

The “Non-Non” Crisis and Academic Bias in Native Language Assessment of Linguistic Minorities

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A common belief among teachers, policy makers and educational researchers is that some school-age children know no language. In Los Angeles Unified School District, for instance, the LA Times reported that 6,800 children were classified as “non-nons” and said to be “nonverbal in both English and their native language” (Pyle, 1996). Children are so classified as a result of native-language assessment, required or recommended for non-English speakers in many parts of the U.S. This paper argues that the common “non-non” result follows from “academic bias” in language assessments commonly used with immigrant children in U.S. schools.

This chapter begins with an overview of existing state policies for the native language testing of English language learners in the U.S., and then presents and critiques the dominant paradigm in language minority education, the Threshold Hypothesis and associated BICS/CALP distinction, a conceptual framework consistent with current native language testing practices. A content analysis of the Spanish version of the IDEA Proficiency Test (IPT-S) (Amori & Dalton, 1996), a widely used native language assessment, is presented to show that the “non-“ or “limited” proficiency rating can follow from construct-irrelevant factors – knowledge of school and school culture, in the present instance. It is concluded that, in light of the lack of relevant empirical evidence for the existence of “non-nons” and the potentially negative consequences of the label, educational agencies should abandon the practice of routinely assessing children’s oral native language proficiency.

1. Native language assessment policy in U.S. schools

An important responsibility of schools in the U.S. is to determine whether or not a child knows English sufficiently well to succeed in an all-English instructional setting. In Lau v. Nichols (1974), the U.S. Supreme Court interpreted Title VI of the Civil Rights Act to prohibit discrimination against language minority children by means of schools failing to provide for their special language learning needs. Thus, schools must determine, for any child enrolling in school, whether the child requires special assistance to understand school content. States which do not have laws prohibiting the use of languages other than English in school are able to provide children with bilingual instruction, making academic content comprehensible during the time needed to learn English.

An evaluation of children’s English ability is appropriate – indeed, imperative – in light of these considerations. However, many states also require or recommend assessment of children’s native language ability, with the result that numerous children are identified as “non-nons” – that is, non-speakers of English, and non-speakers of their home language (typically Spanish, in the U.S. context), historically known as “semilinguals” (Skutnab-Kangas, 1981; Cummins, 1979). Table 1 lists those states which require or recommend native language assessment, as of 1991, and Table 2 presents states which require or recommend such testing as of 2001. Table 3 presents the most frequently used tests of native language ability.

Table 1. States which require or recommend routine native language assessment for LEP children as of 1991 (Council of Chief State School Officers, 1991) and the number of LEP children in each of these states (Macías & Kelly, 1996) in 1991.

<i>Required (as of 1991)</i>	<i>LEP population (as of 1994-1995)</i>	<i>Recommended (as of 1991)</i>	<i>LEP population (as of 1994-1995)</i>
California	1,262,982	Illinois	107,084
Texas	457,437	Oklahoma	31,562
Arizona	98,128	Indiana	6,293
New Jersey	52,081	New Hampshire	1,084
Hawaii	12,216		
<i>Total LEP children</i>	<i>1,882,844</i>	<i>Total LEP children</i>	<i>146,023</i>

Table 2. States which require or recommend routine native language assessment for LEP children as part of the identification process (Mahoney & MacSwan, 2003) and the number of LEP children in each of these states (Kindler, 2002) as of 2001.

<i>State</i>	<i>LEP population</i>
Arizona	135,248
Connecticut	20,629
District of Columbia	5,554
Hawaii	12,897
Illinois	140,528
Mississippi	3,225
Ohio	19,968
Oklahoma	43,670
Oregon	47,382
South Dakota	5,883
Texas	570,022
Virgin Islands	1,223
Virginia	37,385
<i>Total LEP children</i>	<i>1,043,614</i>

Table 3. Testing Instruments Used by States for Native Language Assessment (Mahoney & MacSwan, 2003)

<i>Instrument</i>	<i>Number of States</i>
Language Assessment Scale-Spanish (LAS)	11
Idea Proficiency Test-Spanish (IPT)	10
Woodcock-Munoz-Spanish	5
Bilingual Inventory of Natural Language (BINL)	1
Bilingual Syntax Measure-Spanish (BSM)	1
Peabody Picture Vocabulary Test-Spanish (PPVT)	1

Below, after presenting an overview and critique of currently accepted perspectives on language in language minority education, we turn to a content analysis of the Spanish version of the IDEA Proficiency Test (for a critique of the Pre-LAS Español, see MacSwan, Rolstad and Glass, 2002).

