
DIFICULTADES O DESABILIDADES DE APRENDIZAJE?

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Special education textbooks (e.g., Friend, 2005; Turnbull, Turnbull, Shank, & Smith, 2004) seem to suggest that the field of learning disabilities (LD) either knows very little about Latino students in the United States or that no cultural or linguistic considerations are necessary in its assessments, prevalence rates, or curricula and instruction (e.g., Bradley, Danielson, & Hallahan, 2002). This article argues the former and proposes that the future of LD could mimic the field of mental retardation if it does not counter the potential problems of social construction in diagnosis and irreparable educational harm in pedagogy for Latino students.

Among the many factors associated with Latino students' educational outcomes, two stand out: culture and bilingualism. The first manifests itself in multiple national origins, traditions, and histories. These interact with American culture, producing unique sociocultural and socioeconomic outcomes. More than anything, however, what impacts Latino populations in the United States is the failure of the American educational system to meet the needs of students who manage two language systems.

This article focuses on Latino children who come from homes where Spanish is spoken, who spoke Spanish as their primary language, or who speak English and Spanish. They are all designated as being "bilingual" in that, historically, the term uniquely predicts their academic underachievement in the public schools.

One aspect of Latino students' underachievement was documented as early as the 1920s when they were found to overpopulate classes for the educable mentally retarded (Chandler & Platkos, 1969; Reynolds, 1933). General educators and special educators ignored the problematic history of bilingualism and psychometrics (Brigham, 1930), naively relying on English IQ tests to explain underachievement as mental retardation rather than as limited English proficiency.

In the 1960s the courts and, to a lesser extent, published research found that the diagnosis of mental retardation was confounded by the bilingual backgrounds of Mexican and Puerto Rican children placed in EMR classrooms. Educational outcomes from such false positives came to be seen as academic "dead ends" that produced irreparable harm (*Diana v. California State Board of Education*, 1970). These findings of bias and the social construction of MR resulted in a precipitous decline in the population of Latino children diagnosed with mild mental retardation. Some research indicated that as this population declined, the LD population increased nearly proportionally (Tucker, 1980).

The next three sections of this article address the assessment, prevalence rate, and curricular and instructional issues that the field of LD may need to consider in the future with regard to Latino students.

Assessment

Assessment of LD will undoubtedly undergo changes, particularly if the 2004 reauthorization of IDEA succeeds in moving states away from the discrepancy indices currently in use. If the change is quick, problems with the nondiscriminatory assessment of Latino children may be avoided. If not, as will more likely be the case, the area of LD diagnosis could face serious challenges of bias.

Since the 1920s, the research literature on the psychometric testing of bilingual populations in the United States has produced a consistent set of findings (Valdes & Figueroa, 1994). There is a discrepancy between verbal and nonverbal measures of intelligence. There is a discrepancy between nonverbal IQ and academic achievement. There is a discrepancy between language and math aptitude/achievement scores. There is a discrepancy between what is learned in English-only classes and what is demonstrated on fluid intelli-

gence. There is, in effect, a high likelihood of being diagnosed as LD as a result of being bilingual.

At a more profound level, children with varying degrees of bilingualism can demonstrate anomalous differences on measures of cognitive processing. At the beginning of his career, Jensen (1961) made a curious discovery. Low-IQ Mexican American children from low socioeconomic backgrounds could hold their own compared to high-IQ white, low-SES children on short-term memory tasks. This finding evolved into a more elabo-

rate and elegant theory of Level I and Level II mental abilities. The former was operationally defined as short-term, rote memory skills that could be measured using forward digit-span tests. This ability was not affected by socioeconomic or racial differences. Level II mental skills, operationalized by backward digit-span tests, on the other hand, did interact with socioeconomic and racial differences. Using the random, representative sample of 622 white and 622 African American children from the System of Multicultural Pluralistic Assessment

Table 1
Forward and Backward Digit-Span Scaled Scores Across SES Levels in White and Mexican American Children

