Two case studies are presented here to highlight the importance of identifying cultural giftedness in language-minority children who are monolingual Spanish or bilingual Spanish dominant with low English proficiency. In one study, the child was monolingual, Spanish-dominant and culturally or non-verbally gifted; in the other, the child was an unbalanced bilingual Spanish-dominant/limited-English-proficient and culturally and linguistically gifted. The discussion helps to shed new light on the association between bilingualism and cognitive development and giftedness in young children. Quality of family life and socioeconomic status, based on parental education level and occupation, were examined for each child. The term "voices" is used to refer to the mainstream school culture view of linguistic and academic dimensions of giftedness based on standardized tests and performance standards guiding the curriculum. The term "voces" refers to the minority community view of cultural aspects of social and emotional dimensions of giftedness. Findings reveal that alternative assessments can capture non-verbal and verbal giftedness in minority children's culture and language; low socioeconomic minority children from nurturing families who provide cultural enrichment can develop emotional, cultural, and linguistic giftedness; and parents represent the minority voces while teachers portray the mainstream voices that result in complementary visions of giftedness that enrich language minority children's assessment. (Contains 47 references.)
Identifying Gifted Bilingual Hispanic Kindergartners with Alternative Sociocultural Dual Language Assessments

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This is a summary of the presentation, if you are interested in the complete paper contact the authors (see addresses in AERA program). Complete manuscript will be submitted for publication in a journal during April 1996.
- Identifying Gifted Bilingual Hispanic Kindergartners with Alternative Sociocultural Dual Language Assessments

- Overview of Study

The two case studies presented in this paper were selected with the purpose of establishing the importance of identifying cultural giftedness in language-minority children who are monolingual Spanish or bilingual Spanish dominant with a low English proficiency level. We describe a monolingual Spanish-dominant child who is culturally or non-verbally gifted, and another unbalanced bilingual Spanish-dominant/limited-English-proficient child who is culturally and linguistically gifted. Our objective was to show in the two case studies presented that giftedness in language-minority children has not only linguistic but also cultural dimensions.

These two case studies help us shed new light on the dilemma of the association between bilingualism and cognitive development, in relation to two research questions related to whether or not monolingual and bilingual low SES children can be gifted: (1) What is the role of cultural and linguistic factors on cultural or non-verbal giftedness?, and (2) What is the role of cultural and linguistic factors on linguistic or verbal giftedness? These two research questions led to a third general one: (3) What is the role of cultural and linguistic factors on language-minority children’s performance in non-verbal and verbal cognitive alternative measures? Two cultural variables are considered including: (1) Quality of family life, and (2) Socioeconomic Status (SES) given by parental educational level and parental occupations. Two linguistic variables are considered including: (1) monolingualism, and (2) unbalanced bilingualism.

Our discussion and conclusions indicate that: (1) alternative assessments representing minority children’s culture and language can capture their non-verbal and verbal giftedness; (2) low SES minority children from nurturing families that provide cultural enrichment can develop emotional, cultural, and linguistic giftedness; and (3) parents represent the minority voices and teachers portray the mainstream voices, resulting in complementary visions of giftedness that enrich language-minority children’s assessment.

Theoretical Framework

Our position is that a monolingual Spanish-speaking child or an unbalanced bilingual Spanish-dominant/limited-English proficient child can be identified as gifted by using alternative developmental measures representing non-verbal and verbal aspects of their minority culture and language. We use the terms voices and voces to offer a critical reflective view of the assessment of language-minority children who are gifted. The term voices is used to refer to the mainstream school culture view of linguistic and academic dimensions of giftedness based on standardized tests and performance standards guiding the curriculum. The term voces is used to refer to the minority community view of cultural aspects of social and emotional dimensions of giftedness.
Selected Literature Review

The summary of literature review presented below will discuss four major areas, the role of: (1) cognitive development on bilingualism, (2) bilingualism on cognitive development; (3) dominant-language assessment on the identification of linguistic giftedness, and (4) cultural factors on non-verbal giftedness.

Role of Cognitive Development on Bilingualism

Research indicates that higher-level cognitive abilities can influence bilingualism:

• Gerrig and Banaji (1994): children with a heighten cognitive ability, their first and second language development can occur more readily.

