Although most educators agree in theory that labeling linguistically and culturally different students as "low I.Q." can adversely affect their academic progress, in practice a disproportionate number of bilingual students are still being "deported" into special education and vocational classes as a combined result of indiscriminate use of mental tests and cultural and linguistic orientation of school programs. Teachers and psychologists commonly assume that minority language students have become "language proficient" when they have acquired peer-appropriate fluency in everyday communication. The dangers of such assumptions can be seen in a study in which the psychological assessments of over 400 minority language students were analyzed. Two continua (context-embedded and context-reduced language proficiency) were used to show the relationship between language proficiency and academic achievement. Research suggests that the acquisition of meaning in context-reduced classroom situations requires more knowledge of the language itself than is typically required in context-embedded face-to-face situations. By eliminating "lack of English proficiency" as an explanation for low achievement in bilingual students, educators risk creating academic deficits by attributing low academic performance or test scores to deficiencies in the student or in his or her background experiences. (LH)
Tests, Achievement, and Bilingual Students

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... The number of aliens deported because of feeblemindedness increased approximately 350 per cent in 1913 and 570 per cent in 1914.... This was due to the untiring efforts of the physicians who were inspired by the belief that mental tests could be used for the detection of feeble-minded aliens.... (Goddard, 1917)

Most educators would consider that the assumptions underlying the widespread use of ability and achievement tests in our schools are very far removed from the naive assumptions of early practitioners of IQ testing. In contrast to the early assumption that IQ tests measured "innate potential," most educators today would agree that IQ tests measure "academic potential," as evidenced by the high correlations between IQ and academic achievement tests, and that performance is determined by both hereditary and environmental factors. They would also readily agree that IQ tests have certain limitations. For example, extreme caution is necessary in assessing the intelligence of students from backgrounds other than the dominant cultural group because of the possibility of cultural or linguistic bias. Labelling such children as "low IQ" can adversely affect their academic progress because of the way labels tend to shape teachers' expectations.

All of this is "known" by most teachers, psychologists, and administrators in our school systems because they have learned it in university courses in educational or clinical psychology. However, there is abundant evidence that this "knowledge" about the dangers of testing culturally and linguistically different students does not readily translate into educational practice and that a disproportionate number of bilingual students are still being "deported" into special education and vocational classes as a combined result of the indiscriminate use of mental tests and the cultural and linguistic orientation of school programs.

However, during the past decade, U.S. educators have been forced to begin to address the issue of bias in educational programs and tests as a result of court decisions and legislative mandates. Bilingual education is intended to reduce the language barriers to students' achievement while court rulings in California (e.g., Diana v. California State Board of Education, 1970) have made it mandatory to assess bilingual students in their dominant language, where feasible.

Such changes, although clearly necessary and worthwhile, are as yet only scratching the surface of the problem. Most minority language students are still taught predominantly in English by nonbilingual teachers and most are still assessed by monolingual psychologists with assessment tools and procedures that were designed only for children from the majority Anglo group. Myths about the "causes" of bilingual students' low achievement still persist (e.g., "bilingualism gives rise to language handicaps," "inadequate home experiences lead to low verbal abilities," etc.) and these myths appear to be reinforced by the results of biased educational and psychological assessment procedures. Because of this it is not uncommon to find bilingual teachers who suspect that some of their students may have learning disabilities that might benefit from appropriate diagnosis and remediation but who refuse to send the students for psychological assessment. The teachers know that the students will return with a permanent label and a one-way ticket to a monolingual English special education class.

Court decisions and legislative mandates may eventually force "compliance," but the only compliance that will have any lasting impact is one that is rooted in sympathy with the intended aims and understanding of the conceptual issues. Although presumably most educators would claim to support the goal of equal educational opportunity, relatively few know enough about the process of second language acquisition and bilingual academic development to translate this support into effective educational practice.
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The reason for this is quite simply that research evidence has, until recently, been lacking. In the absence of research, however, educators have naturally tended to revert to "common sense" as a basis for decisionmaking. Often the common-sense assumptions that guide (or misguide) educational policy and practice are regarded as self-evident. An example is the assumption of educators until recently, that schools had to eradicate the first language (L1) of minority students (often by means of physical punishment) in order to help them learn English (L2) and identify with the dominant cultural group. Research carried out in the context of bilingual programs (Cummins, 1981) shows clearly that this assumption is entirely false and served only to create and sustain academic deficits in minority students, thereby "reproducing the caste of assembly-line workers" (Skutnabb-Kangas, 1978).

