The Role of Language Assessment Data in Diagnosis and Intervention for Linguistically/Culturally Different Students.

Findings are reviewed from a descriptive study which evaluated special education placement of Hispanic students. A clinical case study approach was used to analyze student characteristics from individual program folders, and policy and practice were examined. The appropriateness of the data, expertise of the professionals, and the role of the languages of the bilingual and limited English proficient (LEP) students were examined. Findings revealed that: the linguistic characteristics of Hispanics, bilingual, and LEP students were evaluated with the same instrumentation used for native English speakers; a minimal role was ascribed to the native language in the evaluation process; English speech and language production and poor academic performance along with teacher referral were the most significant variables determining special education placement; and professionals' data analysis demonstrated limited professional abilities and knowledge related to special linguistic and culturally different populations. Recommendations are offered for professionals, including greater emphasis in teacher preparation programs on working with linguistically/culturally different students; additional training for diagnosticians; and increased focus on identifying best practices for referral, assessment, diagnosis, placement, and intervention of bilingual and LEP students. (CL)
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THE ROLE OF LANGUAGE ASSESSMENT DATA
IN
DIAGNOSIS AND INTERVENTION
FOR
LINGUISTICALLY/CULTURALLY DIFFERENT STUDENTS

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Introduction

Documented inappropriate special education placements involving language minority students (Mercer, 1973; Shepard and Smith, 1981), indicate certain professional limitations. According to recent findings (Carpenter, 1983; Garcia, 1984; and Maldonado-Colon, 1984), professionals involved in the process of evaluation are still not able to distinguish between data/information needed to diagnose a speech or language or learning disorder among native speakers, and information/data required to identify a disorder among linguistically/culturally different children. Deviant observations among this population require that a certain distinction be made to unquestionably separate characteristic behaviors of a disorder in these areas, from overlapping characteristics of second language acquisition among non-traditional populations.

An indication that professionals do not understand the characteristics of the second language acquisition process, and their overlap with characteristics of language disorders or deficiencies among native speakers of English, is their
treating children as pathological cases regardless of a language background which reflects exposure to different linguistic conditions, that is, possibly to an environment, and particularly a language, characterized by differences. In Canaca, Cummins (1980) found a similar pattern among professionals involved in the evaluation of immigrant children. Cummins' data suggests that if a non-native child speaks English, regardless of its quality, he/she is automatically considered to possess the same skills and linguistic background as a native speaker of the language. That is, he/she is considered proficient enough to compete with native speakers and is expected to perform as one. Consequently, data interpretation, decisioning and program assignment are based upon this misconception which has the potential, eventually, to limit academic learnings as measured by standardized achievement tests, or worse, to lead to learning difficulties and referral to special education (Cummins, 1982).

Assessment, originally a scientific approach, requires optimal conditions for implementation, as well as careful selection of the most appropriate procedures and tools to capture performance—linguistic and cognitive. Language, the most common medium through which performance is estimated and predicted, and academic growth is assessed, requires a certain level of linguistic skills to support optimal evaluation and performance. Of significance is, that
this factor critical to the assessment process, can enhance or inhibit optimal performance. Thus, professionals which diagnose problems, disorders or disabilities in linguistically/culturally different children, are expected to collect as much information as possible, including, but not being limited to: (a) the selection and administration of a language proficiency measure in each language, along with other measures or procedures considered appropriate to evaluate a suspected handicap or disability; (b) documentation of the language of the home as well as an estimate of the quality of language usage; (c) documentation of introduction to pre-academic experiences related to what is being evaluated; (d) information on any previous intervention in which the child was involved, and (e) child's linguistic preference by setting (e.g., home, classroom, play area). In other words, it is the input of such language data sources which guides appropriate assessment, and facilitates interpretation, as well as the selection of additional procedures, or measures; including the collection of additional data from other sources in order to develop a differential diagnosis (Mattes and Omark, 1984). That is, in order to distinguish deficiencies caused by functioning in a second language, from disorders, or deficiencies caused by disorders evident in the native language. This is a critical aspect also in relation to the development of an appropriate and effective intervention.
The literature suggests that the lack of descriptive and normative data for populations other than the traditional English speakers, along with inappropriate evaluation tools, lack of trained bilingual specialists, and lack of clear policy guidelines, are factors which affect services, assessment, diagnosis and intervention for the linguistically/culturally different student (Garcia, 1984; Maldonado-Colon, 1984; and Ortiz, 1984). Within the field, this paucity of data concerning a different population has been traditionally blamed for the inadequacy of the evaluations and diagnosis of language minority students.