• Clark (1996): advanced cognitive ability of some children may allow them to engage in the analysis of linguistic and cultural representations that evolve into metalinguistic abilities. Example, a gifted bilingual child who hears someone refer to a table as a mesa in Spanish may use his metalinguistic abilities to: (1) analyze explicitly of implicitly the differences and similarities in the meanings of mesa (it can refer to the object table in Spanish or to a geological feature in both Spanish and English), (2) compare the words table and tabla (Spanish word for graph/table), and (3) conclude that the basic function of a table/mesa/tabla is an object that can hold something. Metacognitive and metalinguistic abilities are developed to analyzed different conceptual and symbolic representations in two languages, a second language more readily acquired.

• Duncan (1980) and Clark (1981): used the Cartoon Conservation Scales (CCS, De Avila, 1976) to show the strong positive relationship between cognitive Piagetian developmental stages, and degree of bilingualism. In addition,

• Clark (1981) and Klje (1994): the CCS accurately indicated which bilingual students were gifted, in a way not revealed by more traditional measures.

Role of Bilingualism on Cognitive Development

There is developmentally advanced performance on cognitive tasks as a product of bilingualism:

• Leopold (1949): “I attribute this attitude of detachment from words confidently to the bilingualism. Constantly hearing the same things referred to by different words from two languages, she [his own child] has her attention drawn to essentials, to content instead of form”

• Peal and Lambert (1962): French-English bilingual children’s cognitive development was enhanced by their bilingualism: Intellectually, his [a bilingual’s] experience with two language systems seems to have left him with a mental flexibility, a superiority in concept formation, a more diversified set of mental abilities, in the sense that the patterns of abilities developed by bilinguals were more heterogeneous...”

• Cummins (1979): full fluency in two languages marks a breakthrough of the cognitive threshold experienced by bilingual children, who show higher cognitive development than monolingual children.
Albert and Oller (1980): bilinguals seemed to have mastery over two different sets of skills or strategies as they stated, "...there is a loosening of perceptual constraints, a new openness, a greater cognitive flexibility on the part of bilinguals"

Yale College Programs of Study (1992): the learning of other languages because bilingualism increases "subtlety of mind".

De Avila and Duncan (1979): bilingual children who grew up acquiring two languages attained superior metalinguistic and metacognitive awareness because of a parallel development of conceptual abilities that language helps to facilitate.

Cummins (1978): bilingual children use their metalinguistic awareness to understand differences in word-referent relationships and to apply higher-level reasoning strategies.

Diaz (1985) noted that the effect of bilingualism on cognition resulted in metalinguistic awareness.


Role of Dominant Language Assessment on the Identification of Linguistic Giftedness

Influence of the characteristics of cognitive assessments used, such as language of administration and the degree of representation of minority and majority cultural and linguistic factors, on bilingual children's performance.


Clark & Gonzalez (1996): using dual language assessments can discover: (1) cultural giftedness in children who are non-verbally advanced and may have (or have not) achieved English proficiency, and (2) linguistic giftedness in children who are verbally advanced as shown by their proficiency in only one or both languages. As the two case studies presented below attest: (1) the monolingual Spanish child, Oscar, demonstrated to be culturally gifted in alternative cognitive measures (QUEST® and CCS) administered in Spanish; and (2) the bilingual Spanish/English child, Alberto, demonstrated to be both culturally and linguistically gifted when assessed with QUEST® and CCS in his first language. It is important to note, as discussed below, that Spanish was the dominant language for Alberto and when administered QUEST®, he performed in Spanish at higher verbal and non-verbal developmental levels than when assessed in English. Thus, the use of alternative assessments that are culturally and linguistically appropriate can help evaluators to have a holistic view of the triple interaction of cognition, language, and culture in children who have different degrees of proficiency in English and their minority language.
Role of Cultural Factors on Non-Verbal Giftedness

- Dundes (1965): a community, a home or a family can express concepts within a particular “...cultural context and environmental setting... [it can validate]...culture by justifying its beliefs...[and it can serve an educational purpose]...by maintaining conformity to the accepted patterns of behavior” (p. 294).

