# A Bilingual (English & Spanish) Psychoeducational Assessment MODEL Grounded in Cattell-Horn Carroll (CHC) Theory: A Cross Battery Approach

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The Individual with Disabilities Education Act mandates nondiscriminatory assessment for children who are culturally and linguistically diverse. Because of the overrepresentation of English Language Learners (ELL) in special education programs in the United States, the focus of this article is the psychoeducational assessment of Spanish- and English-speaking children who are classified as ELL. This article presents a bilingual assessment model that incorporates Cattell-Horn Carroll (CHC) based instruments. The premise of this model is that a learning disability is manifested in L1 (primary language) and L2 (secondary language). The writers present cognitive assessments that are available in English, Spanish, and nonverbal modalities that utilize CHC as the underlying theory. By incorporating these assessments, the school psychologist is in a better position to analyze L1 and L2 assessment data and gain a clearer understanding of strengths and weaknesses and provide linguistically appropriate interventions.

*KEYWORDS:* bilingual assessment, cultural linguistic diversity (CLD), Cattell-Horn Carroll (CHC) theory, nondiscriminatory assessment, cross battery assessment, learning disability.

School psychologists across the United States are asked to assess children from various cultural and linguistic backgrounds. Although a myriad of non-English languages are spoken, Spanish is the most common (Ochoa, Riccio, & Jimenez, 2004). As this trend is also evident in the educational system, it is imperative that school psychologists are prepared to adequately assess and intervene with children who are culturally and linguistically diverse (CLD). In many cases, children who are in the process of learning English appear to have the same learning challenges as those children who are suspected of having learning disabilities (Diaz-Rico & Weed, 2002). Accordingly, an overrepresentation of CLD children within special education programs has been documented (Oswald & Coutinho, 2001). This trend is especially evident when considering English language learners (ELL) placed in special education programs (Artiles, Rueda, Salazar, & Higareda, 2005). In addition, using the traditional discrepancy model and a limited scholastic review of students has contributed to educational misplacement and poor intervention (Abedi, 2008). Thus, school psychologists need to be equipped with nondiscriminatory assessment procedures to adequately differentiate normal English language development (ELD) manifestations from specific learning disabilities (SLD).

Part of identifying SLD in bilingual children involves conducting a bilingual assessment. A bilingual assessment is one conducted in both L1 (primary language) and L2 (secondary language) by a qualified school psychologist who is fluent in both languages, or a monolingual English school psychologist working with a qualified interpreter (Rhodes, Ochoa, & Ortiz, 2005). A qualified interpreter is one who is fluent in the language and has firsthand knowledge of the culture. Although beyond the scope of this discussion, interpretation requires that the interpreter accurately express not only the content but also the emotional/affective nuances of the language. Interpreters need the following skills: to maintain neutrality and confidentiality; to adhere to ethical guidelines; to understand technical terms, procedures and rationale of the process of assessment; culture and language experience; and knowledge of key/critical issues that may arise (Rhodes et al., 2005). Lopez (2002) provides a list of suggested practices for school psychologists utilizing interpretation services.

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Because it is an "empirically supported psychometric theory structure of cognitive abilities and academic abilities" (Alfonso, Flanagan, & Radwan, 2005, p. 185), the writers will utilize Cattell-Horn Carroll (CHC) Theory as an underlying approach for cognitive assessment. In addition, the writers will discuss CHC-based cognitive assessments that are available in English, Spanish, and nonverbal modalities that can assist during the assessment process. The premise of this article is that a learning disability must be manifested in both L1 and L2 for a learning disability to exist. To differentiate a true disability from normal ELL developmental manifestations, the school psychologist must conduct a psychoeducational assessment utilizing nondiscriminatory assessment procedures (IDEA, 1997). To facilitate nondiscriminatory assessment, the writers will present an assessment MODEL (Multiple Sources of Information, Observation, Data-Driven Hypothesis, English Language Development, and Language of Assessment), developed by Olvera and Gomez-Cerrillo (2010), to guide the bilingual and monolingual English school psychologist through the assessment of ELLs.