Taking the previous caveats into consideration, this paper attempts to: (a) question the selective use of linguistic data obtained through a biased process; (b) underscore that, based on a dearth of data, placement in special education was recommended, and intervention decisions were made, without any consideration to the child's exposure to a language other than English, to a dual language environment, or to the consequences of mislabeling a student; and (c) increase a limited database related to the bilingual and limited-English proficient (LEP) handicapped and non-handicapped. A study (Maldonado-Colon, 1984) conducted in a large metropolitan school district in the Southwest, revealed that Hispanic children identified as communication disordered exhibited characteristics of second language learners. Characteristics which were very similar,
in most cases, to those evident among language disordered native speakers of English. It is the overlap between both criteria-sets, as well as documented exposure to a language other than English which indicated further objective and appropriate testing. To reduce the possibility of misdiagnosis, additional ecological data, which could have assisted the professionals making the distinction, were not requested or considered crucial at particular decisioning points, suggesting that, both bilingual and monolingual, professionals lacked the knowledge-base necessary to make such distinctions.

Methodology

The exploratory descriptive study (Maldonado-Colon, 1984) from which this paper was developed was conducted in a large metropolitan school district in the Southwest. A district whose school population was approximately 75% Hispanic. Students' special education program folders, and district policy manuals were examined. Additionally, interviews were conducted with administrative personnel to obtain general demographical and procedural data.

The researcher investigated if given prevailing theoretical and empirical knowledge about bilingualism, dual language acquisition, language assessment of linguistically/culturally different students, factors affecting second language acquisition, and characteristics of Hispanics in
the Southwestern part of the United States, professionals evaluating Hispanic children considered such knowledge-base to make the most appropriate decisions whenever Hispanics were referred to special education programs, and eventually, assessed. The clinical case study approach was used to analyze individual program folders. Additionally, policy and practice were examined to identify the concurrence with or divergence from, what is intended to be instituted.

Research framework. Several categorical questions served as the framework to guide subject selection, data collection, processing, analysis, and interpretation of findings. Since this paper focuses on only one aspect of the data collected, rather than listing the original research questions and subquestions (Maldonado-Colon, 1984), several topical questions were developed to present the concerns addressed by this paper. Content analysis, that is, analysis of data recorded and preserved in the district's special education program folders, was the methodological approach selected to best address the present concern of limited descriptive data related to a population barely addressed within the literature. The following questions were used to interpret descriptive and inferential data obtained from 73 of the 125 individual program folders studied:

1. How are the linguistic characteristics of linguistically/culturally different children
evaluated to best capture and portray each child's language abilities?

2. What are the roles of the first and the second language in the assessment of linguistically/culturally different children?

3. What factors reflect that diagnostic personnel are cognizant of the unique characteristics of bilinguals and limited-English proficient students?

4. What abilities and knowledge do clinicians exhibit in data analysis, diagnosis and intervention for a non-traditional population?

**Subjects.** Students enrolled in the district's sixty-six elementary schools, in grades kindergarten through five, who were identified and served as communication disordered comprised the population of the study. The district made available to the researcher a computerized list of all the students served as communication disordered. Determination of sample size followed guidelines in Polanski's (1960) *Social Work Research*. Subjects were random sampled utilizing Snedecor and Cochran's (1967) random sampling tables.

Seventy-three Hispanics and a control group of 24 Anglos and 28 Blacks comprised the study's sample population. All subjects were served for speech and/or language disorders as a primary and only handicapping
condition. The unit of study was their individual program folder. That is, the researcher utilized demographic, statistical and descriptive data, on each subject, kept by the specialists, assembled in what is known as the individual program folder.