A more subtle but equally prevalent misconception concerns the specific issue of how long it takes minority language students to become "proficient" in English, an issue that is part of the more general question of what it means to "know" a language. Teachers and psychologists tend to assume that minority language students have "learned English" or become "English proficient" when they have acquired peer-appropriate fluency in everyday face-to-face communication (usually within eighteen months to two years of exposure to English). Once students have become "proficient" in English, there appears to be no linguistic reason why they should not be administered an English psychological test or transferred from a bilingual to an English-only program.

The dangers of these implicit assumptions can be illustrated by some concrete examples from a recent study in which the psychological assessments of over 400 minority language students were analyzed (Cummins, 1980).

Three Psychological Assessments

Student LT (225): LT was referred by his second-grade teacher, who noted that he "appears to be of average intelligence but is only at a primer instructional level:" No mention was made of an English as a second language (ESL) background. On the Wechsler Intelligence Scale for Children-Revised (WISC-R), LT's verbal IQ was 70 and his performance IQ was 102. The verbal subtest scores were: Information 3, Similarities 3, Arithmetic 10, Vocabulary 4, Comprehension 6, Digit Span 13. In other words, the child performed at an average (i.e., score of 10) or above-average level on the two least verbally loaded subtests. The psychologist's report read:

Psychometric rating as determined by the WISC-R places LT in the low average range of intellectual development. An extreme discrepancy between verbal and performance abilities is indicated. The low verbal ability IQ may be collectively attributed to limited general information fund or long term learning; poor ability to form generalizations or make abstractions;
poor verbal expressive abilities and limited meaningful vocabulary in comparison with peers of similar age range; and poor judgement with respect to practical solutions to everyday problems or common sense...

With regard to general test behaviour, LT made no attempt to volunteer information or initiate conversation, and tended to require some prodding to make responses...

Ten days later the following entry appeared in the child's file:

Telephoned the mother and gave a brief summary of the testing results. [The mother] indicated that Portuguese is normally spoken at home and this would certainly at least partially account for LT's low verbal abilities.

This example shows how easy it is for psychologists to interpret test scores automatically when they are not sensitized to manifestations of cultural/linguistic differences. After speaking to the child's mother, the psychologist qualifies the previous interpretation of test results. Interestingly, the psychologist persists in using "deficit semantics" by attributing the child's "low verbal abilities development" rather than "present level of cognitive/academic functioning in English" to the use of Portuguese at home.

In this example, the psychologist (and possibly also the teacher) was unaware that the child came from a non-English background (despite some clues in the child's test behavior) and had no hesitation in administering a psychological assessment and interpreting it as though the child were from a monolingual English background. The following example shows that awareness of the child's non-English background does not guarantee any change in test interpretation. A major reason for this is the child's apparent fluency in English.

Student PR (283): PR was referred for psychological assessment because he was experiencing difficulty in the regular first-grade work despite the fact that he was repeating the grade. The principal noted that "although PR was in Portugal for part of the year there is a suspicion of real learning disability. WISC testing would be a great help in determining this." PR's scores on the WISC-R were verbal IQ, 64; performance IQ, 101; full scale IQ, 80. After noting that "English is his second language but the teacher feels that the problem is more than one of language," the psychologist continued:

Psychometric rating, as determined by the WISC-R, places PR in the dull normal range of intellectual development. Assessment reveals performance abilities to be normal while verbal abilities fall in the mentally deficient range. It is recommended that PR be referred for resource room placement for next year and if no progress is evident by Christmas, a Learning Centre placement should be considered.