2. Rethinking the dominant paradigm in language minority education

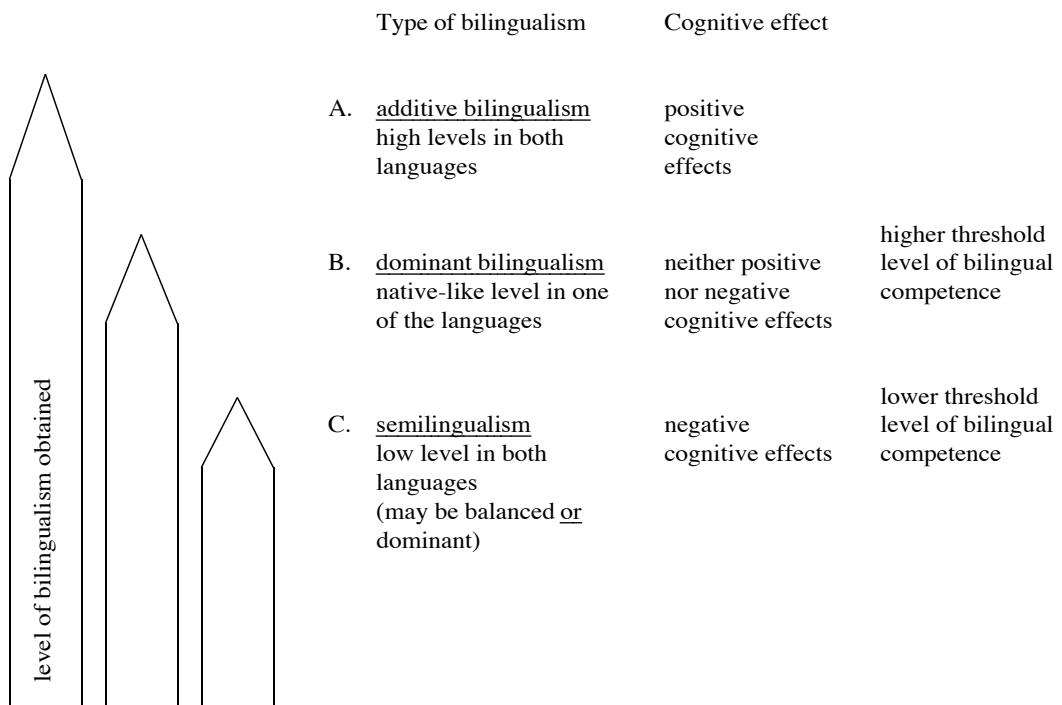
The practice of assessing the native language of bilingual children, if not directly derived from the Threshold Hypothesis and BICS/CALP framework (Cummins, 1976, 1979, 2000), is clearly quite closely related conceptually. The Threshold Hypothesis posits that children may enter into a state of

“double semilingualism,” brought about by a process of native language subtraction, as a result of contact with a second language in the early years. Semilingualism, also known as “limited bilingualism” (Cummins, 1981), has been defined in various ways, but it is most commonly considered to indicate “low levels in both languages,” or “less than native-like command of the vocabulary and syntactic structures” of either language (Cummins, 1979, p. 230, 238). Cummins presented the Threshold Hypothesis graphically as in Figure 1 below, and defined it as follows:

Negative cognitive and academic effects are hypothesized to result from low levels of competence in both languages or what Scandinavian researchers (e.g. Hansegard, 196[8]; Skutnabb-Kangas & Toukomaa, 1976) have termed “semilingualism” or “double semilingualism” ... Essentially, the lower threshold level of bilingual competence proposes that bilingual children's competence in a language may be sufficiently weak as to impair the quality of their interaction with the educational environment through that language (Cummins, 1979, p. 230).