- Frasier (1987): children coming from any cultural-linguistic and SES background can be gifted, as giftedness could be expressed through different cultural representations.

- Casson (1980): Cultural constructs are frequently covert, and cultural principles are often difficult or impossible to express in language.... Parallel examples of unconscious cultural schemata are the covert categories that occur in classification systems, the tacit procedures and strategies that are employed in certain kinds of decision-making and problem-solving and the implicit distinctions that are utilized in recognizing or negotiating certain events and behaving appropriately in them.”

- Gonzalez & Clark (1995): Example of Hispanic mothers describing giftedness. Used the Spanish phrase es un niño bien educado to describe outstanding behaviors in culturally and socially appropriate situations. Also use term malcriado , in opposition to bien educado , to instill and develop consciousness of behavior that is inappropriate. Hispanic culturally gifted children can: (1) analyze a situation, (2) determine the appropriate behavior, and (3) perform in an exemplary manner that will reflect well on self and family.

- Darder (1991) stated, “...IQ testing is unable to function as a fair measurement of innate intelligence, because its primary concern is directly likened to a relative ranking of people based on criteria derived solely from the values of a selective cultural system” (p. 14).

- Marquez (1992): gifted Hispanic children were described by their parents as curious, motivated, creative, observant, inquisitive, able to find multiple uses for objects and to solve problems, and interested in novelty.

- Clark & Gonzalez (1996): to portray the cultural and linguistic dimensions of giftedness by using an alternative developmental assessment model.

Method

Subjects

- (1) Oscar, a 6 years and 2 months Spanish monolingual child; and
- (2) Alberto, a 5 years and 4 months bilingual Spanish-English child.
- Pseudonyms are used for both children in order to protect their identities.
- Both children were first generation Mexican-Americans, and were in Kindergarten bilingual classrooms in public schools located in Hispanic low SES “barrios” within metropolitan areas of the Southwestern region of the U.S.
- The background qualitative information collected based on which similarities and differences between Oscar And Alberto were derived included: (1) the Home Language Survey (Gonzalez, 1991); and (2) the Parents’ and Teachers’ Ratings of Cognitive, Linguistic, and Social Skills (Gonzalez, 1994).

Similarities Between Oscar and Alberto

- Nurturing home environment: low SES traditional Hispanic intact families.
A secure, well-structured, resourceful, and stable environment.

Mothers and fathers were present in the household, both mothers were housewives and both fathers were the bread-winners.

Both fathers held blue collar jobs: janitor and carpenter.

Not had much formal schooling, they have attended the escuela secundaria, the equivalent of a junior high in the U.S.

Immigrants from Mexico, and both children had been born in the U.S.: 15 years and 4 years.

Live in a low SES Hispanic barrio in a middle-size city in the Southwest region of the U.S. within two hours from the Mexican border.

Youngest of three children. 12 years-old twin siblings and siblings of 9 and 7 years of age.

Use of Spanish as the primary language to communicate at home.

**Differences in the Linguistic Abilities of Oscar and Alberto and their Parents**

**Oscar's Case**

- LAS (4 in Spanish and 1 in English).
- Parents see his Spanish proficiency as very good, and his English proficiency as good.
- Teacher's ratings of his language abilities indicated him to be Spanish monolingual, good in pronunciation, syntax and grammar, and social language; and as very good in vocabulary and academic language.
- Uses both code mixing and code switching at home.

Father: Spanish proficiency good and English proficiency very good, mother: very proficient in Spanish and limited English.

**Alberto's Case**

- LAS (4 in Spanish and 2 in English)
- Parents and teachers' ratings: of Spanish and English abilities were similar, good command of both languages. used code switching and code mixing.
- Teacher: Spanish proficiency as good in pronunciation, vocabulary, syntax and grammar, and social language; and as average in academic language. English proficiency as average in pronunciation, vocabulary, syntax and grammar, and social language; and as poor in academic language.
- Father: proficient in both languages, mother: very proficient in Spanish and very limited English.

