used assessment models include (a) the Medical Model, (b) the Psychoeducational Process Model, (c) the Task Analysis Model, (d) the Pluralistic Model, and (e) the Clinical-Diagnostic Teaching Model. A brief description of each follows.

a. The Medical Model: This model defines abnormality as biological pathology that is evidenced by the presence of biological symptoms (Oakland, 1977). According to Oakland, this model, appropriately used, does not discriminate racially and culturally except in cases where poverty and socio-economic deprivation are associatd with poverty-related organic pathology.

b. The Psychoeducational Model: This may be better known as the "deficit" model. It views abnormality as the presence of process or ability deficits that interfere with the acquisition of academic skills (Oakland, 1977). The basic assumption of this model is that "academic problems are caused by deficits or disabilities within the child." As Oakland (1977) has stated, "a corollary of this assumption is that children's academic difficulties are not the result of inadequate teaching or inadequate educational experiences." This model emphasizes the child's weaknesses and limitations, rather than helping the child become cognizant of his or her strengths and coping abilities (Gliedman and Roth, 1980). It is a completely culture-bound model, since educational failure is defined in terms of failure to acquire those specific skills that reflect the values and goals of the schools (Oakland, 1977). This model is based on scores derived from norm-referenced measures such as the WISC-R, Stanford-Binet, Bender Visual Motor Gestalt Test, ITPA, PPUT, and The Purdue Perceptual-Motor Survey.

The Psychoeducational Model is generally used in special education programs. It is better known as the diagnostic-prescriptive model. According to Sapir (1980), evaluation in this model "assumes the child is either correct or incorrect with the

focus on the outcome (product), not on the differing ways a child may have used to arrive at a specific outcome (process)." Examples of this model include programs such as [illegible] evaluation and then prescribes activities that form the basis of a treatment plan. Mann and Sabatino (1973) have indicated that the diagnostic-prescriptive methodology, which develops educational programs based on the strengths and weaknesses of the child's performance on particular tests, has little validity. Sapir (1980) considers this model a limited informational system, since it does not consider the way children develop schemata, assimilate, and accommodate new learnings to their schematic system.

c. The Task Analysis Model: In this model, a child's behaviors are evaluated in terms of an apparent ability or inability to perform certain tasks. Within this model, each child is treated individually rather than in reference to other children. Therefore, it involves no formal definition of normal or abnormal behaviors (Oakland, 1977).

The main assumption of the Task Analysis Model is that there are skilled hierarchies and that the development of complex skills is dependent upon the acquisition of lower level enabling behaviors (Oakland, 1980). Unfortunately, this model is culture bound because the specific skills that are considered important are determined by the school, which reflects the goals and values of the culture (Oakland, 1977). This model uses criterion-referenced measures and behavioral observation techniques. Each child's score is used to evaluate skill development and is not compared with the scores of others (Oakland, 1980).

Sapir (1980) believes that the principal problem with the Task Analysis Model is that the assessment is short-ranged, since it pays more attention to product than to process. He further notes that task analysis has value only when it increases understanding of the processes used by a child. Understanding the process will enable the teacher to plan long-range strategies to assist the student's learning process.

d. The Pluralistic Model: This model attempts to discover talent and potential masked by discriminatory measures. The Pluralistic Model assumes that all

[illegible] with a particular cultural heritage. Oakland (1980) has summarized three possible approaches within this model. One approach is the culture-specific test, which measures the child on the basis of his or her particular cultural experiences and is standardized on a well-defined and usually major sample. The Black Intelligence Test for Children (BITCH Test) developed by Williams (1972) is an example of this approach. A second approach attempts to determine a child's ability to learn. Using a pre-test, teach, and post-test procedure, the amount of gain a child shows between the two tests is used as an index of his or her potential (Oakland, 1980).

Mercer and Kewis (1978) propose an example of the third approach to the Pluralistic Model, which uses multiple test norms for children from various socio-cultural, socio-economic, racial-ethnic, and geographic groups. In this model, racial-ethnic bias is eliminated by specifying a norm group of which a child is a member and comparing his or her score only to children within the same norm group (Oakland, 1980). Gliedman and Roth (1980) indicate that Mercer's pluralistic approach provides certain advantages for the assessment of handicapped children. Whenever possible, handicapped children should be assessed by pluralistic norms that explicitly compare them to children with similar handicaps and similar socio-cultural backgrounds.

e. The Clinical Diagnostic Teaching Model: In the area of assessment, the Diagnostic Teaching Model assumes that instructional decisions make little sense when they are divorced from clinical diagnosis. What is needed is the coordination of treatment and diagnostic processes. This approach is predicated on the principle that diagnosis proceeds from observing the child's attempts to solve tasks; being able to analyze the tasks in terms of what processes are involved; and discovering together those parts of the task with which the child can be successful as well as those parts that are causing problems. The goal is a precise match between the cognitive style of the learner and the cognitive demand of the task (Sapir, 1980).

In addition to the above, the following principles are also basic to the Clinical Diagnostic Teaching Model: (1) The teacher works with the child's strengths, providing [illegible] development of more abstract [illegible] perceptual-motor abstract [illegible] to help himself or herself progress more successfully through the developmental stage. This model implies a linking of treatment and diagnosis, so that the continually emerging patterns of the child's development lead to the refinement of diagnosis and revision of teaching strategies.

Test Reviews Available

Tests and various collections and reviews of psychoeducational and language tests used with Hispanic children have been prepared either by specific school districts, state education agencies, or professional organizations. The following are reviews that have been identified during the preparation of this monograph.

1. The American Speech, Language and Hearing Association prepared a Resource Guide to Multicultural Tests and Materials (Cole and Snope, 1981). This guide was prepared to assist the diagnostician in locating tests and materials for use with minority language groups. A total of thirty-five tests for Spanish speakers were included. This guide specifies whether the test measures articulation, receptive language, syntax and morphology, language dominance, reading, and/or other abilities such as cognitive development. Copies of this guide may be obtained by writing to the Office of Minority Concerns, ASHA, 10801 Rockville Pike, Rockville, MD 20852.

2. The Bilingual-Bicultural Assistance to Special Education Project, supported by a grant from the San Diego County Department of Education (Kare, 1981), reviews sixteen tests utilized with bilingual handicapped students. This review includes only two tests that have been translated into Spanish, neither of which provide information on its validity, reliability, or standardization. The review includes The Bohem Test of Basic Concepts and The Illinois Test of Psycholinguistic Abilities. It offers

information on test purpose, age/grade level, target population, time of administration, test description, and technical information, including validity,

[illegible] the selection of appropriate tests for assessing ethnic minorities (Watson, Crowell, Heller, and Omar 1980). Approximately 500 tests are reviewed concerning the following areas: a) academic and school readiness; b) adaptive behavior, development, and social competence; c) communication and language skills (includes tests for language dominance and native language proficiency); d) intellectual and cognitive abilities; e) learning approach, learning style, focus of control, and social/cultural skills; f) perceptual skills; g) personality, emotional disturbance, and self-concept; h) psychomotor skills and neurological impairment; and 9) vocational and occupational interest and aptitude. Data are provided about each test's reliability, validity, administration times and mode, standardization groups, and apparent best usage.

4. The School Board of Broward County, Florida, reviewed the assessment instruments used in their county with limited English speakers. In the area of language, the tests reviewed include the following: a) Language Assessment Scales; b) Bilingual Syntax Measure; c) Woodcock Language Proficiency Battery; d) Test For Auditory Comprehension of Language, and e) Expressive One-Word Picture Vocabulary Test. Tests used to evaluate intellectual functioning include the System of Multicultural Pluralistic Assessment (SOMPA) and the Cartoon Conservation Scales, Levels I and II. Technical information is provided only on the measures of intellectual development.

5. The Dade County Public Schools, Florida, developed a procedures manual as one of the products of its project entitled, "Evaluating the Non-English Speaking Handicapped." The manual reviews eight intelligence tests that are available in Spanish or are of the non-verbal type. Information provided on each test includes validity, reliability, standardization, age/grade level, and time required.

6. The Bilingual Multicultural Special Education Project of The Massachusetts Department of Education (1980), reviews psychoeducational and language tests used in the [illegible]

[illegible] produced a book entitled, Special Education and The Hispanic Child: Cultural Perspectives (Cordon, Peters, and Sueiro-Ross, 1979). In this document, the tests that are reviewed and described are those that have been used with some measure of success to diagnose exceptionalities in Spanish-speaking children. These tests are: The Hickey-Nebraska Test of Learning Aptitude; The Bender Visual Motor Gestalt Test; Raven's Progressive Matrices; Benton Revised Visual Retention Test; The Goodenough-Harris Draw-a-Person Test; The Developmental Test of Visual-Motor Integration; and The Illinois Test of Psycholinguistic Abilities. This review includes a discussion of research studies conducted on the appropriateness of each of these tests for diagnosis of handicapping conditions in Hispanic children. Towers (1981) discusses the procedures followed for the non-biased assessment of limited English proficiency students in the public schools of Montgomery County, Maryland.

CHAPTER IV
PLACEMENT

Introduction

During the past decade, the field of special education has made considerable progress in the development of more effective methods of identification, referral, and placement of all exceptional children (Milofsky, 1977). However, there is a critical need to adapt these improvements to the needs of Hispanic students. Among limited English-speaking children, there are still large numbers whose impairments remain unnoticed or are improperly diagnosed by school personnel. Although the literature on this subject is extremely limited, recently, there has been renewed interest, increased research, and the development of model programs in bilingual special education.

This chapter discusses litigation related to the placement of Hispanic students, issues involved in the placement of children in special classes, and standards for the non-biased placement of limited English-speaking children in special education.

Litigation

Discriminatory practices in the classification and placement of Hispanic children have resulted in a number of court cases brought against schools by parents and community groups. However, litigation has not focused exclusively on the assessment practices for placing minority children in classes for the educable mentally retarded, emotionally disturbed, and other mild handicapping conditions. The following discussion focuses on the issue of placement as dealt with in some of the cases presented in Chapter I as well as additional relevant cases.

In Arreola v. Board of Education, Orange County, California (1968), the court action secured parents' participation in the decision to place Hispanic students in educable mentally retarded classes. An injunction was granted to prohibit the continuation of the special classes unless a hearing was provided before placement.

In Diana v. California State Board of Education (1970), an out-of-court settlement called for a revision of placement procedures to include testing in the home language (Bergin, 1980). In Covarrubias v. San Diego School District (1970), the court established the right of parents to be provided information in their "house language" regarding the nature of the educational program under consideration. This decree intended to allow parents to give informed consent about the placement of their child in a special education program (Gallegos, Garner, and Rodriguez, 1978).

With respect to the emotionally handicapped, Lora v. New York City Board of Education (1978) considered disproportionate placement or overrepresentation of black and Hispanic students in Special Day Schools for the Socially Maladjusted and Emotionally Disturbed. This led to an investigation of the board's assessment and placement policies that resulted in a decision against the Board of Education. A lack of adequate facilities in the public schools led to restrictive programs in racially and segregated schools (Baca, 198). The District Court held that, on constitutional grounds, and according to P.L. 9 and Section 504 of the Rehabilitation Act, the special day schools were because plaintiffs suffered discriminatory treatment in the referral, evaluation process procedures.

In Jose P. v. New York City Board of Education (1979), the plaintiffs, representing physically handicapped children of Hispanic heritage, claimed that board policies resulted in exclusionary practices leading to underrepresentation in public school programs. The court ruled that the defendant had failed to evaluate and place minority group children in a timely manner. The board was directed to provide school-building level assessment for all pupils with suspected handicaps with testing to be conducted in the child's native language.

A complaint in United Cerebral Palsy v. New York City Board of Education (1979), raised a series of issues involving the failure of New York City's Board of Education to provide appropriate services to children who have disabilities resulting from brain injury or other impairment of the central nervous system (Baca, 1980). Dyrcia S. v. Board of Education was filed on October 2, 1979, on behalf of Puerto Rican and other Hispanic students with handicapping conditions residing in New York

City. Subsequently, on February 24, 1980, a consolidated judgment was issued in the United Cerebral Palsy and Dyrcia S. cases that incorporated all the provisions of the Jose P. order. This judgment has affected virtually every aspect of special education in New York City (Baca, 1980). The aspect that related specifically to placement states:

> Appropriate Programs in the Least Restrictive Environment - One provision of a continuance of services including preventive services, resource room programs in all regular schools, and sufficient programs for all handicapped children and low incidence disabilities as close to their houses as possible, and the provision of appropriate bilingual programs at each level of the continuance for children with limited English speaking proficiency.

According to Baca, while the matter of bilingual special education has not yet reached the nation's courts, indicators are that additional litigation based on the Jose P case can be expected (1980).

Issues in the Placement of Hispanic Children

The following issues have been identified in the literature concerning the placement of Hispanic children in appropriate educational programs.

Overrepresentation in Special Education

A primary concern has been the overrepresentation of minority group children in self-contained special classes, particularly those for the mentally retarded. In an intensive, eight-year study conducted in Riverside, California, Mercer (1973) reported that the rate of placement of Mexican-American children in special classes was four times greater than would be expected on the basis of their numbers in the population at large. It was found that Spanish surname students, while representing 15.2% of the public school population, constituted 23% of those in special classes for the mentally retarded. On the other hand, Anglos constituted 72.4% of the total school population, but only 50% were in classes for the mentally retarded.

In 1968, Dunn wrote a classic paper that brought together issues related to the absence of demonstrable benefits associated with self contained special classes as well as the issue of overrepresentation of minority children in such classes. Dunn wrote as follows:

> A better education than special class placement is needed for ... culturally deprived children with mild learning problems who have been labeled educable mentally retarded....The number of special day classes for the retarded has been increasing by leaps and bounds. The most recent 1967-68 statistics compiled by the U.S. Office of Education now indicate that there are approximately 32,000 teachers of the retarded employed by local school systems - over one-third of all special educators in the nation. In my best judgement about 60-80 percent of the pupils taught by these teachers are from low status backgrounds - including Afro-American, American Indian, Mexican, and Puerto Rican American; those from nonstandard English speaking, broken, disorganized and inadequate homes; and children from other non-middle class environment. This expensive proliferation of self contained special schools and classes raises serious educational and civil rights issues which must be squarely faced. It is my thesis that we must stop labeling these deprived children as mentally retarded. Furthermore, we must stop segregating them by placing them into our allegedly special programs.