Although the Threshold Hypothesis is widely accepted, no actual evidence has been presented to support the “semilingualism” idea that is embedded in the hypothesis. Paulston (1983), for instance, reviewed numerous Scandinavian studies which sought linguistic evidence for the existence of semilingualism in Sweden, and concluded that “there is no empirical evidence to support the existence of such a language development hiatus as” semilingualism (p. 42, emphasis hers). MacSwan (2000) reviewed reputed evidence from studies of language variation, linguistic structure, school performances, and language loss, and concluded that all of it was either spurious or irrelevant. MacSwan (2000) emphasized that semilingualism, as presented by its proponents, is indistinguishable from classical prescriptivism.

Figure 1. Cognitive Effects of Different Types of Bilingualism (Cummins, 1979, p. 230)



The semilingualism idea contrasts markedly with empirically grounded work on child language. As Chomsky (1965, p. 58) observed long ago,

A consideration of the character of the grammar that is acquired, the degenerate quality and narrowly limited extent of the available data, the striking uniformity of the resulting grammars, and their independence of intelligence, motivation and emotional state, over wide ranges of variation, leave little hope that much of the structure of language can be learned by an organism initially uninformed as to its general character.

Chomsky's statement paints a picture of children as inwardly-driven language learners who acquire their language perfectly and without instruction. During the most active acquisition period (ages 2-6), children learn approximately 10 to 12 new words a day, often on one exposure and in highly ambiguous circumstances (Gleitman & Landau, 1994). Children know things about elementary aspects of sentence structure for which they have no evidence at all (Pinker, 1994), and in cases of creolization children acquire syntactically and morphologically complex linguistic systems in accordance with principles of Universal Grammar in the presence of highly degenerate, rudimentary adult language input (pidgins) (Bickerton, 1981, 1982).

In an extensive review of research on child language in the preschool years, Tager-Flusberg (1997, p. 188) reported that, "by the time children begin school, they have acquired most of the morphological and syntactic rules of their language," and possess a grammar essentially indistinguishable from adults. This view represents a consensus among researchers in child language acquisition, where the matter has been investigated empirically for about three decades (for summaries, see Pinker [1994] and Berko-Gleason [1997]). Given these facts, it is remarkable that so many language minority children in the U.S. would be classified as "nonverbal in both English and their native language" when they arrive at school, while majority language children are not so classified (and indeed, are not tested in this way).

A concept related to semilingualism in Cummins's framework is the distinction between BICS (Basic Interpersonal Communication Skills) and CALP (Cognitive Academic Language Proficiency) (Cummins, 1976, 1979). Cummins (1994, 2000) also uses the terms "academic language" for CALP, and "conversational language" for BICS. "Considerably less knowledge of language itself is usually required to function appropriately in interpersonal communicative situations than is required in academic situations," Cummins (2000, p. 36) claims, and academic language usually involves "much more low frequency vocabulary, complex grammatical structures, and greater demands on memory, analysis, and other cognitive processes."

As MacSwan and Rolstad (2003) point out, the BICS/CALP distinction has many of the same negative conceptual consequences as does the Threshold Hypothesis. As with semilingualism, a problem emerges because BICS/CALP equates the language of school, and hence the language of the educated classes, with language that is inherently more complex, richer, and which places greater demands on cognitive resources. These claims represent a certain burden of proof which has not been met. Specifically, proponents must present some reasonable evidence that the (oral) academic language has these properties. The matter is especially compelling given the similarities with traditional prescriptivism. Indeed, the attrition of special "complex grammatical structures" and greater cognitive demands to the language of the educated classes would appear to have disturbing implications for the language of the unschooled or of children of lower socio-economic status, and hence for their cultural and linguistic identities.

One kind of purported evidence for semilingualism and the BICS/CALP distinction comes from students' test results on oral, native language assessments such as the Language Assessment Scales Oral-Español (LAS-O Español), the Idea Proficiency Test Spanish (IPT-S), and the Woodcock-Muñoz, which purports to test a child's level of CALP in Spanish. In the present paper, I will limit my comments to the IPT-S.

3. Construct validity of the idea proficiency test Spanish (IPT-S)

Construct validity is the degree to which a test actually measures the construct of interest – oral language, in the present instance. In attempting to refine the notion of validity, Messick (1989) added,

Validity is an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores or other modes of assessment.