Data collection. Two questionnaires and a data collection form were developed. One questionnaire was administered by the researcher to the district's program director, the other to the speech/language therapists' supervisor. District program policies and procedural manuals were requested and analyzed based on the research question, which constituted the framework of the study. Individual student characteristics were transferred by the researcher from the program folders kept in each school to the data collection form developed to capture data relevant to the purposes and questions of the study.

Data analysis. Two programs of the Statistical Package for the Social Sciences (SPSS) were used to process data: Frequencies Subprogram (Nie et al., 1975) and One-Sample Chi-Square Analysis (Hull and Nie, 1981). Since the study was descriptive and exploratory in nature, no hypotheses were tested. Thus, the researcher selected frequencies and a non-parametric test to analyze data aggregated under three categories: district policies, district practices/procedures, and student characteristics. Additional
Results and Interpretation

The appropriateness of data, the expertise of the professionals aggregating, selecting and interpreting findings, as well as the role of the languages of the bilingual and LEP student in the process, were investigated. The following sections summarize some of the findings.

Evaluation of language skills. Clinical personnel followed certain routines prescribed by policy in an attempt to capture the linguistic skills of the children referred to them. Available data revealed that students were tested mostly in English regardless of home language or first language background. Test administration depended on evident or suspected handicapping condition. Evaluation ranged from use of a single measure to use of multiple measures administered on the same day or within two days. Required language proficiency measures for second language learners, or children from dual language environments, were not administered by clinicians. Rather, professionals accessed any information available to them which reflected language proficiency. That is, clinicians considered any
indication that the child was dominant in one of the languages as sufficient documentation to meet compliance of the language dominance requirement—e.g., "The teacher says the child is Spanish dominant"; "The parent says the child speaks English at home". Since ascertaining dominant language, as well as characteristics of the home language, is critical to the assessment process of non-traditional children (Greenlee, 1981), it is significant that clinicians and diagnosticians, both bilingual and monolingual, failed to practice a more objective verification of language dominance before proceeding with any in-depth analysis, and later on, diagnosis.

To assess language skills in English, most clinicians utilized the following measures: Peabody Picture Vocabulary Test--PPVT (Dunn, 1965), Test of Auditory Comprehension of Language --TACL-E (Carrow, 1973), and Test of Language Development --TOLD (Newcomer and Hammill, 1977). Additionally, language samples were collected through the use of pictures or the retelling task in the Goldman-Fristoe Test of Articulation GFTA (Goldman and Fristoe, 1972). Articulation was assessed through the GFTA. Results were analyzed to determine error patterns requiring interventions.

Modifications to the testing procedure, in response to different conditions affecting the population under evaluation, were not reported. Data suggests that second
language learners, and/or simultaneous bilinguals--those acquiring both languages within the one to three years of age period, were tested as if they were native speakers of the language (English). Interpretation of findings disregarded the status of the children as linguistically different from native speakers not exposed to another language e.g., "The numerous articulation errors require intervention."; "According to results of the TACL-E, the child exhibits a language delay of two years."). Even though, some clinicians did recognize that evaluation results indicated second language learning characteristics (e.g., accent, substitutions of English sounds by Spanish sounds) and dialectal variations (e.g., sound substitutions), they proceeded to recommend placement based on the misconception that sound distortions or substitutions prevent successful reading and effective communication.

It was noted that in spite of the subjects' Spanish dominance, Spanish measures were infrequently administered, regardless of state regulations which mandate testing bilingual and LEP children in their dominant language. From the variety of methods utilized to determine language dominance (e.g., questions, checklists, estimations), it must be concluded that, prior to the summer of 1982, there were no formal guidelines available indicating how to determine initial language dominance. The most frequent informal methods selected were teachers' or parents'
estimates of the child's dominant language, and his/her abilities in it. To test Spanish skills the TACL-Spanish, a translation of the PPVT, normed in west Texas, the GFTA's pictures, and the Austin Spanish Articulation Test (Carrow, 1974) were utilized. Their results were not interpreted.