According to Gliedman and Roth (1980), there is evidence that racial discrimination sometimes marches under the flag of special education. For example, the incidence of handicaps that stem from a physical or genetic cause is approximately the same among all ethnic groups. However, minority children are greatly overrepresented in such handicapping conditions as mild retardation and mild emotional disturbance, when no clear physical or genetic cause can be attributed (Gliedman and Roth, 1980).

Bernal (1977) also believes that the problems of misclassification and inappropriate placement are most acute with the cognitively and emotionally "mildly handicapped" groups. In many instances, cultural, linguistic, and cognitive style differences are considered to be learning deficits (Mercer, 1974).

Franks (1971) studied eleven of the twelve Missouri school districts that received state aid for educable mentally retarded (EMR) and learning disabled (LD) children. The study found that, whereas about one-third of all children in EMR classes were black, only about three percent of all children in LD classes were black. Furthermore, white children accounted for about two-thirds of all students in EMR classes and about 97% of all students in LD classes.

A study conducted by Ortega (1971) revealed that special education placement in California does not follow expectations according to the curve of normal probability. Ortega found a disproportionate number of Mexican American children in EMR classes.

As a response to these discriminatory practices, on May 25, 1970, I. Stanley Pottinger, Director of the Office of Civil Rights, issued a memorandum stating that "school districts must not assign national origin, minority students to EMR classes solely on the basis of criteria which essentially measures skills in the English language" (Oakland, 1980).

Underrepresentation

As a result of litigation against disproportionate placement of Hispanic students in classes for the mildly handicapped, today we find increased numbers of handicapped LEP students in regular bilingual classrooms. Bergin (1980) has stated that "in an almost complete turnaround from the days in which discriminatory overrepresentation of minority language youngsters in special education was the issue, there emerged a concern that minority language youngsters who also needed special education were not being appropriately screened or placed."

Contrary to the literature, Hispanics are underrepresented in all categories of handicapping conditions with the exception of learning disabilities (Ortiz and Yates, 1981). In 1978, a leading advocacy group in Boston, "Massachusetts Advocacy," published a study entitled, "Double Jeopardy." This study referred to fifteen towns in Massachusetts in which there was a denial of appropriate special education services to linguistic and racial minority students. The study concluded that, in Massachusetts, minority students are both over- and under-represented in special education. Students

of limited English proficiency were found to be underrepresented. On the other hand, other minorities with some degree of English proficiency were over-represented in special education classes and particularly in the more restrictive programs.

Another study, conducted by the United States General Accounting Office (1981), revealed that there is yet a substantial number of children in regular classrooms (the majority served) who need special education but who are not referred to special education. The study also indicates that handicapped migrant students are definitely an underserved population.

An explanation for the decline in the incidence of mildly handicapped Hispanics may be the fact that schools are becoming reluctant to classify minority children as handicapped for fear that they will not be able to defend the assessment procedures they use (Bergin, 1980; Ortiz and Yates, 1981). Another reason that has been cited is the lack of bilingual special education teachers (Bergin, 1980).

Given the legal mandates for bilingual programs and the lack of bilingual special education services available, the bilingual classroom has often been regarded as the "best" placement available. Therefore, regular bilingual classrooms have become an alternative to special education placement (Ortiz and Yates, 1981). Presently, the state of the art offers minority language handicapped students two equally inappropriate choices: placement in an overcrowded bilingual classroom, or placement in a monolingual special education program (Bergin, 1980).

Inappropriate Placements

Hill (1975) has indicated that 15% more Hispanics than Anglo or black students were referred to special education based upon academic difficulties versus physical problems. She also noted that there appears to exist a high correlation between facility in English and academic performance, as demonstrated by the high (78%) number of students referred for linguistic problems.

In a research document entitled, "Testing and Teaching Communicatively Handicapped Children: The State of the Art in 1980," Dulay, Burt, and McKeon (1980), reported that 73% of the professionals surveyed thought there may be Hispanic children who are being inappropriately placed into programs for the severely language and speech impaired. Along the same lines, in New York City, over 60% of the 1200 children placed in monolingual classes for the severely language impaired are of Hispanic background. In these cases, the Spanish-speaking child with a true language disorder is additionally handicapped by being "submerged" in an all-English classroom (Ortiz, 1979).

The Hill study (1975) also discovered that many Spanish-speaking children unable to function in a regular monolingual classroom were placed in special education classes simply because there were no other programs available in the schools to meet their special needs.

In May, 1978, the Delegate Assembly of the Council for Exceptional Children approved a Minority Position Policy Statement (CEC, 1978). The concerns expressed that are relevant to this topic are: (1) Minority children are being improperly assessed and inappropriately placed in lower ability groups or special education programs; and (2) Educational services provided to handicapped minority children often do not take into consideration the cultural differences that may accompany the handicaps.

Gliedman and Roth (1980) have also affirmed that, even when minority handicapped children are properly classified, they tend to be assigned to educational programs that are not designed to meet their individual needs. For example, a learning disabled child might be classified as mentally retarded and placed in a class for slow learners from which he or she will never escape. They further note that, "in many instances, the only consistent criterion for acceptance, classification and placement of children in particular classes was administrative convenience."

Ortiz and Yates (1981) have indicated that one of the reasons many Hispanic students are inappropriately classified is the lack of adequate procedures to identify handicapping conditions or to determine when linguistic and cultural factors are

interacting with academic failures. They also state that the concept of "least restrictive environment" is not considered seriously when dealing with LEP students. Children are often placed in bilingual education programs on a full-time basis with the expectation that bilingual teachers will be able to best deal with their problems. In the case of truly handicapped LEP students, a bilingual teacher does not adequately meet their special education needs, thereby constituting an inappropriate placement. Although placement in a bilingual education program will most probably meet the language and cultural needs of the child, bilingual teachers do not usually have the training needed to deal with handicapped children (Rodriguez, et al., 1979).

A major issue related to the inappropriate diagnosis and placement of Hispanic children is that of declassification. Even though the goal of the special education program should be to declassify the child and return him or her to either the monolingual or bilingual regular classroom as soon as possible, it is generally agreed that once a child is placed in a special education class, the chances of escaping are minimal (Ortiz and Yates, 1981; Salinas, 1971).

Parents' involvement is crucial in the process of classification and declassification of children with special needs. Even though P.L. 94-142 requires parental consent before a child is placed in a special education program, that requirement is frequently ignored (Gliedman and Roth, 1980). Usually, parents are informed that a type of placement is the only option available and are threatened with various types of sanctions should they reject it. In situations where school personnel speak only English and parents speak little or no English, misunderstandings and intimidation become even more common (Gliedman and Roth, 1980).

Even though P.L. 94-142 stipulates that the school must make every effort to inform limited English proficient parents about prospective educational decisions in their own language, it does not provide for free translation services during hearings, or for translations of school records (Gliedman and Roth, 1980).

Hispanic parents who fail to exercise their right to challenge an original diagnosis and placement are at a great disadvantage should they decide to subsequently challenge the school's decision:

> Serious questions are raised by the possibility that some school systems will formally or informally establish administrative procedures that provide for speedy review of challenges to initial classification and program placement and much slower review of attempts to have the child re-classified or placed in different programs (Friedman and Roth, 1980).

Research has found that only about one child in ten has been declassified from the categories of emotionally disturbed, mildly retarded, or perceptually handicapped, and has returned to the regular classroom (Kirp, Buss, and Kuriloff, 1974).

Labeling

Of critical concern among minority professionals is their belief that many special education labels are stigmatizing, negatively affect children's self-concepts, and doubly penalize minority group children, who already are discriminated against by virtue of their racial or ethnic identity (Jones, 1976).

Gliedman and Roth (1980) believe that, since children labeled EMR or emotionally disturbed perform just as well in regular as in special classes, the result of the labeling of minority children is to subject them to the potential stigma associated with a handicapping condition and to perpetuate traditional patterns of racial segregation in a new guise.

Special educators are caught in a dilemma. On one hand, they want to guard against biased labeling of children; on the other hand, they are aware that funds will not be allocated for use with handicapped children unless the equitable expenditure of funds for a specified population is assured (Duffy, et al., 1981).

In 1976, a task force of educators in New Jersey concluded that P.L. 94-142, instead of eliminating biased assessment, actually promoted it through its system of allocating federal monies to schools based upon the number of children classified as handicapped (Johnson, Peters, and Suerto Ross, 1979).

According to Duffy, categories such as "mental retardation," "emotional disturbance," "learning disabilities," and "language impairment" create problems because these are based on social norms for ill-defined symptoms that appear as much because of normal cultural and linguistic diversity as because of a handicapping condition. It is impossible to tell the difference between the two (Duffy, et al., 1981).

Hobbs (1975) summarizes the dilemma facing the special education field in the report of the Project on Classification of Exceptional Children:

> Children who are categorized and labeled as different may be permanently stigmatized, rejected by adults and other children, and excluded from opportunities essential for their full and healthy development. Yet categorization is necessary to open doors to opportunity: To get help for a child, to write legislation, to appropriate funds, to design service programs, to evaluate outcomes, to conduct research, even to communicate about the problems of the exceptional child.

Reynolds believes that, with present technology and expertise, it is possible to develop educational programs that provide for the needs of all children without categorizing any of them beyond their ability to perform various skills (Reynolds, 1980).

Standards for the Placement of LEP Children

As Tucker (1980) noted, school personnel must utilize all the available data from all the relevant sources possible before making a decision that would place the child in a learning environment other than the regular classroom. Tucker states that "Knowledge gained from the assessment of language proficiency will help guide subsequent educational decision-making and, if necessary, placement, thereby assuring that the students rights have been respected."

[illegible] students alternative educational programming for children with special needs. (1) The greater the severity of the handicaps, the greater the possibility that the students will be considered to be ineligible for regular programs. Such children with mild to moderate handicaps are most likely to be found in bilingual education classrooms on a partial or a full time basis, and (2) The goal of the program should always be to declassify the child and return him or her to a regular education program (Ortiz and Yates, 1981).

When a LEP student has been judged eligible for special education services, the decision can be made according to the model, "Cascade of Services," provided by Reynolds (1962). See Figure 1.

The following standards, cited in the literature, are intended to reduce bias in placement decisions concerning LEP children in need of special education services.

1. Placement records should be examined for biases. If a disproportionate number of students placed in special education programs appear to come from certain cultural, ethnic, or sex groups, placement procedures should be examined for biases and changed if biases are discovered (Alley and Foster, 1978).

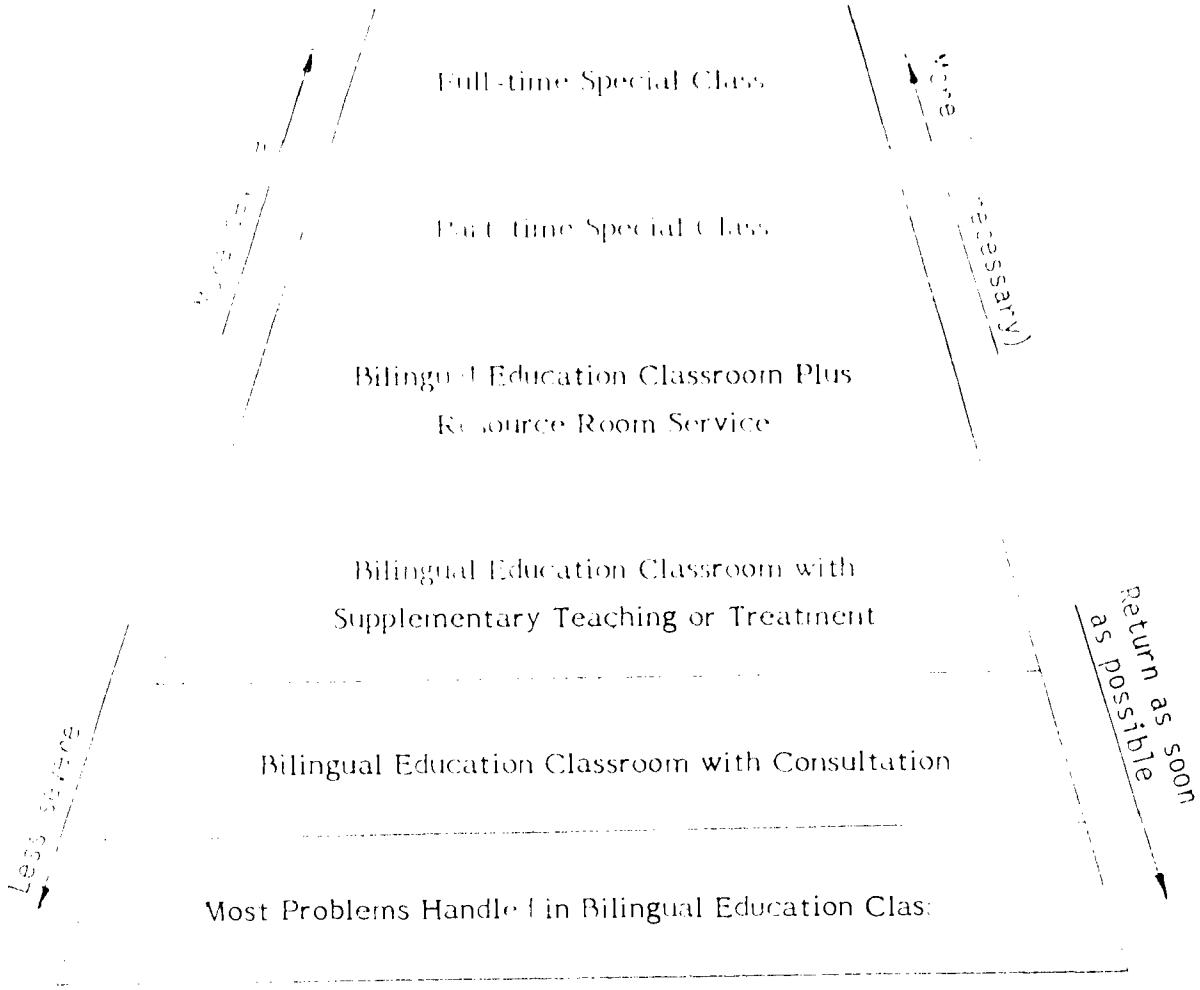
2. Teachers should examine their own records of referring individuals for special education services. If they have tended to refer a high percentage of minority students, they should try to determine the basis upon which these recommendations were made (Alley and Foster, 1978).