The IPT-S purports to be a test of language ability, and purports that its scores indicate the degree to which a child has acquired a language – Spanish, in the case of the IPT-S. In the case of assessing Spanish as a second language, we would naturally expect a wide range of ability levels. But it should come as some surprise that children who are born and raised in a monolingual Spanish-speaking environment would be assessed as non- or limited speakers of Spanish. MacSwan (2001) administered the IPT-S and other language proficiency tests to a group of Spanish-background children, ages 6-8, who had varying degrees of proficiency in English as a second language. Students’ proficiency levels in Spanish were classified by the IPT-S as shown in Table 4.

Table 4. Frequencies of students’ Spanish language proficiency levels on the IPT Spanish (n=134) in MacSwan (2001)

	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent</i>
<i>FSS (Fluent)</i>	14	10%	10%
<i>LSS (Limited)</i>	105	78%	89%
<i>NSS (Non-speaker)</i>	15	11%	100%
<i>Totals</i>	134	100%	100%

Remarkably, the vast majority of the children in the study (78%) were classified as non- or limited speakers of their home language.

To assist in determining whether the results given in Table 4 are valid, it will be useful to evaluate the implicit “theoretical rationale,” in Messick’s terms, of the IPT-S. The basic question under consideration is this: Do correct responses on the test items which comprise the IPT-S consistently provide evidence of higher Spanish oral language proficiency? If so, then the test will correctly measure the intended construct, Spanish oral language proficiency. However, the test will lack construct validity to the extent that knowledge of correct answers to items require knowledge of some other (irrelevant) domain – say, for instance, knowledge of school culture and school subjects.

A traditional idea in language arts, frequently attributed to Plato, is that a “complete sentence” consists of a subject and a predicate, and that “correct language” or at least “better speech” is characterized by such utterances. In the real world, however – and even in academia – people communicate in phrases shorter than sentences with very high frequency.

Although no arguments have been advanced to sustain the idea that speech characterized by “complete sentences” is better speech, the notion has found its way into considerable educational work in minority language issues. For example, Schatzmann and Strauss (1955), who had interviewed monolingual members of the lower and middle classes about their impressions after the occurrence of a disaster, found that the former used lots of emotional language which reputedly gave rise to “elliptical syntax” and limited them to conveying meaning “implicitly,” while the educated classes could do so “explicitly.” Bernstein (1971) similarly characterized the language of the unschooled as accessing a “restricted code,” while the educated classes could avail themselves to a more expressive “elaborate code.”

In a classic critique of such approaches, Labov (1970) reviewed work by Bereiter and colleagues (Bereiter & Englelmann, 1966; Bereiter et al., 1966) regarding the relationship between African-American Vernacular English and the poor educational achievement of African-American school children. Bereiter reported that the four-year-olds he studied communicated by gestures, “single words,” and “a series of badly connected words or phrases.” According to Bereiter, these children could “without exaggeration ... make no statements of any kind,” and could not ask questions. Of particular significance was Bereiter’s expectation that children answer in complete sentences. In response to the question “Where is the squirrel?” Bereiter’s subjects tended to answer “In the tree”—a response Bereiter characterized as illogical and badly formed. As Labov (1970) pointed out, the response “In the tree” is the natural response in this context, and the one that anybody would use under normal circumstances—except, perhaps, in the context of an academic exercise.

Indeed, an examination of the contents of the IPT-S immediately reveals that the test is much more an assessment of academic knowledge than of language ability. For instance, the second part of the IPT-S asks four questions to which students are required to provide answers in complete sentences, as shown in Table 5. Students who miss these (or any other) four questions on this part are labeled “limited Spanish speaking.”¹ After a first incorrect response, the test administrator directs the student to “answer the question in a complete sentence.”

Table 5. Items on “Level C” of the ITP Spanish which require students to answer in complete sentences.