SES	White (W)			Mexican American (MA)			Difference	t
	M	SD	n	M	SD	n		
Forward Digit-Span Scores								
9 (High)	11.60	2.83	83	9.12	3.03	25	2.48	3.74***
8	11.66	2.69	50	11.50	2.52	4	.16	.113
7	10.57	2.78	86	10.39	3.65	23	.18	.255
6	11.27	3.41	49	9.53	2.58	17	1.74	1.89*
5	10.57	3.11	122	9.95	2.65	55	.62	1.28
4	10.72	2.56	46	9.16	2.43	38	1.56	2.81***
3	10.61	3.12	54	9.61	2.90	70	1.00	1.83*
2	10.41	2.88	85	8.93	2.82	191	1.48	3.98***
1	9.13	2.78	16	8.58	2.46	107	.55	.81
0 (Low)	9.65	3.27	23	9.18	2.85	84	.47	.67
Backward Digit-Span Scores								
9 (High)	11.41	2.71	83	9.92	2.77	25	1.49	2.38**
8	11.66	3.17	50	12.75	2.50	4	-1.09	.66
7	11.35	3.09	86	11.39	3.04	23	-.04	.06
6	11.08	2.70	49	9.41	2.03	17	1.67	2.3**
5	10.93	2.96	122	10.35	3.06	55	.58	1.19
4	10.96	3.14	46	10.26	2.78	38	.7	1.06
3	11.09	3.25	54	10.71	2.81	70	.38	.69
2	10.46	2.76	85	9.42	2.81	191	1.04	2.84***
1	10.31	2.55	16	9.36	2.55	107	.95	1.38
0 (Low)	8.70	2.90	23	9.27	2.84	84	-.57	.84

*p < .05, **p < .025, ***p < .005.

(SOMPA) (Mercer, 1979), Jensen's theory was convincingly demonstrated in the profile of these two groups' scores on forward and backward digit-span tasks (each with a mean scaled score of 10 and *SD* of 3) across nine levels of socioeconomic status (Jensen & Figueroa, 1975). Level I scores (forward digit span) for both groups were generally not significantly different across socioeconomic levels. Out of the 10 SES levels, significant mean differences between groups were found at only one SES level. Level II scores (backward digit span), however, generally showed significant differences across six SES levels.

Table 1 presents the forward and backward digit-span mean scaled scores for a group of white students ($N=667$) from which Jensen's sample was randomly selected (Jensen & Figueroa, 1975). It also presents the mean scaled scores from the sample of Mexican American students ($N=614$) in Mercer's (1979) SOMPA norming study. There are two unique aspects of this sample of Latino students. It is one of the best representative, random samples ever collected. Also, the Mexican American children were all judged to be English proficient by their school and by the school psychologists who did the individual testing. As it turned out, however, these students came from three distinct home-language backgrounds: English, English/Spanish, Spanish.

As Table 1 shows, with a sample of students who come from homes where another language is spoken (approximately 60% of the Mexican American sample), children with Level I abilities perform more like those with Level II abilities, and vice versa. Forward digit span, in effect, is more difficult than backward digit span.

This finding is not new. The literature has noted similar findings with Chinese and Japanese bilingual students (Darsie, 1926; Hung-Hsia, 1929; Luh & Wy, 1931; Manuel, 1935). Jensen himself, in fact, had found similar anomalous results with Japanese students (Jensen & Inouye, 1980) and speculated, without any analysis or elaboration, that the anomaly may have been due to "bilingualism." The theory of Level I and Level II abilities, in effect, does not seem to hold with bilingual children.

As anyone who has ever diagnosed an LD knows, digit-span tests and their many analogues are a mainstay in diagnosis. They operationalize disorders in basic psychological processes such as sequential processing skills, speed of processing skills, auditory processing, memory, and attention. For students who are limited-English speaking or who come from homes where another language is spoken, forward digit-span scores, and possibly any sort of sequencing memory tasks, may be low because of bilingualism, not LD. Interesting, few, if any, of the professional texts on LD acknowl-

edge this possibility (e.g., Bradley, Danielson, & Hallahan, 2002).

How will the field of LD diagnose bilingual learners? Diagnostic instruments that control for varying levels and types of bilingualism and that are free of bias due to translation, interpretation, or decision making (Figueroa, 2002; Sandoval, 1998) have yet to emerge. In fact, the testing standards for English Learners (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 1999) have yet to be addressed by test makers.

Prevalence Rates

Even though there is no compelling evidence showing that Latino children in the United States are significantly overrepresented in LD, some regional studies have noted that this does occur. Currently in California, for example, Latino children make up 46% of the general education population. They make up approximately 50% of the LD population.

The question of what constitutes overrepresentation may, in great part, be responsible for the lack of a clear picture of this phenomenon. Typically, standard deviations of proportions, 10% points above the percentage of any group of students in the general education population, or a greater percent of students in LD compared to the general education population, have been used in this regard. What has been missing in the Latino demographics in LD has been the disaggregated percentages of Latino children who either come from Spanish-speaking homes or who score in the "English Learner" category on state English proficiency tests. That is, as has been the case in the fields of psychometric, psychological, and educational research, the missing element in studying Latino populations has been the disaggregated cohort of Latino children who manage two language systems either proficiently as additive bilinguals (cognitively competent and literate in two languages) or deficiently as subtractive bilinguals (underdeveloped linguistic systems).