3. If the child is found not to be handicapped, s/he should be placed into the bilingual program or the monolingual English program, based upon language proficiency (Bernal and Tucker, 1981).

4. If the child is mildly handicapped, s/he should be placed in the bilingual or English program according to language proficiency, and additional support and resources should be provided. Special education provisions must be applied, including the Individualized Education Program (IEP) and periodic reviews of progress and reassessment of status (Bernal and Tucker, 1981).

Figure 1

Cascade of Services*



*Adapted from Reynolds (1962), Special Education Placement Alternatives, p.39.

[illegible] professionals, [illegible] member [illegible], [illegible] team, [illegible] important issues that require consideration before offering some or all of the special interventions in the child's dominant [illegible] (Rivera, 1981).

[illegible] the school system should make explicit to every placement team the program sites that provide bilingual intervention models (Rivera, 1981).

[illegible] (Rivera, 1981).

8. All related services required by the Individualized Education Program should be provided in the dominant language of the child (Rivera, 1981).

9. LEP students in bilingual special education programs should have equal opportunity to participate in programs, services, and activities available to children in regular education (Rivera, 1981).

10. Written progress reports, telephone contacts, and meetings should be in the primary language of the parents (Rivera, 1981).

Chapter 7

PERSONNEL PREPARATION

[illegible] demands created by P.L. 94-142 and other legislation, there is [illegible] shortage of bilingual special education personnel (Grant, 1979; Bergin, 1980). This shortage of properly trained teachers and other school personnel is one of the most critical problems facing the education of bilingual children with handicapping conditions (Gray, 1978). Under P.L. 94-142, both State Education [illegible] are confronted with the responsibility of complying with the legislation as well as with the reality that there are very few trained teachers (Gray, 1978).

Table 1 presents information based on a 1976 survey conducted by the Office of Civil Rights of the Office of Education. The data illustrate the extent of the problem in the [illegible] states with the highest number of Hispanic students (Ortiz, 1981).

Table 1

State	Total Population	Total Hispanic	Total Handicapped	Total Hispanic Handicapped
California	4,313,926	851,884	245,179	42,057
Illinois	2,211,075	105,183	181,199	8,344
New York	3,270,428	352,421	116,833	14,002
Texas	3,827,101	706,181	233,461	58,556

Data obtained from OE/OCR

At the present time, institutions of higher education (IHE's) are doing very little to prepare bilingual special education teachers (Baca, 1980; Ortiz and Yates, 1981). The few training programs that are currently being developed are projects funded either through the Division of Personnel Preparation of the Office of Special Education or through Title VII (Baca, 1980). These programs are in their infancy stage and need to

... of their effectiveness and impact can be secured

... [illegible] special education specialists has ... Many preschool handicapped children have been integrated into day care, Head Start, and other mainstream, early childhood settings. There also has been an increase in the number of therapeutic nurseries serving Hispanic children between the ages of three and five. The training of these specialists should foster understandings and experiences related to "normal" preschool children, since the teacher who has worked only with handicapped children may lose perspective on what are and are not appropriate behaviors and skills for a given age (Ortiz, 1981).

Fuchigami (1980) has noted that, "if an appropriate public education for culturally diverse populations is to become a reality, it is critical that persons in positions to deliver that education - teachers and administrators - have the necessary knowledge and skills to teach minority children." For institutes of higher education to be able to train effective bilingual special education personnel, it is apparent that teacher-training faculty members need training, themselves, about the specific educational needs of bilingual handicapped children. The idea of Title VII Dean's Grants to provide faculty inservice training with a focus on cultural diversity and the minority handicapped child has been suggested. Ortiz (1981) has stated, "there is also a critical need for bilingual personnel with advanced degrees to join the faculties of colleges and universities interested in initiating training programs in bilingual special education." She goes on to say that bilingual individuals should be recruited into post-master's and doctoral programs in the fields of language development and disorders, psychology, and special education. Information concerning scholarships and fellowships must be widely disseminated in the various target communities since these provide at least an incentive for bilinguals to enter the complex field of bilingual special education (Gray, 1978).

A number of issues regarding training have been cited in the literature during the past three years. The following is a discussion of the most critical issues discussed in the limited sources available.

Recruitment of Students: As has been indicated, the recruitment of sufficient numbers of bilingual students into the bilingual special education field is and will continue to be a problem (Ortiz and Yates, 1980). As these authors have noted, "to speak of an appropriate catchment (sic.) population for a further refined population, i.e., bilingual, with appropriate characteristics for serving exceptional children, indicates immediately signficant recruitment difficulties."

Connections among Regular Education, Bilingual Education and Special Education: Ideally, enough bilingual people would be trained in bilingual special education to meet the needs of all LEP handicapped students. Unfortunately, there is a very limited number of bilingual persons interested in special education (Ortiz, 1981; Gray, 1978). Given this scenario, institutions of higher education are faced with the task of providing training at different levels. For example, the resource teacher model has been developed as a compromise between the student's instructional needs and the lack of availability of appropriately trained bilingual professionals (Lerman, 1980).

Baca (1980) believes that regular teacher training programs should require special education and multicultural education courses that address the issue of how to work with the bilingual handicapped child. Cortes (1977) suggested that universities assume the role of change a[illegible] by approaching the training of bilingual special education staff through an i[illegible] disciplinary approach rather than waiting for all components to be in place before creating a new specialization in bilingual special education. Bergin (1980) agrees with an interdisciplinary approach because it avoids the petty jealousies that often arise as individual departments compete for students. Integration of information concerning minority exceptional students into the regular

teacher-education program will help faculty and students ultimately improve the [illegible] regular as well as special

[illegible] courses, etc. (Fuchigami, 1980).

Baca (1980) believes that special education students should be required to complete a course on working with the bilingual handicapped child and, by the same token, bilingual education students should be required to take a course about exceptional children. The courses should include a practicum or field-based component that involves working with bilingual handicapped students.

According to Ortiz (1981), institutes of higher education need to train two different types of individuals: (a) bilingual education majors interested in becoming bilingual special education specialists, and (b) monolingual, English-speaking regular and special education teachers interested in becoming sensitive to the linguistic, cultural, and educational needs of minority handicapped children.

The complexity of the personnel preparation effort required is evident, given the population to be served, i.e., bilingual handicapped students. It is clear that the training of these individuals will require an interaction of two complementary disciplines within teacher preparation; that is to say, bilingual education and special education. The great number of similarities and differences between these two areas of education have been discussed by Ortiz and Yates (1980).

The resistance met by bilingual education as it has sought integration of its content into the overall offerings of schools of education already points out the problems to be faced by the more specialized bilingual special education field (Gray, 1978; Ortiz and Yates, 1980). The following statement by Ortiz (1981) supports the philosophical basis for the integration of regular education, bilingual education, and special education:

A bilingual special education teacher training program should grow out of the education of the bilingual child in the regular classroom. Learning activities should include courses in normal child [illegible] self-contained special education classrooms are expected to eventually be mainstreamed and served through a Resource Room Program. Colleges should help teachers become knowledgeable in the "normal" academic and language functioning of English and Spanish-speaking children so that program graduates will be able to differentiate between those "normal" Hispanic children with apparent handicapping conditio and those who are truly impaired.

Bilingual special education training activities should be integrated into the on-going special education and regular education training activities to the maximum degree possible. Such an integrative approach will allow bilingual and non-bilingual students to share ideas and concerns and to gain new insights into their own style and competencies as teachers. Through sharing in courses and practica, students and faculty members who are not bilingual learn from those who are involved in the Hispanic culture and learn the issues concerning the education of the Hispanic handicapped child (Ortiz, 1981).

An integrated program must include many of the common content areas typically associated with a general teacher-preparation program. In addition, the program should provide specialized training that is unique to serving bilingual students, i.e., first- and second-language acquisition, bilingual curriculum, etc. Furthermore, the highly specialized personn to serve bilingual exceptional students would need to develop all the competencies required for special education certification. According to Ortiz and Yates (1980), "in addition to the integration of complementary disciplines, there is the assumption that there is a body of knowledge supportive of and unique to bilingual special education." In other words, "the sum of the competency development is more than the mere integration of three, complementary, teacher training disciplines" (Ortiz and Yates, 1980).

Some of the problems that may be anticipated include concerns over course ownership, student credit hours, time available to focus on specialized content areas, student selection and enrollment, degree, certification, etc. (Ortiz and Yates, 1980).

Although this interfacing and integration seem to be extremely difficult to [illegible] Grant and Yates (1980) list the following forces among those that may

[illegible] special education [illegible] attitudes in terms of experiences, i.e., general understanding of the operating modes of prejudice, bias, etc.

2. There are legislated/litigated mandates to serve the unique population of concern, i.e., Public Law 94-142, Title VII Regulations, etc.

3. There are increasing demographic variables of support, i.e., Hispanics are the largest minority in the Southwest and by 1985 will be the largest minority in the United States. Increasing numbers of Hispanics are assuming political and other leadership roles.

4. Greater commonalities than discrepancies of competencies and learnings are required in preparation.

5. New training markets hold promise to bolster enrollment in colleges of education at a time when they are experiencing enrollment decline, retrenchment, and reduction of resources.

Teacher Attitudes and Expectations: Teacher and administrative attitudes and expectations have been identified as the main issue in teacher education programs, as they prepare future educators to meet the needs of culturally diverse students (Fuchigami, 1980). Fuchigami affirms that, "if attitudes and expectations are to be altered, colleges of education and district inservice training programs will need to provide educators with information and skills about how to teach culturally diverse children and also provide them with opportunities to apply the skills in appropriate field settings."

Identification of Instructional Materials: There exists a perceived shortage of bilingual/bicultural teacher training materials. In a marketing survey conducted in 1978 for the Council for Exceptional Children by Fuchigami, 78% of the 250 colleges and universities that responded reported that they lacked training materials on minority groups. In reality, there is a wide variety of available bilingual/multicultural training and instructional materials developed by Title VII projects, Teacher Corps projects, Ethnic Heritage projects, and commercial publishing companies (Fuchigami, 1980).

focused on teachers, since this is the area of greatest demand. There are some programs that prepare other types of personnel needed to serve bilingual handicapped students.

In this section, the knowledge, attitudes, and skills required of bilingual special education teachers and bilingual psychologists will be briefly examined. The reader is referred to additional sources for further information. The importance of parent training programs also will be discussed.

Teachers: In relation to the bilingual special education teacher, Arciniega (1978) states:

> Defining successfully the role of the ideal teacher for a bilingual/bicultural special education program is no easy task because a successful program requires the teacher to function effectively in multiple roles, i.e., the teacher as community liaison person, the teacher as ethnic role model, the teacher as a master teacher of the handicapped, the teacher as bilingual specialist, and, to a large extent, the teacher as change agent. Thus, although we may not be able to lay blame and responsibility on the teachers in programs that are not functioning well, it is difficult to overemphasize their importance.

Ortiz (1981) discusses the functions, roles, and competencies required of bilingual special education specialists and of monolingual English-speaking teachers. Regarding the latter group, she states that teachers of Hispanic handicapped children participating in a bilingual special education training program should be sincerely committed to the multicultural approach in education and linguistic background. The following roles were presented as possibilities for a bilingual special education specialist: (1) special education teacher to work with English and/or Spanish speaking

handicapped children in a self-contained classroom; (2) resource room teacher to work with English and/or Spanish-speaking children; (3) bilingual/multicultural specialists in [illegible] (Ortiz, 1983)

[illegible] Lerman (1980), and Ortiz and Yates (1983) [illegible] extensive and vary, depending upon the philosophy of education of the author or institution s/he represents. Nevertheless, careful analysis of the lists reveal the following competencies to be considered consistently important in a teacher-training program:

1. Ability to diagnose a student's strengths and weaknesses, using formal and informal non-discriminatory assessment measures and procedures.

2. Ability to identify and understand the developmental process of first and second language acquisition and language disorders in Hispanic children.

3. Ability to identify and understand regional, social, and developmental varieties in a child's language(s) at the phonological, grammatical, syntactical, pragmatic, and semantic levels.

4. Ability to differentiate among difference, delay, and disorder when evaluating a child's language.

5. Ability to utilize assessment data to develop a curriculum appropriate for handicapped non-English speaking, limited English speaking, and bilingual children.

6. Ability to create, evaluate, and use bilingual/bicultural materials.

7. Ability to involve parents in the instructional process.

8. Ability to respond positively to the diversity of behavior involved in cross-cultural environments.

9. Awareness of his or her personal beliefs, value systems, and attitudes, and the effect these variables have on personal behavior and decision-making in working with Hispanic handicapped children.

Psychologists: It is generally agreed that IHE's need to address the issue of bilingual non-discriminatory assessment and prepare bilingual psychologists capable of [illegible]. The following [illegible] competency have been [illegible]

2. Knowledge of the basic school acculturation needs of ethnic minority group children.

3. Knowledge of different cognitive styles and learning modes of ethnic minority group children.

4. Knowledge of the standards for educational and psychological tests, and of the ethical standards of psychologists.

5. Knowledge of resources and methods of obtaining information useful in providing services to ethnic minority group children.

6. Knowledge and application of methods and techniques for assessment of ethnic minority group children, and ability to develop appropriate educational plans.

Parent Participation: Parental participation is critical in the education of handicapped children. Lack of parental involvement amounts to a delay in the provision of special education and related services to handicapped children (A.P.N.I., 1978). Legislation such as P.L. 94-142 mandates parents' involvement throughout the process of referral, evaluation, and placement of students in a special education program. Unfortunately, only through the pressure of public opinion in general, and of parents of the handicapped in particular, are laws implemented fully and in timely fashion by the corresponding authorities (A.P.N.I., 1978). According to Ayala (1978), most of the gains of the exceptional child in terms of acceptance, programs, research, and other areas have been a direct result of the work of parents.

There is a critical need for parent training programs that, in addition to making them cognizant of their rights under P.L. 94-142, prepare them to provide follow-up at home to the child's educational program. A knowledgeable and involved parent can be a valuable member of the instructional team, facilitating the continuity between home and classroom activities (Baca, 1980).

In terms of secondary students, it is critical that parents be made aware of occupational opportunities in relation to their children's abilities and interests. This type of training enables parents to stimulate their children's motivation for work and

"...to bring bilingual parents of handicapped children into active participation in school and community organizaitons, and together to advocate for enriched and expanded career education programs and services in the school and the community."