**Results**

**Teachers' and Parents Alternative Developmental Assessments**

- *Voces*: Parents' Survey of their Children's Cognitive, Linguistic, and Social Abilities
Oscar’s Case

- **Cognitive abilities**: used *es un niño exemplar* and *Mi hijo es muy inteligente*. Asks about new things, wants explanations, doesn’t forget details, learns rapidly and has great abilities. Imaginative when playing, independent, and likes order and puzzles.

- **Linguistic abilities**: speaking to him was like speaking with an adult. Described problem-solving abilities in terms of his adult-like speech and reasoning. “Mami, when you have a problem you must always be patient”. “Mami, logically, it is like this”.

- **Social abilities**: used *es un niño exemplar* to describe cognitive abilities. A literal translation of this Spanish expression is “he is an example of a child,” but in Spanish the cultural connotation is that “the child has an outstanding social behavior that shows maturity and wiseness.”

- **Adjectives**: *es un niño exemplar, es muy inteligente*.

Alberto’s Case

- **Cognitive abilities**: very advanced for his chronological age: (1) he is observant, and has a long attention span; (2) he is good in math; (3) he likes to do puzzles, and takes apart things and puts them back together again; and (4) he has good navigating skills.

- **Linguistic abilities**: also played a role in his parents’ perception of his giftedness. Interpreted the child’s sophisticated use of his first-and-second language to be unusual. Spoke like an adult, asked lots of questions, and made up stories.

- **Social abilities**: Interpersonal skills of being cooperative, independent, and able to understand social rules were used as an example of his gifted problem-solving abilities. Willingness to help solve problems as adult-like behavior. He analyzed situations, determined what needed to be done, and did it without being asked.

- **Adjectives**: Cognitive: “Mi hijo es (my son is) atrevido (sure), intenso (intense), curioso (curious/witty), persistente (persistent), listo (quick), inteligente (studious, applied), laborioso (hard-worker), arriesgado, (risk-taker), y (and) sabio (wise).” Social and interpersonal skills: “Mi hijo es (Mi son is) simpático (charming), empático (sentimental) cooperativo (cooperative), abierto (open-minded), servicial (helpful), sano (moral), amistoso (friendly), considerado (considerate), seguro (confident), impulsivo (sure), y respetuoso (respectful). Es un niño ejemplar (he is an example of a child)”.

**Voices**: Teachers’ Survey of the Children’s Cognitive, Linguistic and Social Abilities

Oscar’s Case

- **Cognitive abilities**: good reasoning skills in math and he problem solved using math manipulatives. Can “put puzzles back together without the puzzle outline.” Motivation for learning mentioning that he was “very knowledgeable in many areas.”

- **Linguistic abilities**: “very expanded vocabulary” as the result of his family travel experiences and his ability to relate knowledge from his real-world experience to classroom activities.

- **Social abilities**: creative and independent, demonstrated by his ability to play alone and to bring into that play creative ideas. A leader who “organizes groups,” and as a responsible child, demonstrated by his volunteering for cleaning up play areas in the classroom without being told.

- **Adjectives**: smart, observant, curious, independent, and creative.
**Alberto’s Case**

- **Cognitive abilities:** eager to learn, intrinsically motivated, persistent, and committed to finish tasks. Likes to assemble things, draw, and had good problem-solving skills.

- **Linguistic abilities:** advanced language skills as exemplified by his very large vocabulary and very good story-telling skills.

- **Social abilities:** independent, very helpful, cooperative, caring, friendly, observant thoughtful, talkative, and adventurous.

**Alternative Psychological Developmental Assessments: QUEST and CCS**

- **QUEST** (Qualitative Use of English and Spanish Tasks, Gonzalez, 1991, 1994)

- **CCS** (Cartoon Conservation Scales, De Avila, 1976)

**Oscar’s Performance in QUEST® in Spanish**

- Functional: Defining
- Concrete: Sorting & Category Clue
- No Classification: Verbal Justification of Sorting
- Above developmental level in non-verbal tasks (General System: Animals & Food, & Gender-Based System: Animals)
- Non-verbal or cultural giftedness

**Alberto’s Performance in QUEST® in English**

- Functional: Defining
- Concrete: Sorting
- No Classification: Verbal Justification of Sorting and Category Clue
- Below normal level in verbal tasks, and at above or at developmentally adequate levels for non-verbal tasks (Gender-Based & General Systems: Animals & Food)
- Non-verbal cultural giftedness

**Oscar’s performance in the CCS**

Given that Oscar was a monolingual Spanish child, the CCS was administered in Spanish. Attained a developmentally advanced ranking because in his performance he showed a concrete operational level. The subscales passed were: conservation of number, conservation of length, horizontality, volume, and probability.