## MULTIPLE SOURCES OF INFORMATION

*Multiple sources of information* refers to the systematic gathering of information related to the referred student, providing the context of assessment results. This process is foundational to conducting nondiscriminatory assessment. Historically, psychoeducational assessments have not been sensitive to children who are culturally and linguistically diverse (Figueroa & Newsome, 2006). Prior to collecting any data related to a student referred for special education assessment, school psychologists must develop cultural competence while becoming aware of cultural biases that he or she may unknowingly possess (Ortiz, 2008; Oritz, Flanagan, & Dynda, 2008; Rhodes et al., 2005). Maintaining an objective attitude toward referred students ensures that the examiner will make eligibility decisions that are based on objective data rather than those influenced by personal beliefs or biases.

Within MODEL, the assessment process begins with a comprehensive review of the student's cumulative file. The cumulative file contains the student's ELD level and language of instruction. The examiner may want to examine the Home Language Survey, which is given to each parent upon enrolling the child in public schools. This form is included as part of the district's student enrollment packet and documents the student's home language. In addition, the California English Language Development Test (CELDT) is the primary assessment upon which English proficiency is determined in California schools. Upon reviewing the CELDT, the school psychologist is encouraged to note the yearly progression of language development via the CELDT and determine if a pattern of consistently low performance is evident. This includes reviewing the overall CELDT score and individual sub categories: reading, writing, listening, and speaking. If an ELL student is gradually progressing in his or her ELD level, then this may indicate a pattern of appropriate language development (Valdes & Figueroa, 1994). As a cautionary note, if the examinee has consistent difficulties across one or more areas, particularly reading and writing, the examiner must not make the assumption that a disability is present. Instead, other factors must be considered that may possibly contribute to this dynamic. Factors include: proficiency in the primary language, response to intervention implementation, program of instruction (e.g., bilingual instruction/ELD supports), English development support in the family, community variables, etc. In addition, it has been established that limited proficiency in a primary language may impede acquiring a second language (Lau & Blathcey, 2009). Thus, knowledge of the primary language is extremely important.

Other sources of data to examine in the cumulative file include but are not limited to anecdotal notes (e.g., psychological reports), all schools of attendance, retention records, Board of Reviews, Academic Improvement Plans (AIP), attendance, truancy, grades, behavioral comments, discipline records, and achievement results from group normed tests. Particular attention should be noted regarding the language of instruction. That is, has the student been educated in a bilingual or an English-only program? If the examiner is not familiar with the program of instruction, an English as Second Language (ESL) specialist needs to be consulted. In the event that the student attended school in another country, the examiner should request report cards and/or previous assessments from that school.

Another source of data that is imperative to all psychoeducational assessments is the Student Success Team (SST) file. Most SST files incorporate Response to Intervention (RTI) data. This should

all be documented and incorporated in the interpreting of testing data. As school districts begin to incorporate RTI systems, the availability of tier one and two intervention data will provide essential data for Individual Education Plan (IEP) teams to make the best decisions for ELL students regarding placement and further intervention. In addition, Lichtenstein (2008) and others found the incorporation of RTI data within a comprehensive psychoeducational assessment to be the best practice for the identification of learning disabilities for all children, including English learners. Interviews with caregivers must be conducted with great care and sensitivity, with particular attention given to culture and linguistic background (Ortiz et al., 2008). The reader is directed to Rhodes et al. (2005) to understand specific methods and aids to assist in the completion of interviews. Together, this collection of multiple sources facilitates ruling out of exclusionary factors, focuses on understanding the student's cultural and linguistic profile, and provides a foundation to interpret assessment results.