CHAPTER VI
DELIVERY OF SERVICES

[illegible] have seen P.L. 94-142 significantly effected the education of bilingual handicapped children. This piece of federal legislation not only included a provision for non-discriminatory assessment but, in addition, required an appropriate education for each child, to be accomplished through an Individualized Education Program (I.E.P.). (Baca, 1980.)

An I.E.P. can require that instruction be carried out using a bilingual approach. At the present time, California, Louisiana, and New York City require the inclusion of bilingual goals and objectives, programs, and services in the I.E.P. of bilingual handicapped students (Baca, 1980). Bergin (1980) states that P.L. 94-142 guarantees minority language handicapped students equal access to education. In order for access to become a reality, "special education and bilingual education must come together within the administrative structure of a school system to provide in practice, what the law requires" (Bergin, 1980).

Issues in the Delivery of Services

The basic issues related to the appropriate delivery of services for language minority students relate to various philosophical and political perspectives that range from insistence by school personnel that therapy be provided in English because "this is America" to equally firm insistence by parents and other professionals that services be provided in Spanish in order to facilitate learning of academic content and to reinforce maintenance of the primary or home language (Hendrickson, 1982). Although it is generally agreed that the fields of bilingual education and special education must come together in order to benefit language minority handicapped children, there are many ways in which this juncture is occurring in bilingual special education programs throughout the country. Some of the models found at the present time include the

following: (1) self-contained classrooms with or without bilingual assistance; (2) bilingual self-contained classrooms; (3) regular bilingual classrooms with a resource room component; (4) regular monolingual classroom with a bilingual resource room

[illegible] implemented (Berg, 1978). There is, however, a severe paucity of research illustrating the effectiveness of the models listed above. During the preparation of this monograph, an extensive literature review revealed a complete absence of research studies on the effectiveness of bilingual special education service delivery models.

Native vs. English language Instruction: A Review of the Literature

The use of native vs. English language instruction with language minority handicapped students has been identified as one of the most important issues facing education today. Before discussing the advantages and disadvantages of using native language instruction with handicapped students, a definition of bilingual education must be provided. For the purposes of this discussion, bilingual education is defined as:

> ...the use of two languages, one of which is English, as mediums of instruction for the same pupil population in a well organized program. This encompasses all or part of the curriculum and includes the study of the history and culture associated with the mother tongue of the students. A complete program develops and maintains the children's self-esteem and a legitimate pride in both cultures (U.S. Office of Education, 1971).

The main purpose of bilingual education is not to teach language, per se, but to provide students with the opportunity to acquire knowledge and skills through the language they know best while, at the same time, adding English to their linguistic repertoire. Authorities such as Lambert and Tucker (1972), Saville and Troike (1971), Skutnabb-Kangas and Toukomaa (1976), and Tucker (1975) are convinced that the native language is not only the best language for instructional purposes, but that its

use in school can only enhance the child's self-image and esteem for his or her own culture.

[illegible] Bilingualism

[illegible] monolinguals, were behind in school, retarded in measured intelligence, and socially adrift (Peal and Lambert, 1962). However, an analysis of the research methodology used in these studies indicates that they did not control for such important confounding variables as degree of bilingualism, socio-economic status, and the quality of educational programs. Additionally, many of the so-called "bilinguals" were actually limited in one of the two target languages. Ramirez and Gonzalez (1972) identified the following critical confounding variables that were not controlled for in previous research: 1) cultural inappropriateness of tests, 2) language, 3) test atmosphere, and 4) cognitive style reflected in test instruments and procedures.

Since the 1960s, researchers who have concentrated on the dynamic variables of cognitive functioning have concluded that, contrary to previous assertions, bilingualism has a positive effect on cognitive development (Lambert and Tucker, 1972; Cummins, 1979). One of the earliest studies that indicated the beneficial effects of bilingualism on intellectual development was that of Peal and Lambert (1962). They found that a group of ten-year-old French and English balanced bilinguals in Montreal showed a higher level of nonverbal and verbal intelligence than a monolingual control group. Peal and Lambert concluded:

> The picture that emerges of the French-English bilinguals in Montreal is that of a youngster whose wider experiences in two cultures have given him advantages which a monolingual does not enjoy. Intellectually his experiences with two language systems seems to have left him with a mental flexibility, a superiority in concept formation, and a more diversified set of mental abilities in the sense that the patterns of abilities developed by bilinguals were more heterogeneous... In contrast, the monolingual appears to have a more unitary structure of intelligence which he must use for all types of intellectual tasks.

Confirmation for the study has emerged from carefully conducted research around the world, e.g., from Singapore (Torrance, Gowan, William, and Aliotti, 1970), Switzerland (Balkan, 1970), South Africa (Ianco-Worrall, 1972), Israel and New York [illegible] (Ben-Zeev, 1972), Western Canada (Carringer and Gulutsan, 1973), and Montreal (Scott, [illegible] Bergal Lambert, [illegible]). [illegible] evidence that [illegible] bilingual processes an analytic orientation to language (Ben-Zeev, 1972, 1976, 1977; Feldman and Shen, 1971). In addition, a positive association between bilingualism and divergent thinking has been documented (Carringer, 1974; Cummins and Gulutsan, 1974; Scott, 1973).

Some of the research cases cited above are based on immersion bilingual education programs. Generally, immersion programs involve a home-school language switch, where the home language is highly valued, where parents actively encourage literacy, and where it is known that the children will succeed in a classroom in which all schooling takes place in a second language (Cummins, 1979). In an immersion program, both languages have social value, and respect for the children and parents is a given. For example, in Canada, where English-speaking Canadians value French as well as English, a French immersion program adds a second, socially relevant language to their repertory of skills (Lambert, 1977). According to Lambert, this is what might be referred to as an "additive" form of bilingualism, in which case, learning the second language would in no form portend the slow replacement of it for the home language.

In contrast, French Canadians or Spanish Americans in the United States who develop skills in English might experience a "subtractive" form of bilingualism. This is often the case for Spanish-speaking children who are placed in an educational program where English is the only language of instruction. Lambert refers to this as a "submersion" bilingual education program. Among the Spanish-speaking children, their lack of proficiency in English is often treated as a sign of limited intellectual and academic ability (Cummins, 1979). Children in submersion programs may often become frustrated because of difficulties in communicating with the teacher. These difficulties often arise because the teacher is unlikely to understand the child's

language and also because of different culturally determined expectations of appropriate behavior (Shuy, 1977).

[illegible] that the only way for ethnic minorities to profit

[illegible] been conducted with so-called "normal" minority children. An example is the work conducted by Skutnabb-Kangas and Toukomaa (1976) in Sweden. The results indicated that Finnish children who came to a Swedish school system between the ages of 7 and 8 years, when their skills in their first language were already established, were more proficient in learning Swedish than those who had been placed in the Swedish schools before the basic linguistic aspects of their mother tongue had been acquired. Those children who arrived in Sweden at age 9 or over"...achieve(d) language skills comparable to those of the Swedes although learning the language takes place more slowly." The authors concluded that "the better a pupil has preserved his mother tongue, the better are his prerequisites for learning a second language."

Bilingual Education Studies

One of the first studies conducted to determine the educational need [illegible] Hispanic Language Impaired Children was a three-year study in New York (Lerman, 1979). The total sample consisted of 106 Hispanic language disc[illegible] students served through the Schools for Language and Hearing Impaired C[illegible]ren (SLHIC) in New York City. The study evaluated the subjects' social-emotional behavior, communication, and family background. The study revealed that most parents in the sample wanted to be identified as Hispanic rather than American and were concerned that their children learn to speak and understand Spanish as well as English. In communicating with the language disordered child, most parents and other family members used only the Spanish language. In addition, parents interviewed were nearly unanimous in their belief that Spanish should be taught to their children by the school system. Furthermore, the majority of parents indicated that, even if requested

of the school, they would refuse to comply with requests to speak only English with the handicapped child.

A study conducted by Wyszewianski-Langdon (1977) attempted to determine the [illegible] the language deficit in a bilingual Spanish-English-speaking group of children who were considered to be language disordered. The sample consisted of two groups of 25 children of Puerto Rican descent. The subjects, 6 to 8 years of age, were matched for socioeconomic status, intellectual capacity, the number of years spent on the mainland, and school experience. One group consisted of so-called "normals" and, the other, of children who were referred by their regular classroom teacher as having language disabilities. The following series of tasks were administered: (1) articulation of words and in connected speech; (2) "auditory" discrimination; (3) sentence comprehension; (4) sentence repetition, and (5) sentence expression. The study revealed that both groups performed consistently better in Spanish than in English on all tasks. The author states that for children suspected of a language problem, it is recommended that they first be given specific language-skills training in Spanish. Having a sound basis in one language will enhance the learning of the second language. These findings showed that the language disordered group had disabilities not only in English but also in their native language.

Linguistic Considerations

The most commonly used argument against bilingual programming for many types of special students, e.g., language impaired, hearing impaired, learning disabled, mentally retarded, neurologically impaired, etc., states: Since it is so difficult for such students to learn one language, how can we expect them to learn two languages? Countering this argument, Fischgrund (1982) has stated that, regardless of the severity of the handicapping condition and age upon entering school, the impaired child has already begun the process of language acquisition. "This position implies the rejection of descriptions of children which conclude that they have 'no language,' and an acceptance of a view of language which says that language is more than just an inventory of producible phonics or testable vocabulary." The child will be dominant in

the language of the [illegible] functioning at the pre-verbal linguistic level. Fischgrund offers a thorough analysis of the linguistic considerations educators should be cognizant of when making decisions concerning the language of instruction used with hearing impaired children from linguistically and culturally diverse backgrounds (1981). These considerations can be applied to handicapping conditions as it appears that language difficulty is a common factor found in bilingual children placed in special education programs (Cohen, 1979).

With regard to hearing impaired children, Bolen (1981) suggests that, in those cases where the child has a severe to profound hearing loss, exposing the child to only one language facilitates the communication process. Fischgrund reacts to Bolen's statement by pointing out the failure to account for the fact that the child has already been exposed to one language and that this exposure will continue as long as it is the home language. Contrary to Bolen's position, Fischgrund believes that "early exposure to the home language must be accounted for in the child's early educational program, and that his or her continued exposure to the home language must be dealt with and programmed for throughout the child's educational career. Handicapped students whose language abilities are delayed in the first language will be able to enter a second language learning process only if there is continued development and use of the first language." (Fischgrund, 1981.)

Cummins' (1979) "developmental interdependence hypothesis" supports this position for both normal and as well as handicapped children (1979). His hypothesis proposes that "the level of L_2 (the second language) competence which a bilingual child attains is partially a function of the type of competence the child has developed in L_1 (the first language) at the time when intensive exposure to L_2 begins." Many educational programs do not consider this linguistic interdependence, therefore, most LEP handicapped students find themselves in a similar situation to the one described by Skutnabb-Kangas and Toukomaa (1976):

> If in an early stage of development a minority child finds himself/herself in a foreign-language learning environment without contemporaneously receiving the requisite support in their mother tongue, the development of skill in the mother tongue will slow down and even cease, leaving the child without a basis for learning the second language.

This is a typical problem for most LEP handicapped children, and reflects two very common complaints among parents and educators: (1) complaints from parents that their child is losing his or her home language, and (2) complaints from educational personnel that the child is not doing well in school due to his or her limitations in using the English language. Fischgrund (1982) declares that, "rather than explaining these difficulties by saying, in the first case that the child would rather speak English (the parents' complaint), or in the second case (the teacher's complaints) that the child has an additional disability, one should examine the developmental interdependence hypothesis to understand why communication breakdown in the home and poor academic achievement are inextricably interrelated."

Bilingual Special Education Model Programs

The following [illegible] programs have been identified.

1. Bilingual/Bicultural Model Program for Spanish-Speaking Language and Hearing Impaired Children

   Population served: Language and Hearing Impaired Spanish-Speaking Children

   Ages: 5-8 years

   Languages: Spanish and English

   Contact/Address:

   Dr. Carmen D. Ortiz
   Bank Street College of Education
   610 West 112th Street
   New York, N.Y. 10025

Project Description:

This project provides bilingual/bicultural instructional services to Hispanic children served through the schools for Language and Hearing Impaired children of the Divison of Special Education and Pupil Personnel Services in New York City. The program has been implemented in Public School 25 in School District 7, Bronx, New York.

Project Goal

The goals of the project are:

1. to develop and implement a bilingual/bicultural educational curriculum and to document and access school achievement, development of Spanish and English language proficiency, self-concept, interpersonal relations, and parental involvement;

2. to develop, refine, and document procedures, techniques, and instruments used in the evaluation and diagnoses of language-impaired children from Spanish-speaking homes;

3. to develop bilingual curriculum materials to be used with Spanish-speaking handicapped children; and

4. to provide guidelines in the area of parental involvement in bilingual special education.

This model is being implemented in two self-contained bilingual special education classrooms. Children are mainstreamed for special activities such as music, motor education, and dramatic arts for a minimum of three times a week.

2. A Mass Media Approach to Sign Language Instruction for Spanish-Speaking Parents

Population Served: Spanish-Speaking Parents and Their Deaf Children

Languages: Spanish-Sign Language-English

Contact/Address:

Kathee M. Christensen
Department of Communicative Disorders
San Diego State University
San Diego, CA. 92182

Project Description:

Through a two-year grant funded by the U.S. Department of Education, Office of Special Education and Rehabilitation Services, the Communication Department of San Diego State University is airing a weekly, 30-minute television program that teaches sign language to speakers of Spanish. Each program contains a fourteen-minute "lesson" followed by a sixteen-minute "interactive" session, with television viewers telephoning questions to the instructors (project personnel). During the first twenty months of the two-year project, the series will be aired weekly via cable television to over 250,000 homes in San Diego County. A user's manual to accompany the tapes will be prepared and refined. A trilingual series of 14 instructional videotapes also will be available. During the last four months of the project, the video-tapes and User's Manual will be mass-produced, marketed, and disseminated to the national audience. Another component of the project is training teachers of the deaf in Spanish as well as training Spanish-speaking teachers in sign language.

Content evaluation will be [illegible] a 50 [illegible] them, their parents and [illegible] in order to [illegible] [illegible] recording of [illegible] the project [illegible] September, 1983.