<i>Item</i>	<i>Required student response</i>	<i>Prompt</i>
1. ¿Qué está haciendo el niño? [What is the boy doing?]	El (niño) está leyendo/estudiando. [The boy is reading/studying.]	Picture of boy looking at book
2. ¿Cuántos manos tengo yo? [How many hands do I have?]	Usted tiene dos manos./Tú tienes ... [You have two hands.]	None.
3. ¿Pueden correr los caballos? [Can horses run?]	Sí, pueden correr. [Yes, they can run.]	None.
4. ¿Vuelan los elefantes como los pájaros? [Do elephants fly like birds?]	No, los elefantes no vuelan. [No, elephants don't fly.]	None.

Putting aside the inconsistency in the implicit definition of a “complete sentence” and the fantastical and decontextualized nature of the items, we must ask whether the ability to recognize or produce a complete sentence on demand ought to factor into a native speaker’s knowledge of language. Indeed, few of us would produce answers like those required above if asked these questions. The natural response to item 1 in Table 5, for instance, is simply Leyendo or Estudiando (“Reading/Studying”).

Indeed, one’s ability to answer in a fragment reveals detailed covert knowledge of linguistic structure. For instance, if asked a question such as item 4 in Table 1, we rely on our knowledge of the internal structure of the phrase to determine possible shortened forms of the sentence (in English or Spanish), such as No and No, they don’t; we can also reflect on our knowledge of language to determine which shortened versions are not structurally possible (e.g., No, they / No, they do). In fact, answering the question in the desired way requires that we suspend our knowledge of pragmatics, which tells us that we can delete recoverable information, in order to comply with an institutional requirement to respond in a so-called complete sentence.

We only learn about complete sentences in school, which is why the ability to produce or identify them should be regarded as part of the domain of academic achievement, not an aspect of knowledge of language. A language is a set of expressions generated by a grammar, which maps meaning to sound (Chomsky, 1986; Pinker, 1994). Very early on, children exhibit complex knowledge of word order, word structure, pronunciation, discourse structure, and appropriate use of language in distinct situations. All normal children exhibit this knowledge, regardless of their specific cultural background or life experiences. By contrast, knowledge of particular communities and cultural practices – including those internal to the school – depend upon one’s interests, opportunities, and specific environment. If we define language proficiency in such a way as to include this sort of highly particular cultural knowledge, what should be regarded as a simple cultural difference suddenly becomes a linguistic dividing line which enormously privileges those with more socially valued cultural capital in hand. Only a small segment of the human race experiences formal schooling, and even fewer excel at it; but all of us know a language.

¹According to the IPT-S scoring procedures, kindergarteners who take the test for initial identification must miss nine items on this part of the test to be regarded as “limited Spanish speaking”; kindergarteners who take the test for redesignation, like all others, are “limited” after just four “errors” (Amori & Dalton, 1996, p. 39). Of course, no justification is presented for these arbitrary decisions.

4. Conclusions

We conclude that the common results of the IPT-S, indicating that monolingual Spanish speaking children are “non-“ or “limited” in their home language, is an artifact of poor test design, relating to construct-irrelevant factors embedded in a poorly developed theory of language ability, and is in no way a genuine reflection of the true language abilities of these children.

A lack of field-internal debate and disciplinary sophistication in language minority education has held the field at a virtual standstill, and today the basic theoretical underpinnings of the field are no more developed than they were a quarter of a century ago. In effect, research on language minority education proceeds with no substantive understanding of the nature of language itself.

There are significant advantages for research, knowledge, and children associated with opening up the debate on language ability among linguistic minority children. Indeed, the field-internal debate is at least as important as the field-external (usually ideological) debate, and the real-world hardships associated with labels such as “non-non” and associated language prejudice compel us to look more deeply at “language proficiency” in language minority education. Refining our conception of language proficiency and its relationship to school achievement will benefit language minority children. Indeed, it already seems very clear that conducting assessments of children’s oral native language ability provides misleading information to schools and teachers, and may lead to the creation of tacit tracking mechanisms such as the “non-non” label.

Finally, in light of the lack of relevant empirical evidence for the existence of “non-nons” or semilinguals, and in light of the potentially negative consequences of the label, educational agencies should abandon the practice of routinely assessing language minority children’s oral native language proficiency. Naturally, assessment or alternative forms of evaluation of first language literacy and English language ability are appropriate.

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