This assessment illustrates how poorly psychological tests can be used. It does not seem at all unreasonable that a child from a non-English background who has spent six months of the previous year in Portugal should perform very poorly on an English verbal IQ test. Yet, rather than admitting that no conclusions regarding the child's academic potential can be drawn, the psychologist validates the teacher's "suspicion" of learning disability by means of a "scientific" assessment and the use of inappropriate terminology ("dull normal," "mentally deficient"). An interesting aspect of this assessment is the fact that neither the teacher nor the psychologist makes any reference to difficulties in English as a second language and both considered that the child's English proficiency was adequate to perform the test. This again implies obvious deficiencies in English communicative skills despite a "severe lag in English academic proficiency."

These examples (and many more from the same study), as well as both research evidence (e.g., Snow and Hoefnagel-Höhle, 1978) and common observation, show that within about eighteen months to two years of starting to acquire a second language, most minority language students are able to function fluently in it for everyday face-to-face situations. As a result of children's fluency, teachers and psychologists tend to assume that language difficulties due to learning English as a second language have been overcome. In other words, the child has learned English and can be classified as "English proficient." According to this apparent logic there is thus no reason why such minority language students should not be given a psychological assessment in English or transferred from a bilingual to a regular all-English classroom. If the child then experiences academic difficulties or shows low "verbal abilities" on an IQ test, this must be due to intrinsic cognitive or motivational deficiencies within the child (e.g., "learning disabled," "educable mentally retarded," "lazy"). These, in turn, can be attributed to the child's deficient background experiences (e.g., "cultural deprivation," "bilingualism," etc.). Before examining the fallacies in this logic, it is worth considering another example that illustrates the destructive potential of making children's home language or bilingual proficiency the scapegoat for their "low academic abilities."

Student MF (237): MF was referred for psychological assessment by her first-grade teacher, who noted that she had difficulty in all aspects of learning. She was given both speech and hearing and psychological assessments. The former assessment found that all structures and functions pertaining to speech were within normal limits and hearing was also normal. The findings were summarized as follows: "MF comes from an Italian home where Italian is spoken mainly. However, language skills appeared to be within normal limits for English."

The psychologist's conclusions, however, were very different. On the Wechsler Preschool and Primary Scale of...
Intelligence (WPPSI), MF obtained a verbal IQ of 89, a performance IQ of 99, and a full scale IQ of 93. The report to MF's teacher read:

MF tended to be very slow to respond to questions, particularly if she were unsure of the answers. Her spoken English was a little hard to understand, which is probably due to poor English models at home (speech is within normal limits). Italian is spoken almost exclusively at home, and this will be further complicated by the coming arrival of an aunt and grandmother from Italy.

There is little doubt that MF is a child of low average ability whose school progress is impeded by lack of practice in English. Encourage MF's oral participation as much as possible, and try to involve MF in extracurricular activities where she will be with her English-speaking peers.

Despite the fact that the speech assessment revealed no deficiencies in MF's spoken English, the psychologist has no hesitation ("there is little doubt...") in attributing MF's academic problems to the use of Italian in the home. The implicit message to the teacher is clear: MF's communication in L1 with parents and relatives detracts from her school performance, and the aim of the school program should be to expose MF to as much L2 as possible in order to compensate for these deficient linguistic and cultural background experiences. It is likely that in reporting the results of this psychological assessment to MF's parents, the psychologist or teacher would encourage them (and presumably the soon-to-arrive aunt and grandmother) to use more English with MF, in which case the child would, in all likelihood, be exposed to poor English models in the home as well as to a considerably impoverished linguistic environment.

Research Evidence: Language Proficiency and Academic Achievement

The major misconceptions about the nature of language proficiency illustrated in the psychological assessments considered above are very much in evidence in the education of minority language students in the United States. These misconceptions reflect a failure to recognize the crucial differences between the "language proficiency" involved in face-to-face communication and that involved in most academic tasks, and the considerably greater time required to attain age-appropriate levels of academic skills in a second language as compared with face-to-face communicative skills. The research evidence relating to these misconceptions has been considered in detail elsewhere (Cummins, 1980, 1981) and will be reviewed here only briefly.