A review of the literature related to the assessment of language minorities revealed that the Spanish TACL was limited, and poorly constructed, that is, inadequate when utilized as a single measure to determine Spanish language skills for Hispanics, (Glass, 1979; Gonzalez, 1974; Rueda and Perozzi, 1977). Concerning the GFTA pictures, this author considers their cultural relevance questionable, as in the case of non-traditional populations. However, these concerns did not prevent their utilization to evaluate the linguistic skills of subjects of limited-English proficiency. Further, records of the placement meetings (Admission Committee Reports) evidenced that during placement decisioning, the issue of inappropriate utilization of the least familiar language to determine placement and labeling was never questioned or addressed. Concerning the misconception that language differences affect reading performance, Wolfram (1979) states that, so far, there is no conclusive evidence that dialectal speakers cannot develop appropriate, effective reading and academic skills. Hence, dialectal variation, and Spanish accent, are not reasons to
label children as communication disordered or speech handicapped.

From information available it can be concluded that, the linguistic characteristics of Hispanics, bilingual and LEP, were evaluated using the same instrumentation utilized with native speakers of English. Further, their errors were interpreted as errors of native speakers of the language, and their placement was the same as those of native speakers. Parsimonious study of available data revealed that, the combination of linguistic restrictions of the second language learner and phonological errors qualified these children as communication disordered according to the guidelines developed by the district to serve native speakers of English who by virtue of an existing disorder require these specialized services.

Roles of first (L1) and second (L2) languages in assessment. Of the 73 Hispanics tested, it was noted that approximately 56.2% (n = 41) were from homes in which Spanish was spoken, while 43.8% (n = 32) came from homes where English was recognized as the only language. Given this information, it could be predicted that a significant number of children would have been tested in both languages, beginning with their dominant language. Instead, data indicates that all children were administered English language measures developed to assess the language skills of
native English speakers with no exposure to a second language. The fact that some children (n=31, 42%) were administered Spanish language measures reflect certain concern with compliance; yet, neither the measures selected, nor the absence of interpretation, indicate knowledge of the most current literature, and practices, on language assessment for non-traditional populations. Thus, it was evident that, English, which possibly was the second language (L2) for most children (56.2%), became the critical unit of evaluation. Consequently, their ability to produce the structures of the second language became the unit of evaluation, hence, penalizing second language learners for their inability to perform like native speakers of the language (English) by labeling them speech/language handicapped.

The minimal role ascribed to the native (L1) language in the evaluation process was evident from the lack of emphasis it was given throughout the assessment, diagnosis and placement processes. That is, whenever data related to the native language was available, or obtained through informal assessment, it was consistently disregarded in favor of English at decisioning points (e.g., referral, placement, intervention, evaluation of progress, and dismissal). Noticeable as well was the absence of a standardized procedure for testing through the native language.
Professional cognizance of factors affecting linguistically and/or culturally different populations. Analysis of reasons for referral revealed that deviant English speech and language production, and poor academic performance, were the most significant variables influencing special education referral. Upon examination of placement decisions, it was confirmed that English test performance, along with teacher referral, were the most significant variables determining special education placement. Noteworthy is the fact that English language test scores among the Hispanic population reflected language delays which ranged from 1.0 years to 4.3 years, qualifying subjects to receive special education services under the category of communication disorders. Such interpretations and conclusions were based on: (1) limited information—home language models, pre-academic experiences, and previous language instruction were not evaluated; (2) the premise that all English speakers constitute a homogeneous group—no recognition of the characteristics of second language learners; (3) the misconception that second language learners perform just like native speakers—deviant performance in L2 is equated to disordered performance; (4) inappropriate test selection—tests for native speakers were selected, with no allowances made for L2 speakers, or dialectical variations; measures utilized were not for bilinguals, or for LEP's; and
(5) misconceptions of how language dominance is determined, or its role in the assessment process.

Professional abilities and knowledge related to non-traditional populations. Issues such as test bias, error type, error interpretation and, additional critical information required, were not addressed during professionals' data analysis. Disregarded was the mandate that language dominance is to determine initial language of assessment, and later on, interpretation of data.