## OBSERVATIONS

*Observations* are crucial aspects of any assessment and are gathered in the student's natural learning environment (Prasse, 2008). Observations should be conducted across multiple settings, adopting structured and systematic methods to document a variety of student dynamics, including language preference, school performance, and, most importantly, an estimate of the student's acculturation or process of acquiring the mainstream U.S. culture (Rhodes et al., 2005). Observing the student both inside and outside the school setting allows the practitioner to gain an estimation of the student's level of acculturation. In addition, the examiner can gain insight into culturally responsive teaching methods, the student's language skills and demands of instruction, and peer support through group work. Additionally, observing the student within the home provides much information regarding family makeup and the cultural environment of the student. In summary, all observations are synthesized with all other sources of data to formulate a data-driven hypothesis or reason for referral.

## EXCLUSIONARY FACTORS

While conducting the assessment process, consideration of exclusionary factors is a mandatory function noted in both federal and state law. Although states have variations of what constitutes a learning disability, all 50 states acknowledge the same exclusionary factors (Reschly & Hosp, 2004). Exclusionary factors include environmental, cultural, or economic disadvantage. MODEL also considers limited English language development as a possible exclusionary factor, but not exclusively. Specific factors can include quality of instruction, time in the United States/acculturation level, mobility patterns, proficiency of primary language, social economic status, parent education level, etc. For example, a third grade student is referred to the Student Success Team (SST) due to concerns with language arts and failure to learn English. Upon reviewing the records, the examiner find that the student has had limited levels of English, for the past two years, and has been in this country since he was in kindergarten. The teacher reports that the student is frustrated with his lack of progress. Upon further review of educational records, the examiner notes that the student has never received ELD support and has not participated in the school's response to intervention (RTI) program. The examiner may recommend ELD programming and RTI services targeting language arts that are appropriate for ELLs, monitor progress, and reconvene within a set period of time. In this scenario, the examiner identified factors that may be contributing to lack of academic progress and recommended targeted interventions. When the team regroups, they will be able to assess the student's progress and determine the next steps.

Children, including those classified as ELL, may have learning disabilities that can coexist with exclusionary factors (Lichtenstein, 2008). MODEL considers this dynamic and encourages practitioners to not prematurely rule out the possibility of a learning disability due to poor language proficiency. Thus, it is imperative that school systems have interventions in place that can support English language learners.

### Data-Driven Hypothesis

After the practitioner has ruled out difficulties that are primarily due to environmental factors (i.e., lack of instruction or intervention), a *data-driven hypothesis* for assessment is developed. Data-driven

hypothesis refers to the development of hypothesis(es) that assists the practitioner to develop a culturally and linguistically appropriate battery of assessments. The hypothesis(es) for assessment is contingent upon themes collected through multiple sources of information. Themes include, but are not limited to, academic, behavioral, developmental, and/or emotional problems.

Once exclusionary factors have been considered and a data-driven hypothesis(es) has been developed, the null hypothesis must be upheld (Ortiz, 2008). Practitioners should assume that difficulties noted are external; that is, a disability should not be regarded as being the primary reason why academic difficulties exist (Flanagan, Ortiz, & Alfonso, 2007; Rhodes et al., 2005). Incorporating gathered data from multiple sources, along with ecologically valid observations, will provide a data-driven methodology to suggest or reject possible explanations for the student's scholastic difficulties.

**Academic Assessment**

Academic assessment must be done in a manner that is nondiscriminatory and, consequently, yields accurate information to best intervene. Prior to deciding in which language to assess, the examiner is to review cumulative records and assess historical and current language of instruction. If the student has received instruction in Spanish through a bilingual program or formal education in the native country, then it is sensible to assess academics in Spanish. This information is valuable and will help to determine academic skills in the primary language. However, if the student has only received instruction in English, even though the student is still a designated English Language Learner (ELL), then an English academic assessment is the only option (Lau & Blatchey, 2009). The purpose of achievement testing is to determine academic skills, eligibility decisions, and intervention planning. Thus, this aspect of the assessment process is very important.