There is clear evidence that not all aspects of language proficiency are related to academic achievement, whether in a monolingual or bilingual context. For example, most children classified as learning disabled have no ostensible abnormalities in face-to-face communicative skills. Also, it has been found that L1 cognitive/academic proficiency is more strongly related to the acquisition of L2 academic skills than are personality factors, whereas the opposite is true for the acquisition of L2 face-to-face communicative skills (Cummins, Swain, et al., 1981).

The relationship between language proficiency and academic achievement has been described in terms of two continua as illustrated in Figure 1. The distinction between context-embedded and context-reduced language proficiency relates to the range of contextual support for expressing or receiving meaning. Context-embedded language proficiency refers to students' ability to achieve their communicative goals in situations where the linguistic message is embedded within "a flow of meaningful context" (Donaldson, 1978), i.e., supported by a wide range of situational and paralinguistic (e.g., intonation, gestures, etc.) cues. Context-reduced proficiency, on
the other hand, refers to students' ability to handle the communicative demands of situations where the range of extralinguistic supports is very much reduced (e.g., reading a difficult text, writing an essay). Clearly, context-embedded communication is more typical of the everyday world outside the classroom, whereas many of the linguistic demands of the classroom reflect communication that is closer to the context-reduced end of the continuum. For example, sharing a communication partner (i.e., the teacher) with thirty other students is more context reduced than a one-to-one, face-to-face situation. The crucial implication is that acquisition of meaning in context-reduced classroom situations requires more knowledge of the language itself than is typically required in context-embedded face-to-face situations.

The vertical continuum relates to the degree of active cognitive involvement in the task or activity; in other words, to the amount of information that must be processed simultaneously or in close succession by the individual in order to carry out the communicative activity. As language skills are progressively mastered or automatized they become less cognitively demanding. It is clear that some language subskills are mastered more rapidly than others (e.g., pronunciation and syntax in L1). In fact, for many L1 context-reduced (e.g., reading, writing) and context-embedded (e.g., oratory) skills it is not appropriate to speak of mastery, but rather degrees of proficiency, since considerable differences among individuals persist throughout adulthood.

What are the implications of this framework for bilingual education and psychological assessment? Many minority language students acquire certain context-embedded English skills and become almost indistinguishable from native speakers in face-to-face situations within a relatively short period. In other words, they quickly acquire quadrant A communicative skills. However, this does not imply that such students have sufficient proficiency in context-reduced (quadrant D) aspects of English to survive academically in an all-English class on an equal footing with native speakers of English. In fact,

![Figure 1](Range of Contextual Support and Degree of Cognitive Involvement in Communicative Activities)
data from studies of immigrant students' learning of English (Cummins, 1980, 1981) and from successful bilingual programs show that it takes approximately from five to seven years, on the average, for minority language students to approach grade norms in academic (context-reduced) aspects of English proficiency. As shown in Figure 2, a major reason for this is that native English-speaking students are not standing still waiting for minority language students to catch up with them (compare, for example, the vocabulary and conceptual knowledge of monolingual fourteen-year-old and six-year-old children). By contrast, differences between fourteen-year-old and six-year-old children are less salient in face-to-face situations.

In summary, educators risk creating academic deficits in minority language students by extrapolating from the considerable English proficiency that these students display in context-embedded face-to-face communication to their ability to handle the context-reduced communicative demands of an all-English classroom or an English psychological test. The implicit identification of adequate surface structure control with "English proficiency" leads teachers to eliminate "lack of English proficiency" as an explanatory variable. As a result, low academic performance or test scores among minority language students are attributed to deficiencies in the student or in his or her background experiences. In this way the process of "blaming the victim," which has characterized the "education" of minority language children in North America throughout this century, is perpetuated.

(From NABE Journal 5, no. 3: 35, used by permission.)

Figure 2
Length of Time Required to Achieve Age-Appropriate Levels of Context-Embedded and Context-Reduced Communicative Proficiency
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