Only recently has a preferred index for determining overrepresentation emerged, the odds ratio. And only recently has a study of overrepresentation used this index and succeeded in disaggregating the Latino sample of English Learners. Artiles, Rueda, Salazar, and Higadera (2002) studied a large sample of Latino children in 11 school districts in California in which the data were disaggregated by English Learners. Using the 10% index above the general education percentage as well as the odds ratio, these researchers found significant overrepresentation of English Learners in MR and speech and language disability categories. Although they were unable to conduct similar analyses of over-

representation in LD programs, they did find that in the most heavily LD-populated program, the resource specialist program, English learners who were in sink-or-swim English classes in general education were more likely to be in the resource specialist program. Similar instances of overrepresentation of bilingual Latino children in LD have been reported (Finn, 1982; Portes, 1999).

The field of LD faces a major challenge if indeed underdeveloped bilingualism is associated with LD overrepresentation. Beyond the mere fact of overrepresentation, however, is the larger question of a pervasive schooling trajectory in subtractive language(s) development experienced by Latino bilingual students. The educational and learning profiles of such students may be linguistically difficult to differentiate from a learning disability in English. How is the field of LD going to grapple with a growing population of Latino LD English Learners possibly created by schooling and not by a disability?

Curriculum and Instruction

For Latino English Learners, schools have seldom worked from an empirical, research-based foundation. Policy and politics have usually predominated over data. Proposition 227 in California is the premier example of this. The primary curriculum for bilingual students has focused on the acquisition of English, either in sink-or-swim English-only classrooms or in classrooms where English-as-a-Second Language is supposedly included. One hundred years of these options have not produced competitive levels of academic achievement in Latino bilingual students (Figueroa & Hernandez, 2000). In fact, Proposition 227 has failed to produce higher rates of English language acquisition or higher levels of academic achievement (Gandara, Rumberger, Maxwell-Jolly, & Callahan, 2003; Grissom, 2004; Thompson, DiCerbo, Mahoney, & Swan, 2002).

What is empirically known, and germane to this article, is that: (a) failure to read *in the first or second language* by third grade predicts academic failure; (b) oral proficiency in English occurs in 3-4 years (Lindholm & Acian, 1991), whereas native-like proficiency in English literacy skills typically develops in 5 years or more (De Avila, 1997; Lindholm & Acian, 1991; Medina & Escamilla, 1992a, 1992b); (c) phonemic awareness and decoding skills in the first language are associated with success in English reading (Durgunoglu, 1998); (d) English Learners instructed in English-only can show good decoding skills but can have little comprehension (Gandara, 1999); and (e) academic instruction in dual-language immersion programs is the most effective method of producing high

levels of academic achievement in bilingual learners (Genesee & Gandara, 1999).

Regrettably, there is little research on the Latino bilingual student who has LD (Ortiz & Yates, 2002). The empirical knowledge on this topic is nascent (Klingner, Artiles, & Mendez Barletta, 2004), and the challenge for the field of LD is how to grapple with the potential issues of misdiagnosis, overrepresentation, ineffective instructional traditions, and the use of research-based findings that may run counter to prevailing practices and policies regarding the use of the primary language in curricula and instruction.

In 1982, the National Academy of Sciences (Heller, Holtzman, & Messick, 1982) made a paradigm-shift recommendation for special education assessment of minority children: First assess the curricular and instructional setting where the student is placed to determine whether there is any empirical evidence that the education is effective. For the immediate future, the field of LD should consider first identifying and treating disabling educational treatments and contexts that confront bilingual learners and then treating the learning problems with dual language interventions to see if, in fact, resistance to optimal interventions is manifested and potentially caused by LD.

It also may be worthwhile to consider the recommendations from the most recent report of the National Academy on Minority Children in Special Education (Donovan & Cross, 2002):

Assessment for special education eligibility would be focused on the information gathered that documents educationally relevant differences from typical levels of performance and is relevant to the design, monitoring, and evaluation of treatments. Competencies would be assessed in natural classroom settings, preferably on multiple occasions.

While an IQ test may provide supplemental information, no IQ test would be required, and results of an IQ test would not be the primary criterion on which eligibility rests. Because of the irreducible importance of context in the recognition and nurturance of achievement, the committee regards the effort to assess the students' decontextualized potential or ability as inappropriate and scientifically invalid. (p. 313)

While eligibility for special education would by law continue to depend on establishment of a disability, in the committee's view noncategorical conceptions and classification criteria that focus on matching a student's specific needs to an intervention strategy would obviate the need for the traditional high-incidence disability labels such as LD and ED. ... (p. 312)

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