Service Delivery: Through Television

3 Project Oportunidad: A Bilingual/Bicultural Program for Hearing-Impaired Students and Their Families

Population Served: Hearing Impaired-Deaf Children Who Are from Spanish or Portuguese-Speaking Homes

Ages/Grade Level: The age at which the handicapped is identified through 21 years old

Languages: English/Spanish/Portuguese - Sign Language

Contact:

Joseph E. Fischgrund
Coordinator Bilingual Program
Rhode Island School for the Deaf
Corliss Park
Providence, RI 02908

Project Description:

Project Oportunidad is a Title VII Demonstration Project that serves 60 hearing-impaired children. The most severely impaired children attend Rhode Island School for the Deaf full time. The other children are mainstreamed into Rhode Island Public Schools and come to the School for the Deaf to receive supportive services.

Service Delivery Model:

Children dominant in English spend most of the day in a class for deaf children with a monolingual English-speaking teacher. They also go to the resource room to work with a teacher who is bilingual and certified in the education of the deaf and/or as a special education resource teacher. Children who are dominant in Spanish spend 50% of their time in the monolingual (English) special education class and 50% with the bilingual resource teacher. Children who are mainstreamed in the Public Schools visit the bilingual resource room daily.

4 Title VII Bilingual Exceptional Student Education Demonstration Project (ESE)

Population Served: Educable mentally retarded, emotionally handicapped, specific learning disability, gifted creative, and talented students who are limited-English-proficient.

Level: Grades K-8

Languages: English/Spanish/Haitian

Contact/Address:

Vilma T. Diaz
Project Manager
The School Board of Broward County
6650 Griffin Road
Davie, FL. 33314

Project Description:

The Bilingual Exceptional Student Education Demonstration Project is a three-year program (1980-1983) presently serving 200 Hispanic and Haitian limited-English-proficient students in the grades K-8 classrooms of Broward County. It is a comprehensive demonstration program offered at six selected school centers.

The project is divided into five components: (1) identification, (2) staff development, (3) instructional programs in elementary and middle school, (4) guidance, and (5) parent training.

The program consists of a paraprofessional model and a curriculum model that stress cultural aspects, linguistic strengths, and each student's dominant language. The program serves educable mentally retarded, emotionally handicapped, specific learning disability, gifted creative, and talented students.

The following materials have been developed by the project:

1) Your Child's Right to Special Education: A Handbook for Parents (1981-1982), 2) Resource Guidebook for Teachers of Bilingual Emotionally Handicapped Students (Summer 1981), 3) Curriculum Guide for Bilingual SLD (Summer 1981), and 4) A School Social Worker's View of Parent Involvement in the B.I.E.P.

Project Goals

The goals of the project are:

1. to use a diagnostic team to identify and place students in an appropriate educational program based on his or her unique educational background, linguistic, and cultural characteristics;

2. to develop a training program for instructional and non-instructional personnel;

3. to assess learning and emotional problems through student placement in a diagnostic prescriptive class while the student obtains counseling services;

4. to offer unique and innovative programs that incorporate culture; and

5. to involve parents in the diagnostic consultation process and in the planning and evaluation of program activities.

Service Delivery Model:

Children [illegible] and exceptional bilingual classroom with resource room assistance or are placed in a [illegible] contained bilingual special education classroom, depending upon the severity of the handicapping condition. The majority of the teachers are bilingual. If the teacher is not bilingual, a bilingual paraprofessional is available to provide native-language instruction and support services.

[illegible]

Population Served: Gifted, talented, and exceptional children, recent immigrants, English superior, Spanish superior.

Ages/Grade Level: K - 8

Languages: Spanish/English

Contact Address:

Mary C[illegible]
Director, Bilingual Education
Hollister School District
761 South Street
Hollister, Ca. 9[illegible]

Project Description:

The Hollister School District began its Title VII Demonstration Project in October of 198[illegible]. The project has implemented a new technique for bilingual classroom instruction that incorporates peer/cross-age teaching and small group dynamics. This technique, called the "jigsaw approach," promotes equality of education and inter-ethnic interaction while creating an educational setting that fosters the interaction of students possessing varying intellectual and linguistic capabilities. A child who has learning difficulties is surrounded by a peer support system that increases his or her chances of acquiring information. In the bilingual classroom, the interaction of the different linguistic capabilities of each member of the group will promote strong language practice in a natural setting. Group participation will encourage students to interact in a socially and linguistically meaningful manner. This approach also serves to foster and broaden students' understanding of cultural heritages other than their own. Moreover, it is an approach that is aimed at enhancing the self-esteem of children with different intellectual abilities and cultural backgrounds. Parents in the community are also involved in [illegible] programs.

Service Delivery Model:

Gifted and exceptional children are mainstreamed in the model bilingual classroom, in which groups of four to six students are formed during the regularly

scheduled activities. The cooperative learning technique is used during one hour time segments three or four times a week. Each member of the "jigsaw group" is given a segment of the day's lesson for which s/he is responsible, including teaching it to other members of the group. Since each student is responsible for only one segment of the lesson, interdependence is established. Since all the segments must be used to complete the lesson, students are dependent on one another for information. In the active process, the bilingual teacher serves not only as a facilitator and resource person, but also as an example of cooperative behavior.

6. Project ENABLE: San Antonio Independent School District

Population Served: Bilingual gifted students

Age/Grade Level: K - 5 in five elementary schools

Languages: English/Spanish

Contact:

Mary Esther Bernal
San Antonio Independent School District
Bilingual Education Office
141 Lavaca St.
San Antonio, TX. 78210

Project Description:

Project ENABLE is a Title VII-funded program designed to identify and meet the needs of gifted and talented, limited English proficiency students. Project students will be provided with a systematic bilingual program for the concurrent development of cognitive and language skills from kindergarten through fifth grades. The project provides on-site orientation and small group sessions for the members of the staff as well as workshops and field experiences for the parents. Computers are part of the educational program.

Project Goals:

The goals for the project are:

1. research and field testing of a broad range of procedures for the identification of gifted and talented LEP, bilingual students;

2. utilization of innovative approaches and technology in providing for gifted and talented students including (1) use of computer science in a resource room setting, and (2) use of individualized education programs through team planning by classroom teachers, resource teachers, counselors, and community resource persons; and

3. pilot a curriculum for cognitive development that concurrently addresses developmental language.

[illegible]

[illegible] will be [illegible] and the [illegible] to [illegible] to [illegible] potential [illegible] Bilingual Resource Room and [illegible] [illegible] to [illegible] [illegible] of [illegible] identified [illegible] children [illegible] [illegible] educational [illegible] [illegible] developed.

7. Project SABER: Bilingual Gifted and Talented, Edgewood Independent School District

[illegible]

Age/Grade Level: 4 - 6 in four elementary schools

Languages: Spanish/English

Contact Person:

Ms. Linda [illegible]
Project Director
Edgewood I.S.D.
5358 W. Commerce Street
San Antonio, TX 78237

Project Description:

Project SABER is a Title VII funded program that identifies potentially gifted bilingual students in four elementary schools in San Antonio, Texas. It consists of the following components:

1. Instructional -- television and computer-assisted instruction;

2. Staff Development -- on-going personnel training; and

3. Community Involvement -- use of community resources, training parents in the characteristics of gifted and talented children, and training parents concerning coping and supportive strategies.

Project Goals:

The goals of the program are:

1. to develop an accelerated bilingual education learning system in grades 3 through 6, emphasizing language arts and mathematics for students who have linguistic and academic ability potential in either one or two language systems;

2. to develop and implement an instructional program for the development of higher cognitive processes;

3. to develop gifted and talented, limited English language proficient students' native language and to facilitate their full acquisition of two language systems along with linguistic, social, and interpersonal skills;

4. to foster bilingual development along with linguistic, social, and interpersonal skills in gifted and talented children who are non-English speakers; and

5. to use cultural and community resources in developing bilingual gifted and talented children through innovative techniques.

Service Delivery Model:

Participants are placed in the regular classroom with a bilingual teacher. They work in a Bilingual Resource Room on a daily basis. Each have one-and-a-half hours per week of instructional television and twenty minutes per day of computer work.

8. Bilingual Gifted and Talented Program/Programa de Ninos Superdotados y Talentosos

Population Served: Gifted and talented [illegible]

Ages/Grade Level: K through Jr 9

Languages: English/Spanish

Contact/Address:

Ms. Edna R. Vega
Project Director
P.S. 155
319 East 117th Street Room 320
New York N.Y. 10035

Project Description:

The Demonstration Bilingual Gifted and Talented Program in Community School District 4 is a Title VII project, funded in 1980 for a three-year period. This project is unique in that it is investigating and addressing the needs of gifted children who are bilingual and bicultural. In addition, it is one of the first bilingual demonstration projects for gifted children to be federally funded in New York State.

The project is divided into the following components:

1. Curriculum. The gifted and talented students are provided with a curriculum that is enriched and expanded. The model used throughout the curriculum is Bloom's Taxonomy of Cognitive Domains, which includes six levels of increasingly complex thinking skills, each level depending upon previously acquired knowledge. The model is also based on Renzulli's Enrichment Triad Model.

Identification Process. The identification component [illegible] types of gifted identification instruments in order to develop [illegible] identifying gifted children who are linguistically and cul[illegible] are of limited English proficiency.

3. Staff Development.

4. Guidance. The project provides guidance through a support system that helps student understand their "gift" and to blend effectively within the school, home, and community environments.

5. Parent Involvement. The parents are assisted in understanding the unique features of the gifted child. Suggestions are provided for enrichment activities to supplement their child's resource-room experiences, and ideas are offered to parents on how to deal with the psychological and academic needs of gifted children.

Project Goals:

The purpose of this project is to meet three long-range needs that have been identified by administrators, teachers, and parents. The major goals to be met by the project are:

1. to adapt and/or modify existing identification instruments in order to meet the needs of culturally and linguistically different children;

2. to establish a program model for gifted bilingual children that will enrich and supplement existing bilingual programs; and

3. to train teachers and parents to identify and deal effectively with bilingual gifted children.

Service Delivery Model:

Both the elementary and the Junior High components of the program are located in bilingual schools. The children are placed in regular bilingual classrooms with a bilingual teacher for the majority of the day. A bilingual resource room is also used on a daily basis. In the resource room, basic computers are used, involving the students in basic operations and programming techniques. The students are grouped into sets of 14 students with similar needs. Each group consists of the following characteristics: (a) One-third of the population is proficient in both Spanish and English; (b) One-third of the population is articulate and fluent in either Spanish or English; and (c) One-third of the population is clearly dominant in either Spanish or English.

Other model programs were identified and described by Bergin (1989), with the hope that enough interest would be generated to "bring about an exchange of letters, ideas, materials, and enthusiasm to refine these initial models."

3. Lack of [illegible] psychometric tests [illegible] used on the various [illegible] groups.

4. Lack of valid pluralistic measures that explicitly compare handicapped children to children with similar handicaps and similar socio-cultural [illegible] groups.

5. [illegible] critical need for an interdisciplinary approach to [illegible] language assessment that utilizes a strong ethnographic [illegible]

Lack of commercial tests that measure functional language proficiency in the [illegible] and second languages.

6. A need to develop new methods of assessing language that more closely reflect contemporary linguistic research and theory.

[illegible] and Preparation

1. Lack of evidence of the effectiveness and [illegible] of existing personnel preparation programs.

2. Lack of information on the issues involved in the training of bilingual special education personnel, e.g., internal politics, tenure, and certification [illegible]

3. Shortage of bilingual teacher-training materials [illegible] a special-education focus.

4. Lack of information on procedures and techniques that can be used in the assessment of competencies.

[illegible] of Services

1. Many [illegible] are implementing [illegible] bilingual special education models.

Lack of bilingual special education curricula and [illegible] curriculum and [illegible]

[illegible] the following: a) ethnic [illegible] background, sex, and language of [illegible] examiner; b) degree of acculturation of the student; c) test language; and d) the use of bilingual interpre[illegible].

2. The language characteristics [illegible] monolingual children compared to those of the different Hispanic groups.

3. [illegible] groups.

4. Development of [illegible] the proportion of Hispanics referred and assigned to classes [illegible] mentally retarded, emotionally disturbed, learning disabled, etc.

Impact of poverty related [illegible] development of cognitive skills.

Perceptions, attitudes, and [illegible] non-biased assessment and edu[illegible].

7. Studies of the functional [illegible] competence required in schools [illegible] various ages and/or grade leve[illegible]

8. Cognitive styles [illegible] Hispanic children with different handicapping conditions.

9. Comparison of cognitive styles and abilities of bilingual and monolingual handicapped students.

10. The effectiveness of the various assessment models when used with Hispanic children. Assessment models include task analysis, pluralistic measures, diagnostic prescriptive and the clinical diagnostic teaching model.

Placement

1. [illegible] relationship [illegible] is an [illegible] the probability of being [illegible] in a regular [illegible] setting with the [illegible] support.

2. Relationship between socio-economic status and labels given to [illegible] students.

3. Relationship between English-language proficiency and probability of being mainstreamed into a regular classroom setting with the appropriate support.

4. Rate of declassification among Hispanic students with different handicapping conditions and/or labels.

5. Effect of parents' involvement on the referral, assessment, placement, and declassification of Hispanic students.

6. Effect of federal and state special education policies on the process of classification and declassification of Hispanic students.

Personnel Preparation

- Effect of various teacher-training models on the education of Hispanic handicapped students.

Service Delivery

1. Effectiveness of the various service delivery models when used with Hispanic children who have different handicapping conditions.

2. The effects of bilingual vs. monolingual English-language instruction on the cognitive, social, and emotional development of Hispanic handicapped students.

3. Attitudes and perceptions of Hispanic parents towards bilingual vs. English-only instructional programs.

4. Validity of Cummins' (1979) developmental interdependence hypothesis when applied to Hispanic children who have different handicapping conditions.

REFERENCES

Abramson, A. Legal Forces and Pressures. In R. Jones (Ed.), Mainstreaming and the Minority Child. Reston, VA: Council for Exceptional Children, 1976.

ACCESS, Inc. Bilingual Special Education Personnel Preparation: National Task-oriented Seminar. Bethesda, MD, 1981 (A workshop report).