An examination of dates when tests were administered revealed that information as old as two years was still used in place of recent data. That is, students were not retested for language proficiency, even though linguistic data being used was more than one and one-half years old. Rather, performance on standard English measures, developed for native speakers, served as measures of proficiency for L2 learners.

A combination of data gaps, and misconceptions related to the evaluation of the linguistic abilities of second language learners, evidenced limited professional abilities and knowledge related to special linguistic and culturally different populations. Professionals focused on errors and characteristics distinguishing the child from mainstream population. Of consequence was the resulting inappropriate
labeling of students, who were in the transitional phases of second language acquisition, as communication disordered. To conclude, it is possible that both, bilingual and monolingual diagnostic personnel, had not been trained to evaluate the non-traditional child, thus, failing to identify critical indicators of non-disordered performance among a different population. Personnel development and cognizance of current language assessment literature, as well as best practices for non-traditional populations are possibilities to be considered for improvement of diagnostic services to a population in need of adequate services. Particularly, those related to the most effective procedures for the identification of language and learning disorders. Further, the results of this study suggest that professionals should develop, the ability to evaluate and diagnose problems of linguistically/ culturally different students, including awareness of linguistic characteristics of minority populations, particularly of second language learners; and the ability to identify and gather appropriate information necessary to distinguish language disorders from differences among non-traditional populations.

In order to distinguish between what constitutes a disorder evident in a second language, and what is merely a reflection of a transitional process, that of second language acquisition, it is necessary, according to scholars and researchers, for professionals to consider such
information as: (1) home language usage; (2) type and
quality of home language modeling; (3) language of initial
instructional activities; (4) language related to
pre-academic experiences; (5) linguistic and academic
experiences which the child practices at home, including
language related to them; (6) length and type of
introduction to English, (7) child's language usage
preferences according to situation and settings; and (8)
state of first language (L1) (Burt and Duyay, 1978; Garcia,
1980; Hamayan, 1984; Mattes and OmarK, 1984; and Walters,
1979). From such data pool a more realistic profile of the
child's linguistic abilities can be developed. Otherwise,
dearth of data, combined with second language
characteristics, facilitate placement of linguistically and
culturally different children, particularly, L.E.P. and
bilingual students, in special education programs developed
to remediate disorders caused by physiological, neurological
and other health related factors (Garcia, 1984; Maldonado-
Colon, 1984; and Shepard and Smith, 1981).
Recommendations for Professionals

The following suggestions can be deduced from data generated by the study from which this paper was developed (Maldonado-Colon, 1984), and are supported by the literature related to bilinguals, children of limited-English proficiency, and children of limited linguistic environments:

1. Institutions of higher education should incorporate in their training programs a strand preparing all students which are to work with children, to work most effectively with linguistically/culturally different students.

2. Local education agencies should implement personnel development plans which include the careful selection of training related to the unique characteristics of the non-traditional student and how these characteristics affect test performance and interpretation.

3. Diagnosticians required to work with populations reflecting characteristics different from those of the average student should pursue additional training intended to facilitate an optimal assessment of the specific population, to diagnose appropriately and to develop effective intervention according to diagnosed conditions.

4. Concentrated efforts should focus on the iden-
tification of best practices for referral, assessment, diagnosis, placement and intervention of bilingual, and LEP students.

5. Whenever linguistically/culturally different children are to be assessed for the purpose of distinguishing disorders or disabilities from problems of second language acquisition, information related to the following areas should be obtained, as it is understood to be significant in diagnosis and interpretation: (a) language of the home, including usage and characteristics; (b) time and quality of exposure to English (L2); (c) type and quality of pre-academic experiences related to language and the development of linguistic skills; and (d) type of instructional interventions to which the child has been exposed and outcomes of such exposure. If possible, personnel should also consider the linguistic characteristics of the child’s immediate community, in order to determine if those characteristics are reflected in the child’s language productions or linguistic behaviors.

6. Language information should be very carefully evaluated in relation to date of elicitation and conditions of evaluation, since factors such as language development, language loss due to non-use
could affect interpretation of most recent data.
References