**Alberto’s performance in the CCS**

Given that Alberto was a bilingual Spanish-dominant child, the CCS was administered in Spanish. The subscales passed were: conservation of number, conservation of length,
horizontality, egocentricity, and probability. Performance at the concrete operational level indicated that he scored in the advanced ranking.

**Traditional Psychological Assessments: LAS and TONI**

- **Oscar's Performance**
  
  He attained a score of 106 on the Test of Non-Verbal Intelligence (TONI -Brown, Sherbenou, & Dollard, 1982), placing him in the average intelligence category and in the 66th percentile. Category 4 for his Spanish proficiency in the Language Assessment Scales (LAS -De Avila & Duncan, 1986), and the category 1 on the LAS English.

- **Alberto's Performance**
  
  He had a score of 114 on the TONI which placed him in the superior intelligence category and in the 83rd percentile. LAS Spanish placed him in category 4, and in category 2 on the LAS English.

**Discussion**

**+ Alternative vs. Traditional Psychological Assessments**

- Role of Cultural or Non-Verbal Factors on Non-Verbal Giftedness:

  - Can a monolingual low SES child be gifted?

- Direction of the Association between Bilingualism and Cognitive Development:
  
  ♦ A monolingual child can be culturally or non-verbally gifted

- Can a limited-English proficient bilingual child be gifted?
  
  The degree of bilingualism may have a positive effect on cognitive development leading towards non-verbal or cultural giftedness and also to linguistic or verbal giftedness

**+ Voces and Voices: Parents' and Teachers' Perspectives**

- Coincidences and differences between teachers and parents' descriptions of language-minority gifted children:
  
  ♦ Hispanic parents value more socially appropriate and emotionally mature behaviors
  ♦ Teachers value more logico-mathematical and academic skills

**Conclusions**

**+ Alternative vs. Traditional Psychological Assessments**

- Unbalanced bilingual children need to be assessed with alternative measures that are sensitive to their verbal giftedness in their dominant language as well as their minority and majority cultural non-verbal giftedness
Non-verbal giftedness is not associated with degree of bilingualism but to the degree in which alternative assessments measure minority cultural representations influencing cognition.

Non-verbal cultural giftedness cannot be measured by traditional non-verbal intelligence standardized tests (TONI).

Presence of idiosyncratic differences in cognitive developmental potentials mediates the effects of external factors: Could it be that Alberto started to learn English before Oscar because he was more intelligent verbally and non-verbally?

Individual differences precede cultural and linguistic differences in language-minority children. The more intelligent child can acquire two languages more readily becoming bilingual sooner, and this bilingualism in turn may influence positively his verbal and non-verbal intelligence increasing both his linguistic and cultural giftedness.

The degree of bilingualism is an intermediate variable between the degree of non-verbal intelligence and the positive effects of bilingualism on verbal and non-verbal cognition. Cultural and linguistic giftedness does exist among minority children who are monolingual or unbalanced bilingual, and who come from a low SES, but we can only observe its psychological expressions in behaviors measured through sensitive alternative assessments.

**Voices and Voices: Parents’ and Teachers’ Perspectives**

- Usefulness of integrating mainstream and minority cultural perspectives for having a more holistic picture of the cultural and linguistic giftedness of language-minority children.

- Children from low SES households whose family members provide adequate emotional nurturing and transmit positive educational values, are functioning as empathic role models and mentors.

- Our view of giftedness is enhanced and elaborated by the perspective of the voices of our minority homes, our Hispanic communities, our Latino people; and by their interaction with the traditional voices of the mainstream school culture.

**References**

Brown, L. Sherbenou, R. J., Dollard, S. J. (1982). *Test of Nonverbal Intelligence (TONI)*. Austin, TX: Pro-Ed.


Cultural and Linguistic Giftedness