Alley, G.R. Methods of Assessing the Performance of Exceptional Children Who Represent Minority Groups. Paper presented at Regional Problems of Exceptional Children Meeting, Regional USEO, Kansas City, MO, June, 1976.

Alley, G., and Foster, C. Nondiscriminatory Testing of Minority and Exceptional Children. Focus on Exceptional Children, 1978, 9(8), 295-299.

Almanza, H., and Mosley, W. Curriculum Adaptations and Modifications for Culturally Diverse Handicapped Children. Exceptional Children, 1980, 46(8), 608-614.

Alvarez, M. Practical Considerations in the Psychological Assessment of Minority Children. Proceedings of a Multicultural Colloquium on Non-biased Pupil Assessment, New York Education Department, 1977.

Ambert, A., Grennbert, J., and Pereira, S. Manual for Identification of Limited-English Proficiency Students with Special Needs. Bilingual Multicultural Special Education Project, Massachussetts Department of Education, 1980.

Anastasi, A., and Cruz, D. Language Development and Non-verbal I.Q. of Puerto Rican Pre-school Children in New York City. Journal of Abnormal and Social Psychology, 1953, 48, 357-366.

Anastasi, A. Psychological Testing (4th ed.), New York: Macmillan Publishing Co., 1976.

Arciniega, T.A. Sociocultural Imperative in the Education of Young Handicapped Children of Spanish Speaking Background. In Pascal Trobanio (Ed.), Early Education in Spanish-Speaking Communities, New York: Walker and Co., 1978.

Arnold, R.D. Reliability of Test Scores for the Young Bilingual Disadvantaged. Reading Teacher, 1969, 22, 341-345.

Arnold, R.D., and Wist, A.H. Auditory Discrimination Abilities of Disadvantaged Anglo and Mexican American Children. The Elementary School Journal, 1970, 70, 295-299.

Arsenian, S. Bilingualism and Mental Development, New York: Teachers College Press, 1937.

Ayala Vasquez, N. Bilingual Special Education: Ahora. In H. Lafontaine, B. Persky and L. Golubchick (Eds.), Bilingual Education, Wayne, NJ: Avery Publishing Group, Inc., 1978, 261-267.

Baca, L. A Dialogue on Cultural Implication for Learning. Exceptional Children, 1974, 40(8), 562-564.

Baca, L. Issues in the Education of Culturally Diverse Exceptional Children. Exceptional Children, 1980, 46(8), 583.

Baca, L. Policy Options for Insuring the Delivery of an Appropriate Education to Handicapped Children Who Are of Limited English Proficiency. Reston, Virginia, Council for Exceptional Children, 1978.

Baca, L. What's Going On in the Bilingual Special Education Classroom? Teaching Exceptional Children, 1975, 7, p. 49.

Baca, L., Cervantes, H. and Torres, D. Use of Bilingual Testing in Colorado. Bilingual Journal, 3(1).

Bailey, D. and Harnin, G. Nondiscriminatory Evaluation. Exceptional Children, 1980, 46(8), 590-597.

Bain, B.C. Bilingualism and Cognition: Toward a General Theory. In S. Carey (Ed.), Bilingualism, Biculturalism and Education, Edmonton, Alberta: University of Alberta Press, 1974.

Bain, B.C. Toward an Integration of Piaget and Vygotsky: Bilingual Considerations. Linguistics, 1975, 160, 5-20.

Bane, M., and Jencks, C. Five Myths About Your IQ. In N.J. Block and G. Dworkin (Eds.), The IQ Controversy. New York: Pantheon Books, 1976.

BASE (Bilingual Bicultural Assistance to Special Education), an ESEA Title IV-C Project. Instructional Modules, Department of Education, San Diego County, California, January 1982.

Ben-Zeev, S. The Effect of Spanish-English Bilingualism in Children from Less Privileged Neighborhoods on Cognitive Development and Cognitive Strategy. Working Papers on Bilingualism, 1977, 14, 83-122.

Ben-Zeev, S. The Influence of Bilingualism on Cognitive Development and Cognitive Strategy. Doctoral dissertation, University of Chicago, 1972.

Ben-Zeev, S. Influence of Bilingualism on Cognitive Development and Cognitive Strategy. Paper presented at the Child Language Research Forum, Stanford University, 1976.

Bergin, V. Special Education Needs in Bilingual Programs. Rosslyn, VA: National Clearinghouse for Bilingual Education, 1980.

Bernal, E. Assessment Procedures for Chicano Children: The Sad State of the Art. International Journal of Chicano Studies Research, 1977, 8.

Cornell, E. Curriculum Development for the Bilingual/Bicultural Exceptional Child. Paper prepared for the Regional Training Program to Serve the Bilingual/Bicultural Exceptional Child, Montail Educational Associates, Sacramento, CA, 1979.

Cornell, E., and Tucker, L. A Manual for Screening and Assessing Students of Limited English Proficiency. Paper presented at the Council for Exceptional Children's Conference on the Exceptional Bilingual Child, New Orleans, LA, 1981.

Bernstein, B. Social Class and Linguistic Development: A Theory of Social Learning. In Holsey, J. Floyd and A. Anderson (Eds.). Society, Economy and Education, [illegible] Free Press, 1961.

Binet, A., and Simon, T. Sur la necessite d'etablir un diagnostique scientifique des etats inferieurs de intelligence. Annee Psychologique, 1905, 11, 163-190.

Bland, E., Sabatino, D., Sedlak, R., and Sternberg, L. Availability, Usability and Desirability of Instructional Materials and Media for Minority Handicapped Students. Journal of Special Education, 1979, 13(2), 157-167.

Bloom, L. Language Development Form and Function in Emerging Grammars. Cambridge, MA: MIT Press, 1970.

Bloom, L., and Lahey, M. Language Development and Language Disorders. New York: John Wiley and Sons, 1978.

Bohen, A.E. Criterion-Referenced Assessment for the Teacher. Teachers College Record, 1973, 75, 117-126.

Bolen, D. Issues Relating to Language Choice--Hearing Impaired Infants from Bilingual Homes. Volta Review, 1981, 83, 410-412.

Bowd, A.D. Linguistic Background and Non-verbal Intelligence: A Cross-Cultural Comparison. Journal of Educational Research, 1974, 68(1), 26-27.

Bransford, L., Baca, L., and Lane, K. (Eds.) Cultural Diversity and the Exceptional Child. Reston, VA: Council for Exceptional Children, 1974.

Brim, O.G., Glass, D.C., Neulinger, J., Firestone, I.J. and Lerner, S.C. American Beliefs and Attitudes about Intelligence. New York: Russell Sage Foundation, 1969.

Brown, G., et al. The Condition of Education for Hispanic Americans. Washington, DC: National Center for Educational Statistics, 1980.

Brown, R. A First Language: The Early Stages. Cambridge, MA: Harvard University Press, 1973.

Bruck, M. The Suitability of Early French Immersion Programs for the Language Disabled Child. Canadian Journal of Education, 1978.

Bruck, M., Rabinovitch, M.S., and Oates, M. The Effects of French Immersion Programs on Children with Language Disabilities. Working Papers in Bilingualism, 1975, 9, 47-56.

Bryen, D. Special Education and the Linguistically Different Child. Exceptional Children (special issue), 589-66

Burt, M., Dulay, H., and Hernandez, E. Bilingual Syntax Measure Technical Booklet. New York: Harcourt Brace Jovanovich, 1976.

Carlson, H.B., and Henderson, N. The Intelligence of American Children of Mexican Parentage. Journal of Abnormal and Social Psychology, 1950, 45, 544-551.

Carringer, D.C. Creative Thinking Abilities of Mexican Youth; The Relationship of Bilingualism. Journal of Cross-Cultural Psychology, 1974, 5, 492-504.

Carrow, E. Test for Auditory Comprehension of Language. Austin: Learning Concepts, 1973.

Cazden, C. The Situation: A Neglected Source of Social Class Differences in Language Use. Journal of Social Issues, 1970, 26, 35-60.

Cazden, C. Child Language and Education. New York: Holt, Rinehart, and Winston, 1972a.

Cazden, C. Language in Early Childhood Education. National Association for the Education of Young Children. Washington, DC: 1972b.

Chan, K., and Rueda, R. Poverty and Culture in Education: Separate but Equal. Exceptional Children, 1979, 45, 422-428.

Chinn, P. Curriculum Development for Culturally Different Exceptional Children. Journal of the Teacher Education Division, Council for Exceptional Children, 1979, 2(4), 59-68.

Chinn, P. The Exceptional Minority Child: Issues and Answers. Exceptional Children, 1979, 45(7), 532-536.

Chomsky, N. Aspects of the Theory of Syntax. Cambridge, MA: The MIT Press, 1965.

Choy, S.J., and Dodd, D.H. Standard-English-Speaking and Non-Standard Hawaiian-English Speaking Children: Comprehension of both Dialects and Teachers' Evaluations. Journal of Educational Psychology, 1976, 68, 184-193.

Cleary, T., Humphreys, L., Kendrick, S., and Wesman, A. Educational Uses of Tests with Disadvantaged Students. American Psychologist, 1975, 30, 15-41.

[illegible] Language Maintenance in Spanish-Speaking Communities in the [illegible] E. Hernandez-Chavez, Cohen, and A. Bartstano (Eds.), El Lenguaje de los Chicanos. Washington, DC: Center for Applied Linguistics, 1975.

[illegible] and Swain, M. Bilingual Education: The Immersion Model in the North American Context. TESOL Quarterly, 1976, 10, 45-53.

Cohen, R.A. Conceptual Styles, Cultural Conflict, and Nonverbal Test of Intelligence. American Anthropologists, 1969, 71(5), 828-856.

Cole, L., and Snope, T. Resource Guide to Multicultural Tests and Materials. [illegible] on Speech, Language and Hearing Association, 1981, 23(6).

Colfer, C., Baca, L., and Kalk, M (Eds.), Bilingual Special Edu Annotated Bibliography (Vol. 2). Boulder: University of Colorado, 1982.

Condon, E.C., Peters, J.Y., and Sueiro-Ross, C. Special Education and the Hispanic Child: Cultural perspectives. Reston, VA: Council for Exceptional Children, 1979.

Cortes [illegible]o, G., Malgady, R., and Vazquez, C. A Comparison of the Murray-TAT and a New Thematic Apperception Test for Urban Hispanic Children. Hispanic Journal of Behavioral Sciences, 1981, 3(3), 291-300.

Cornejo, R. A Criterion-Referenced Assessment System for Bilingual Reading. California Journal of Educational Research, 1974, 25, 294-301.

Cortez, L. A Student's Reaction to Bilingual Special Education. Paper presented at the Annual Conference of the Council for Exceptional Children, 1977.

Coulopoulos, D. In-Service Training of School Psychologists. In Nondiscriminatory Assessment of Bilingual Children. Simmons College, Boston, MA: 1980. (Unpublished paper.)

Cummins, J., and Gulutsan, M. Some Effects of Bilingualism on Cognitive Functioning. Edmonton, Alberta: University of Alberta Press, 1973.

Cummins, J. Educational Implications of Mother Tongue Maintenance in Minority-Language Children. In S.T. Carey (Ed.), The Canadian Language Review, 1978, 34, 395-416.

Cummins, J. Linguistic Interdependence and the Educational Development of Bilingual Children. Review of Educational Research, 1979, 49, 222-251.

Curtis, J. and Ligon, G.D. When Is a LEP Student No Longer LEP? Bilingual Education Paper Series, National Dissemination and Assessment Center, California State University, Los Angeles, 3(8), 1980.

Darcy, N.T. A Review of the Literature on the Effects of Bilingualism Upon the Measurement of Intelligence. Journal of Genetic Psychology, 1946, 37, 21-44.

[illegible] The Intelligence Quotients of Mexican-American [illegible] and Society, 1963, 36, 37-306.

[illegible] Assessing Communicative Competence. In [illegible] and [illegible] (Eds.), Communication Assessment of the Bilingual Bicultural Child. Baltimore, MD: University Park Press, 1981, [illegible] 198.

Dew, N.A., McColum, P.A., Cieslak, V.A., and Erickson, J.G. Discrete Point Language of Bilinguals: A Review of Selected Tests. In Erickson, J., and Omark, D. (Eds.). Communication Assessment of the Bilingual/Bicultural Child. Baltimore, MD: University Park Press,

[illegible] tion in Education, 1973, 1, 34-38.

DeAvila, E. Mainstreaming Ethnically and Linguistically Different Children: An Exercise in Paradox or a New Approach? In R. Jones (Ed.), Mainstreaming and the Minority Child. Reston, VA: Council for Exceptional Children, 1976, 93-108.

DeAvila, E., and Duncan, S. A Few Thoughts About Language Assessment: The Lau Decision Reconsidered. Bilingual Education Paper Series. National Dissemination and Assessment Center, California State University, Los Angeles, 1(8), 1978.

DeAvila, E., and Havassy, B. Piagetian Alternative to IQ: Mexican American Study. In N. Hobbs (Ed.), Issues in the Classification of Children, San Francisco: Jossey-Bass, Inc., 1975.

DeAvila, E., and Havassy, B. IQ Tests and Minority Children. Dissemination Center for Bilingual Bicultural Education. Austin, Texas: 1974.

DeAvila, E., and Havassy, B. The Testing of Minority Children: A Neo-Piagetian Approach. Today's Education, November-December, 1974.

DeAvila, E., and Pulos, S.M. A Piagetian-based Group Administered Test of Developmental Level: The Cartoon Conservation Scales. Manuscript submitted for publication, 1976.

Dent, H. Assessing Black Children for Mainstream Placement. R. Jones (Ed.), Mainstreaming and the Minority Child. Reston, VA: Council for Exceptional Children, 1976.

Dew, N. Designing an Individualized Math LAB Program for the Bilingual LD Student (Grades 4-9). Arlington, VA (ED 208606 ERIC Document Reproduction Service).

Dew, N. National Origin Minority Children and Standardized Achievement Testing: Working Papers. Paper presented at the Evaluation and Assessment Conference for Educators of National Origin Minority Students. Indianapolis, 1979.

Diaz, [illegible] for English Speakers and Intelligence Testing. Paper presented at the Illinois Association for Citizens with LD, Chicago, 1979.

Diaz, N., and Perlman, R. Protection in Evaluation Procedures for Linguistically Different Minority Children. Paper presented at the Council for Exceptional Children's Convention, Philadelphia, 1980.