If the examinee has been educated in Spanish in another country or through a bilingual program in the United States, then the Bateria III Woodcock Munoz: Pruebas de Aprovechamiento (Munoz-Sandoval, Woodcock, McGrew, & Mather, 2005a) may be an appropriate assessment to administer by school districts that require standardized assessment data. This assessment is to be administered by a trained interpreter or by a school psychologist and/or special education teacher who is fluent in Spanish. Because the Bateria III, like many other Spanish assessments, was normed on Spanish-speaking populations that are not typically represented in United States public schools, the examiner is advised to take extra caution in interpretation of the data, as this may not be an appropriate test for the student.

Another option for academic assessment includes utilizing curriculum-based measurement (CBM) which research supports to measure critical academic skills including but not limited to, oral reading, written expression, and calculation (Burns, MacQuarrie, & Campbell, 1999). The benefit to utilizing CBM is that the examiner can assess academic skills, develop interventions, monitor the student's progress, and modify interventions based on individual progress (Lau & Blatchey, 2009). Another benefit is that schools that utilize CBM may develop local norms that can prove helpful in comparing individual student progress with similar individuals who share the same linguistic and cultural background. Research with ELD children, although not plentiful, is promising (Baker & Good, 1995; Baker, Plascencio-Peinado, & Lezcano-Lytle, 1998; De Ramirez & Shapiro, 2006).

## ENGLISH LANGUAGE DEVELOPMENT

Jim Cummins (1979) hypothesized two related language skills: Basic Interpersonal Communications Skills (BICS) and Cognitive Academic Language Proficiency (CALP). Briefly, BICS is the language skill that facilitates communication in social contexts that are typically found in informal settings: conversing with peers, discussing sporting events, and chatting at recess or lunch. Conversely, CALP is a more complex language skill that is required for academic learning. It is important to note that language development, in any language, follows a developmental course. The developmental stages include: CALP 1 (preproduction), CALP 2 (early production), CALP 3 (speech emergence), CALP 4 (intermediate fluency), and CALP 5 (advanced fluency) (Diaz-Rico & Weed, 2002). Hearne (2000) and Roseberry-McKibben (2002) provide examples one can observe as the student moves through the various levels of the aforementioned CALP levels. See Table 1 for CALP examples.

**Table 1** *CALP Level Examples*

| CALP Stage (1-5) | Examples |
|---|---|
| CALP Level 1: Preproduction | May engage in educational activities using their first language. Many join in group activities but are not yet able to work independently. May experience the silent period. |
| CALP Level 2: Early Production | Increasing control of the English tense system and increase in vocabulary. Growth in listening and speaking skills in English, but still need substantial support in most reading and writing activities in the classroom. |
| CALP Level 3: Speech Emergence | Understand most classroom and social language, and can engage in a variety of oral and written activities. Able to express ideas and feelings in English. Developing reading fluency and understanding, although still in need of support. Learning to write independently. |
| CALP Level 4: Intermediate Fluency | Able to understand English in many contexts, and have developed into independent readers and writers. May need minor support. |
| CALP Level 5: Advanced Fluency | Observations and performance would be at level expected from a monolingual English student. |

The California Department of Education (CDE; 2009) developed the California English Language Development Test (CELDT) to assess California public education students' English language proficiency and incorporates CALP levels. The CELDT incorporates the following stages of ELD: Beginner (CALP 1), Early Intermediate (CALP 2), Intermediate (CALP 3), Early Advanced (CALP 4), and Advanced (CALP 5).

When assessing children who are still ELL, the school psychologist must assess CALP levels to determine the most appropriate language in which to assess. For example, a student may be conversationally proficient in English (BICS); however, may not be academically proficient in English (CALP). Though on the surface the student may seem to be proficient, it does not become obvious until the examiner conducts a CALP-based assessment (e.g., BVAT or Woodcock Munoz) that the student is still in the process of becoming proficient in English. Without assessing CALP levels, the examiner may unknowingly engage in discriminatory practices by assuming that the student is proficient and conducting an English-based psychoeducational assessment.