Diaz, N., and Perlman, R. Specialized Training for Bilingual Teachers of Exceptional Children. Paper presented at the National Association for Bilingual Education Conference, 1981.

Diaz, V. Bilingual Exceptional Education Guide. Paper presented at the Council for Exceptional Children's National Conference on Bilingual Exceptional Students, New Orleans, 1981.

Drew, C. Criterion-Referenced Assessment of Minority Group Children. Journal of School Psychology, 1973, 11, 323-329.

Duffy, J., Arvia, J., Tucker, J., and Ysseldyke, J. Nonbiased Assessment: A Need for Operationalism. Exceptional Children, 1981, 47(6), 427.

Duray, H., Burt, M., and McKeon, D. Testing and Teaching Communicatively Handicapped Hispanic Children: The State of the Art 1980. Paper prepared for the California Department of Education, Grant No. 38-B161-LO-B29-7100, 1980.

Dunn, L.M. Special Education for the Mildly Retarded -- Is Much of It Justifiable? Exceptional Children, 1968, 34, 5-22.

Dyer, H. Parents Can Understand Testing. Columbia, MD: The National Committee for Citizens in Education, 1980.

Erickson, J., and Omark, D. (Eds.). Communication Assessment of the Bilingual Bicultural Child. Baltimore, MD: University Park Press, 1981.

Fair, G. Career Development for Exceptional Individuals. Reston, VA: Council for Exceptional Children.

Feldman, C., and Shen, M. Some Language-Related Cognitive Advantages of Bilingual Five-year-olds. Journal of Genetic Psychology, 1971, 118, 235-244.

Felker, D. Building Positive Self-Concepts. In H. Tueba and C. Barnet-Mizraki, (Eds.), Bilingual Multicultural Education and the Professional. Rowley, MA: Newbury House Publishers, Inc., 1979.

Figueroa, R. Sompa and the Psychological Testing of Hispanic Children. Metas, 1982, 2(3).

Fischgrund, J. Language Intervention for Hearing Impaired Children from Linguistically and Culturally Diverse Backgrounds. Topics in Language Disorders, 1982, 2(3), 57-66.

Ervin, E. [illegible] Attitudes and Intellectual Attributes of Children in Dual Grade Bilingual/Bicultural Programs. Journal of Educational Research, 1974, 67, 323-328.

Fishman, J. Bilingualism, Intelligence and Language Learning. In F. Cordasco (Ed.), Bilingualism and the Bilingual Child: Challenges and Problems. New York: Arno Press, 1978, pp. 227.

Fishman, J. Language in Sociocultural Change. Stanford, CA: Stanford University Press, 1972.

Fishman, J., and Cooper, R. The Sociolinguistic Foundations of Language Testing. In R. Lugton (Ed.), Advances in Language Testing, Series 2, Arlington, VA: Center for Applied Linguistics, 1975.

Fishman, J., et al., Guidelines for Testing Minority Group Children. In F. Cordasco (Ed.), The Bilingual-Bicultural Child and the Question of Intelligence. New York: Arno Press, 1978.

Franks, D.J. Ethnic and Social Status Characteristics of Children in EMR and LD Classes. Exceptional Children, 1971, 37, 537-538.

Fuentes, F. The Education of Non-Metro Hispanics. U.S. Department of Agriculture, Rural Development Research Report Number 31, 1981.

Frechtling, J. The Use and Misuse of Norm-Referenced Test Scores for Decision Making at the Local School Level: A School District's Perspective. Center on Evaluation, Development, and Research Quarterly, Spring, 1982, 14-17.

Fuchigami, R. Teacher Education for Culturally Diverse Exceptional Children. Exceptional Children, 1980, 46(8), 634-644.

Gallegos, R., Garner, A., and Rodriguez, R. The Exceptional Bilingual Child. Reston, VA: Council for Exceptional Children, 1978.

Garcia, A.B., and Zimmerman, B.J. The Effect of Examiner Ethnicity and Language on the Performance of Bilingual Mexican-American First Graders. Journal of Social Psychology, 1972, 87, 3-11.

Garcia, R.L. Unique Characteristics of Exceptional Bilingual Students. Paper presented at regional meeting of USOE, Kansas City, MO, 1976.

Garcia-Moya, R. (Ed.), Bueno Center for Multicultural Education. Monograph series Vol. 3(1), 1982, University of Colorado, Boulder.

Garth, T.R., Elson, T., and Morton, M.M. The Administration of Non-Language Intelligence Tests to Mexicans. Journal of Abnormal and Social Psychology, 1936, 31, 53-58.

Garwood, G. Educating Young Handicapped Children: A Developmental Approach. Germantown, MD: Apen, 1979.

[illegible] An Interdisciplinary Approach to the Education of Hispanic Handicapped Children. Education Unlimited, 1979, 1(1), 24-26.

[illegible] Head, S.W., and Rucker, C.N. Labels and Teacher Expectations. Exceptional Children, 1974, 41, 464-465.

Schreiber, D. and Roth, W. The Unexpected Minority: Handicapped Children in America. New York: Harcourt Brace Jovanovich, 1980.

Gonzalez, G. Language, Culture and Exceptional Children. In L. Bransford, L. Baca and L. Karen (Eds.), Cultural Diversity and the Exceptional Child. Reston, VA: The Council for Exceptional Children, 1974, 40(8), 565-570.

[illegible] Skills and Competencies Needed by the Bilingual Bicultural Special Educator. Paper presented to the Professional Training Effort on Inter Agency Meeting Sponsored by the Bureau for the Education of the Handicapped, Division of Personnel Preparation, 1978.

Grotberg, E.H. Learning Disabilities and Remediation in Disadvantaged Children. Review of Educational Research, 1965, 35, 413-425.

Guilford, J.P., The Nature of Human Intelligence, New York: McGraw-Hill, 1967.

Hakes, D. Psychological Aspects of Bilingualism. In F. Cordasco (Ed.), Bilingualism and the Bilingual Child. New York: Arno Press, 1978.

Hendrickson, S. An Approach to Speech and Language Instruction for the Spanish-Speaking Preschooler. St. Mary's Hospital, Tucson, AZ: 1978. Unpublished paper.

Herbert, C. Natural Language Assessment. In H. Tueba and C. Barnett Mizraki (Eds.), Bilingual Multicultural Education and the Professional: From Theory to Practice, Rowley, MA: Newbury House Publishers, Inc., 1979.

Hickey, T. Bilingualism and the Measurement of Intelligence and Verbal Learning Ability. Exceptional Children, 1972, 39, 24-28.

Hill, W. Variations in the Rationale of Referrals Leading to Educable Mentally Retarded Placement of Anglo, Black, and Spanish Speaking Students. Doctoral dissertation, 1975.

Hilliard, A.G. Cultural Diversity and Special Education. Exceptional Children, 1980, 46(8), 584-588.

Hobbs, N. (Ed.) Issues in the Classification of Children (Vol. 2). San Francisco, CA: Jossey-Bass, 1975.

Houts, P.L. Standardized Testing in America. The National Elementary Principal, 1975, 54, 2-3.

[illegible]

[illegible]

[illegible] Issues of Comparative Social and Educational Status. The Hispanic American Educational Resource Reference. Washington, D.C., April [illegible].

[illegible] on Bilingual/Bicultural Special Education Personnel Preparation. Bethesda, MD: ACCESS, Inc., 1980.

James, P. James Language Dominance Test (2nd ed.). Austin, TX: Learning Concepts, 1975.

[illegible], Mary. [illegible] Children, 585-588. (Unpublished paper.)

Jensen, A.R. How Much Can We Boost IQ and Scholastic Achievement? Harvard Educational Review, 1969, 39, 1-123.

Jensen, A.R. Learning Abilities of Mexican-American and Anglo-American Children. California Journal of Educational Research, 1961, 12, 147-159.

[illegible], P. [illegible] Stigma in Special Education. Exceptional Children, [illegible].

[illegible], P. (Ed.). Mainstreaming and the Minority Child. Reston, VA: Council for Exceptional Children, 1976.

Jones, W.R. Bilingualism and Intelligence. Cardiff: University of Wales Press, 1959.

Kagan, J. What Is Intelligence?. In A. Gartner, C. Greer and F. Riessman (Eds.), The New Assault on Equity: I.Q. and Social Stratification. New York: Harper and Row, 1974.

Kagan, S., and Zahn, L. Field Dependence and the School Achievement Gap Between Anglo-American and Mexican-American Children. Journal of Educational Psychology, 1975, 67(5), 643-650.

Kane, K. Bilingual-Bicultural Assistance to Special Education. San Diego, CA: ESEA Title IV-C Project, Department of Education, 1981.

Katz, D. Training Bilingual Parents as Career Educators for Handicapped Youth. Project funded by the U.S. Department of Education, Center for Advanced Study in Education, Institute for Research and Development in Occupational Education, City University of New York, 1981.

Killian, L.R. Cognitive Test Performance of Spanish-American Primary School Children: A Longitudinal Study, Final Report. Kent State University, OH: 1971.

Kittell, J.E. Intelligence Test Performance of Children from Bilingual Environments. Elementary School Journal, 1963, 64, 76-83.

[illegible]

[illegible] The Effects of Bilingualism on the Intellectual [illegible] and Educational Implications. New York: Academic Press, [illegible]

Lambert, W.E., and Tucker, G.R. The Bilingual Education of Children. Rowley, MA: Newbury House, 1972.

[illegible] Before the Gap Between Bilingual and Special Education [illegible] 1980.

Lanfranchi, P. Classroom Activities: Non verbal Communication. Massachusetts Department of Education, Bilingual Special Education Project, March, 1980.

Lanfranchi, P. Diagnosis and Intervention of Bilingual Special Education: Searching for New Alternatives. Massachusetts Department of Education, Bilingual Special Education Project, May 1978.

[illegible], L.M. Bilingualism in Three U.S. Hispanic Groups: Contextual Use of Language by Children and Adults in Two Families. Journal of Educational Psychology, 1979, 67, 617-627.

Laosa, L.M. Historical Antecedents and Current Issues in Nondiscriminatory Assessment of Children's Abilities. In Bias Toward None. Lexington, KY: Coordinating Office of Regional Resource Center, 1976.

Laosa, L.M. Inequality in the Classroom: Observational Research on Teacher-Students Interactions. Aztlan, International Journal of Chicano Studies Research, 1979, 8, 51-67.

Laosa, L.M. Nonbiased Assessment of Children's Abilities: Historical Antecedents and Current Issues. In T. Oakland (Ed.), Psychological and Educational Assessment of Minority Children. New York: Brunner/Mazel, 1977.

Laosa, L.M. Reform in Educational and Psychological Assessment: Cultural and Linguistic Issues. Journal of the Association of Mexican American Educators, 1973, 1, 19-24.

Laosa, L.M., J.D. Schwartz, R., and Diaz-Guerrero. Perceptual Cognitive and Personality Development of Mexican and Anglo-Americans as Measured by Human Figure Drawings. Development Psychology, 1974, 10, 131-139.

Lerman, A. Discovering and Meeting the Educational Needs of Hispanic Hearing Impaired Children. CREED VII Final Report. New York: Lexington School for the Deaf, 1979.

Lesser, G.S., Fifer, G., and Clark, C. Mental Abilities of Children from Different Social Class and Cultural Groups. Monographs of the Society for [illegible] in Child Development. Chicago: University of Chicago Press, 1965.

[illegible] Review, 1967, 37, [illegible]

Loera, B. Succesful Practices and Problem Areas in Personnel Preparation. Multicultural Special Education Network, April, 1982, 4-6.

Looking at the Developmental Disabilities Program. Human Development News. Department of Health and Human Services, Dec., 1981.

Mahakian, C. Measuring Intelligence and Reading Capacity of Spanish-Speaking Children. Elementary School Journal, 1939, 39, 760-768.

Mann, L., and Sabatino, D. (Eds.) The First Review of Special Education. Philadelphia, JSE Press, 1973.

Manuel, H.T., and Hugues, L.S. The Intelligence and Drawing Ability of Young Mexican Children. Journal of Applied Psychology, 1932, 16, 382-387.

Martinez, H. (Ed.) Special Education and the Hispanic Child. ERIC Clearinghouse on Urban Education, Institute for Urban and Minority Education, Teachers College, Columbia University, New York, 1981.

Martinez, O.G. Foreword: Bilingual Testing and Assessment. Proceedings of BABEL's Workshop and Preliminary Findings, Multilingual Assessment Program. Berkeley, CA: Bay Area Bilingual Education League, 1972.

McCollum, P. Concepts in Bilingualism and Their Relationship to Language Assessment. In J. Erickson and D. Omark (Eds.), Communication Assessment of the Bilingual Bicultural Child. Baltimore, MD.: University Park Press, 1981.

Mercer, J. A Policy Statement on Assessment Procedures and the Rights of Children. Harvard Educational Review, 1974, 44(1).

Mercer, J. Implications of Current Assessment Procedures for Mexican American Children. Journal of the Association of Mexican American Education, 1973, 1, 25-33.

Mercer, J. Institutionalized Anglocentrism: Labeling Mental Retardates in the Public Schools. In P. Orleans and W. Russell (Eds.), Race, Change, and Urban Society. Los Angeles: Sage Publication, 1971.

Mercer, J., and Kewis, J. System of Multicultural Pluralistic Assessment. New York: Psychological Corporation, 1978.

Milofsky, D. Schooling the Kids No One Wants. New York Magazine, Jan. 2, 1977, 24-33.

Miranda Correia, L. The Goodenough-Harris Drawing Test and Ethnicity. Bilingual Journal, 1980, 5(1) 13-14.

[illegible], D. A Strategy for the Assessment of Intellectual Functioning. Psychology in the Schools, 1980, 17(1).

Mowder, B. Assessing the Biiingual Handicapped Student. hology in the Schools, 1979, 16(1).

New Dimensions in Community Service, Inc. The Developmental Disabilities Movement: A National Study of Minority Participation. San Francisco, CA: 1979.

Newland, T.E. Assumptions Underlying Psychological Testing. In T.D. Oakland and B.N. Phillip (Eds.), Assessing Minority Group Children, A Special Issue of the Journal of School Pyschology, New York: Behavioral Publications, 1973.

Noriega, D. Resource Directory, Massachusetts Department of Education: Bilingual Special Education Planning Project, 1980.