Additionally, the examiner will need to consider the degree to which ELD levels, as a variable, can explain the nature and extent of the referred student's learning difficulties. A few questions to consider include:

- Can the student's difficulty in acquiring English proficiency be attributed to his or her insufficient development in his or her first language?
- Can the student's academic difficulties or failure in an English-only academic setting be attributed to his or her not having attained CALP in English?
- Was the student given ample instructional time in his or her first language to (1) develop CALP in this language and (2) demonstrate ability somewhat within the average range of academic performance? (Rhodes et al., 2009, p. 73)

Consideration of these questions will better inform the school psychologist as to the appropriateness of assessing the ELD student.

**Language of Assessment & Eligibility**

As mentioned above, the school psychologist, or designated language assessor, must assess the ELL student's CALP level to determine the language of assessment prior to psychoeducational assessment. For example, the school psychologist or language specialist may receive a referral for assessment from the student study team and proceed to administer a language proficiency assessment. Assuming the student's native language is Spanish, a possible assessment can include the Woodcock Munoz Language Survey (WMLS). The decision to assess in a specific language will depend on the CALP data that has

been collected. If the student's CALP level in English and Spanish on the WMLS is two and three, respectively, then assessment should be conducted in both English and Spanish in order to establish that a possible disability is evident in both languages. On the other hand, if a student earns a CALP score of two in English and five in Spanish, it is advisable to proceed with assessment in Spanish as that appears to be the stronger language. In contrast, if the student achieved a CALP level five in English and two in Spanish, then assessment should proceed in English. Although there are not clear cut guidelines, the examiner must combine CALP levels and multiple sources of information to augment language proficiency results to best determine the language of psychoeducational assessment. The reader is directed to the Multidimensional Assessment Model for Bilingual Individuals (Rhodes, Ochoa & Ortiz, 2005) for assistance in determining language of assessment.

Several assessments have been specifically developed to assess an individual's CALP level and to better inform the examiner as to which language to use to assess (see Table 2). After assessing and establishing CALP levels, the examiner can select a cognitive battery that is linguistically appropriate for the examinee. Given the CALP scores, the examiner can choose to assess the student using one of, or a combination of, the following modalities: English, Spanish, bilingual, or nonverbal. There are a variety of cognitive assessments that are available in English, Spanish, and nonverbal modalities that utilize CHC as an underlying cognitive theory. See Table 3 for a sampling of cognitive instruments that utilize CHC theory and available languages.

**Table 2** *Summary of Primary Language Assessment & Available Languages*

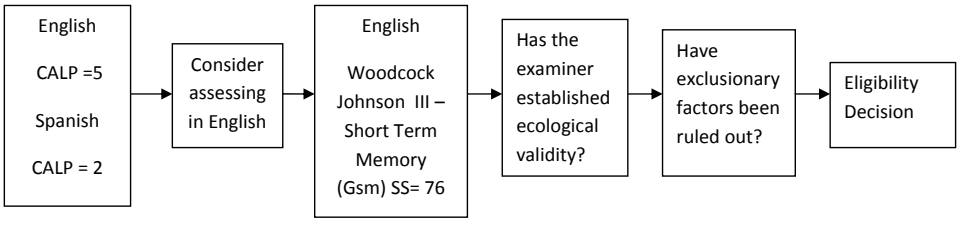
| Test | Available Languages |
|---|---|
| Bilingual Verbal Abilities Test (Munoz-Sandoval, Cummins, Alvarado, & Ruef, 1998). | Arabic, Chinese (Simplified and Traditional), English, French, German, Haitian-Creole, Hindi, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Turkish, & Vietnamese. |
| Basic Inventory of Natural Languages (Herbert, 1986). | Arabic, Armenian, Cambodian, Cantonese, Chinese Creole, Dutch, English, Farsi, French, German, Greek, Hindi, Hmong, Ilocano, Inupiaq, Italian, Japanese, Korean, Laotian, Navajo, Philipino, Polish, Portuguese, Russian, Spanish, Tagalog, Taiwanese, Toishanese, Ukranian, Vietnamese |
| Woodcock-Munoz Language Survey – Update (Woodcock & Sandoval, 2001). | English and Spanish |
| California English Language Development Test (CDE, 2009). | English |
| IDEA Oral Language Proficiency Test (Dalton, 1991) | English and Spanish |