Oakland, T.D. Assessing Minority Group Children: Challenges for School Psychologists. Journal of School Psychology, 1973.

Oakland, T.D. Nonbiased Assessment: Basic Considerations. Unpublished Paper. Austin, TX: University of Texas, 1980.

Oakland, T.D., (Ed.) Psychological and Educational Assessment of Minority Children. New York: Brunner/Mazel, Inc., 1977.

Olmedo, E. Psychological Testing and the Chicano: A Reassessment. In Chicano Psychology. New York: Academic Press, 1977, pp. 175-195.

Ortega, G. Special Education Placement and Mexican Americans. El Grito: A Journal of Contemporary Mexican-American Thought, 1971, 4(4).

Ortiz, A., and Yates, J. Exceptional Hispanics: Implications for Special Education Services and Manpower Planning. The University of Texas at Austin, 1981.

Ortiz, C. A Model Bilingual/Bicultural Program for Hearing and Language Impaired Children from Spanish Speaking Homes. Proposal submitted to the Office of Special Education, U.S. Department of Education, 1979.

Ortiz, C. Training Educators to Meet the Needs of Hispanic Exceptional Students: A Perspective. Special Education and the Hispanic Child. In H. Martinez (Ed.), New York: ERIC Clearinghouse on Urban Education, 1981.

Ortiz, C., and Ball, G. The Enchilada Test. Institute for Personnel Effectiveness in Children. 1972.

Padilla, A.M., and Garza, D.M. Six Cases of Cultural Myopia. The National Elementary Principal, 1975, 54(4), 53-58.

Peal, E., and Lambert, W.E. The Relation of Bilingualism to Intelligence. Psychological Monographs, 1962, 76, 1-23.

Pedraza, P., and Pousada, A. Bilingualism In and Out of School. Unpublished paper. New York: Center for Puerto Rican Studies, 1980.

Pedone, R. The Retention of Minority Languages in the United States. Washington, DC: National Center for Educational Statistics, 1980.

Perrone, V. The Abuses of Standardized Testing. Bloomington, IN: Phi Delta Kappa Educational Foundation, 1977.

Peters and Yates. Neurologically and Perceptually Impaired Bilingual Students: Their Identification and Evaluation. Exceptional Children, Vol. 12.

Philippus, M.J. Test Prediction of School Success of Bilingual Hispano American Children. Denver, CO: Denver Department of Health and Hospitals, 1967.

Pintner, R., and Keller, R. Intelligence Tests of Foreign Children. Journal of Educational Psychology, 1922, 13, 214-222.

Pizzillo, J. Bilingual and ESL Needs Assessment in Seven Southern New Jersey Counties. (Unpublished paper.) Glassboro State College, NJ: 1981.

Price-Williams, D.R. and Ramirez, M. The Relationship of Culture to Educational Attainment. Houston, Rice University Center for Research in Social Change and Economic Development, 1969.

Pryswansky, W.B. The Influence of Examiner's Race on the Cognitive Functioning of Urban and Rural Children of Different Races. Journal of School Psychology, 1974, 12, 2-7.

Public Law 94-142, Education for All Handicapped Children Act, November 29, 1975.

Ramirez, A.G., Arce-Torres, E., and Politzer, R.L. Language Attitudes and the Achievement of Bilingual Pupils. Research and Development Memorandum No. 146, Stanford, CA: Stanford Center for Research and Development in Teaching, School of Education, Stanford University, 1976.

Ramirez, M., and Gonzalez, A. Mexican-Americans and Intelligence Testing. In M.M. Mangold (Ed.), La causa chicana: The Movement for Justice. New York: Family Services Association of America, 1972.

Ramirez, M., and Castaneda, A. Cultural Democracy, Bicognitive Development, and Education. New York: Academic Press, 1974.

[illegible] Spanish English Bilingual Education in the United States: Current [illegible]

[illegible] M. Cognitive Styles and Cultural Democracy [illegible] Quarterly, 1973, 53, 895-904.

Report Calls for Balance in Use of Test Scores. Education Daily, February 3, 1982.

Resource Manual for the Development and Evaluation of Special Programs for Exceptional Students. Evaluating the Non-English Speaking Handicapped, Vol. III-B, Florida Education Department, FL: 1981.

Reynolds, M. A Framework for Considering Some Issues in Special Education. Exceptional Children, 1962, 28, 367-370.

Reynolds, M., and Birch, J. Teaching Exceptional Children in All American Schools. Reston, VA.: Council for Exceptional Children, 1977.

Reynolds, M.C. (Ed.) Special Education in School System Decentralization. Minneapolis: LII/Department of Special Education, University of Minnesota, 1975.

Riojas, E. Determination of Giftedness in Lower Socio-eConomic Mexican American Students. Paper presented at the Annual Meeting of the American Educational Research Association, New York City, 1982.

Rivera, K. Non-Biased Assessment of Minority Children. Master's Thesis, Bank Street College of Education, 1981.

Rivera, R. Nondiscriminatory Assessment of the Gifted Bilingual Child. Paper presented at the Topical Conference of the Exceptional Bilingual Child sponsored by the Council for Exceptional Children in New Orleans, 1981.

Rodriguez, C., Cole, J., Stile, S., and Gallegos, R. Bilingualism and Biculturalism for the Special Education Classroom. Journal of the Teacher Education Division. Council for Exceptional Children, 1979, 2(4), 69.

Rodriguez, F., and Olivares, L.E. Bilingual Children's Language Proficiency: An Ethnographic Study. Paper presented at the annual meeting of the American Educational Research Asociation, New York City, 1982.

Salinas, G. Mexican Americans and the Desegregation of Schools in the Southwest. A Journal of Contemporary Mexican American Thought, 1971, 10(4).

Salvia, J., and Ysseldyke, J. Assessment in Special and Remedial Education. Boston: Houghton-Mifflin, 1978.

Samuda, R. Problems and Issues in Assessment of Minority Group Children. In R. Jones (Ed.), Mainstreaming and the Minority Child. Reston, VA: Council for Exceptional Children, 1976.

[illegible] Bilingualism and Mental Development. Journal of Applied Psychology, 1934, 18, 765-772.

Sanders, M., and Scholz, J.P. Field Independence Match-Mismatch and School Achievement Gains of Anglo American and Mexican American Children. Paper presented at the Western Psychological Association Meeting, Los Angeles, April, 1976.

Sapir, S. Educational Intervention. In H. Rie and E. Rie, (Eds.), Handbook on Minimal Brain Dysfunction: A Critical View. New York: John Wiley and Sons, 1980, 569-588.

Sapir, S., and Nitzburg, A. Children with Learning Problems. New York: Brunner/Mazel, 1973.

Sapir, S., and Wilson, B. A Professional's Guide to Working with the Learning Disabled Child. New York: Brunner/Mazel, 1978.

Sato, I. The Culturally Different Gifted Child--The Dawning of His Day. Exceptional Children, 1974, 40(8).

Saville, M.R, and Troike, R.C. A Handbook of Bilingual Education. Washington, D.C.: TESOL, 1971.

Schultz, R. Resource Materials Available in Spanish Concerning Exceptional Children. Illinois Research Center for Exceptional Bilingual Children.

Scott, S. The Relation of Divergent Thinking to Bilingualism: Cause or Effect. Unpublished research report, McGill University, 1973.

Sebatino, D., Kelling, K., and Hayden, D. Special Education and the Culturally Different Child: Implications for Assessment and Intervention. Exceptional Children, 1973, 39(7), 563-567.

Shuy, R.W. Quantitative Language Data: A Case For and Some Warnings Against. Anthropology Education Quarterly, 1977, 7, 73-82.

Silliman, B., and Alexander, D. Legal and Ethnical Considerations of School Placement for Exceptional Children. Paper presented at the Annual Counseling and Vocational Educational Conference on Placement, Blacksburg, VA, 1976.

Silverman, R.J., and Noa, J.D. Oral Language Tests for Bilingual Students -- An Evaluation of Language Dominance and Proficiency Instruments. Portland, Oregon: Center for Bilingual Education, Northwest Regional Educational Lab, 1976.

[illegible] UNESCO, 1976.

Slobin, D. Psycholinguistics. Gleenview, IL: Scott, Foresman and Company, 1971.

Smith, J. A Comparison of Projective Test Responses Elicited by Two Examiners from Mexican-American Boys and Anglo-American Boys. Doctoral dissertation, University of New Mexico, 1981.

Smith, J. The Education of Mexican-Americans: Bilingual, Bicognitive, or Biased? Journal of the Teacher Education Division, Council for Exceptional Children, 1979, 2(4), 37-48.

Spolsky, B. (Ed.) The Language Education of Minority Children. Rowley, MA: Newbury House Publishers, Inc., 1972.

Starks, J. Summary Proceedings of a Working Institute on Bilingual Special Education, Boulder, Bueno Center for Multicultural Education, University of Colorado, 1982.

Strong, L. Language Disability in the Hispano-American Child. Towson, MD: Bulletin of the Orton Society, 1973, 23,

Supreme Court Agrees to Rule on Deaf Education Case. Update. Cambridge, MA: Center for Law and Education, Inc., 1982.

Talamantes, N. A Study of the Articulary Production of Spanish Consonants and Semivowels by a Group of Spanish Speaking Children. Texas Journal of Audiological and Speech Pathology, 1981, 6, 16-20.

Thomas, A., et al. Examiner Effect in I.Q. Testing of Puerto Rican Working Class Children. American Journal of Orthopsychiatry, 1971, 41(5).

Toronto, A.S. Leverman, D., Hanna, C., Rosenweig, P., and Maldonado, A. Del Rio Language Screening Test (English/Spanish). Austin, Texas: National Educational Laboratories Publishers, 1975.

Torrance, E.D., Gowan, J.C., William, J.M., and Aliotti, N.W. Creative Functioning of Monolingual and Bilingual Children in Singapore. Journal of Educaton Psychology, 1970, 61, 72-75.

Towers, R.L. Toward Nonbiased, Cross-Cultural Assessment of Limited English Proficient Students in Montgomery County, Maryland Public Schools. Paper presented at the Council for Exceptional Children Topical Conference on the Exceptional Bilingual Child, New Orleans, 1981.

[illegible] G.N. [illegible] Development of Reading Skills within [illegible] Program. In S.S. Smiley and J.C. Jones, Language and Reading. Townes, Bellingham, WA: Western Washington State College, 1975.

Tucker, J.A. Ethnic Proportions in Classes for the Learning Disabled: Issues in Nonbiased Assessment. Journal of Special Education, 1980, 14(1), 93-105.

Twomey, S., Gallegos, C., Andersen, L., Williamson, B., and Williamson, J. A Study of the Effectiveness of Various Nondiscriminatory and Linguistically and Culturally Appropriate Assessment Criteria for Placement of Minority Students in Special Education Programs. Merced, CA: Planning Associates, 1980.

United States General Accounting Office, Unanswered Questions on Educating Handicapped Children in Local Public Schools. Washington, DC: U.S. Government Printing Office, 1981 (HRD-81-43).

Vasquez, J. Locus of Control, Social Class and Learning. Bilingual Education Paper Series. Los Angeles, CA: National Dissemination and Assessment Center, 1(7), 1978.

Veltnam, C. The Assimilation of American Language Minorities: Structure, Pace and Extent. A report prepared for the National Center of Educational Statistics, U.S. Department of Education, Washington, DC, 1979.

Wagner, H. Attitudes Toward and Of Disadvantaged Students. Adolescence, 1972, 7(28), 435-446.

Walters, J. Language Variation in Assessing Bilingual Children's Communicative Competence. Bilingual Education Paper Series. Los Angeles, CA: National Dissemination and Assessment Center, 1979, 3(3).

Watson, et al. Nondiscriminatory Assessment Test Matrix, (Vol. II). California Association of School Psychologists and Psychometrics, 1980.

Weatherly, R., and Lipsky, M. Street-level Bureaucrats and Institutional Innovation: Implementing Special Education Reform. Harvard Educational Review, 1977, 47(2), 171-197.

Weber, D.B., and Rockoff, E.S. The Relationship between Demographic Characteristics of Local Education Agencies and Compliance with P.L. 93-380 and P.L. 94-142. Journal of Special Education, 1980, 14(2), 243-251.

Wechsler, D. Wechsler Adult Intelligence Scale. Baltimore, MD: The Williams and Wilkins Co., 1954.

Weikart, D. Early Childhood Special Education for Intellectually Subnormal and/or Culturally Different Children. Ypsilanti, MI: High/Scope Educational Research [illegible] September 1971.

Williams, J. Improving Educational Opportunities for Mexican-American Handicapped Children. U.S. Department of Education, 1968.

Williams, R. Danger: Testing and Dehumanizing Black Children. The School Psychologist, 1971, 25, 11-13.

Williams, R. The Bitch Test (Black Intelligence Test of Cultural Homogeneity). St. Louis, MO: Williams and Associates, 1972.

Woodford, P. The Importance of Testing. Bilingual Education: Current Perspectives. Washington, DC: Center for Applied Linguistics, 1977, Vol. 4.

Wolfran, W. Speech Pathology and Dialect Differences. Dialects and Educational Equity. Washington, DC: Center for Applied Linguistics, 1979.

Wyszewianki-Langdon, H. Determining a Language Disorder in a Bilingual Spanish-English Population. Doctoral dissertation, Boston University, School of Education, Boston, MA: 1977.

List of Cases

Puerto Rican New York v. Board of Education
72 Civ. 4002 (S.D.N.Y., 1972)

Covarrubias v. San Diego School District
Civil Action No. 6-21; 36 R.F.P. (N.D. Cal.,1970).

Diana v. State Board of Education of California
Civil Action No. c70, 37 R.F.P. (N.D. Cal., 1973).

Dyrcia v. New York City Board of Education
79 Civ. 270 (1979).

Hobsen v. Hansen
269, Supp. 401 (1967).

Jose P. v. Ambach
79 Civ. 270, New York (1979).

Larry P. v. Riles
343 F. Supp. 1306 (1972).

Lau v. Nichols
44 U.S. 563 (1974).

Lora v. The Board of Education, New York
456 F. Supp. 1211 (1978).

Mills v. Board of District of Columbia
384 F. Supp. 866 (D.D.C., 1972).

Pase v. Hannon, Gabe Kamowiz
Chicago (1978)

United Cerebral Palsy v. New York City Board of Education
79 Civ. 560 (1979).