**Table 3** *Summary of Cognitive Assessments, Language, and CHC Factor Assessed*

| Test | Languages | CHC Factors |
|---|---|---|
| Woodcock Johnson Test of Cognitive Abilities – Third Ed. (Woodcock, McGrew, & Mather, 2001). | English | Short Term Memory (Gsm); Long Term Retrieval (Glr); Fluid Reasoning (Gf); Visual Spatial (Gv); Crystallized Abilities (Gc); Auditory Processing (Ga); Processing Speed (Gs) |
| Bateria III Pruebas de Habilidades Cognitivas (Mather & Woodcock, 2005). | Spanish | Gc; Gf; Gsm; Glr; Ga; Gv; Gs |
| Kaufman Assessment Battery for Children – Second Ed. (Kaufman & Kaufman, 2004). | English<br>Spanish-Instructions<br>Nonverbal | Gc; Gf; Gsm; Glr; Gv |
| Wechsler Intelligence Test for Children- Fourth Ed. (Wechsler, 2004) | English | Gc; Gf; Gsm; Gv; Gs |
| Wechsler Intelligence Test for Children Spanish, Fourth Ed. (Wechsler, 2004) | Spanish | Gc; Gf; Gsm; Gv; Gs |
| Differential Abilities Scale – Second Ed. (Elliot, 2007) | English<br>Spanish-Instructions | Gc; Gf; Gsm; Glr; Ga; Gv |

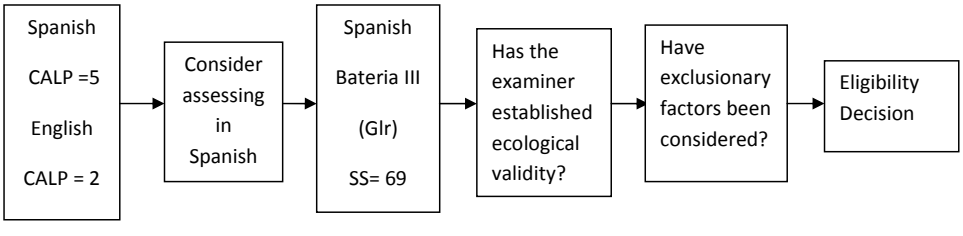
As highlighted above, English-only may be selected as the mode of assessment if the student is no longer classified ELL or if the student has achieved an English CALP score in the four to five range and minimal Spanish CALP (<3). A CALP score in this range indicates that the student has achieved proficiency in the English language, and an English cognitive assessment is appropriate and can be considered nondiscriminatory. Figure 1 (below) illustrates that the student's CALP in English is five while CALP in Spanish is two. The examiner has determined that the student is fluent in English, based on the English CALP designation, and English assessment is appropriate. The student scored at the below average range on the WJ III (Gsm=76), indicating a possible deficit in this area. Eligibility will be considered after the examiner has established ecological validity and exclusionary factors.

**Figure 1.** *Processing deficit decision tree for children that require English.*




Spanish-only may be selected for assessment when the student has a Spanish CALP score of four to five with minimal English CALP Scores (<3). A Spanish CALP score in this range indicates that the student has achieved proficiency in the Spanish language through formal instruction in Spanish or a bilingual program, and cognitive assessment in Spanish is appropriate and nondiscriminatory. Figure 2 (below) illustrates that the student's Spanish CALP is five while the English CALP is two. The examiner has determined that student is fluent in Spanish, based on the Spanish CALP score, and Spanish assessment is appropriate for this student. The student scored at the well below average range on the Bateria III (Glr=69) indicating a possible deficit in this area. Eligibility will be considered after the examiner has established ecological validity and exclusionary factors.

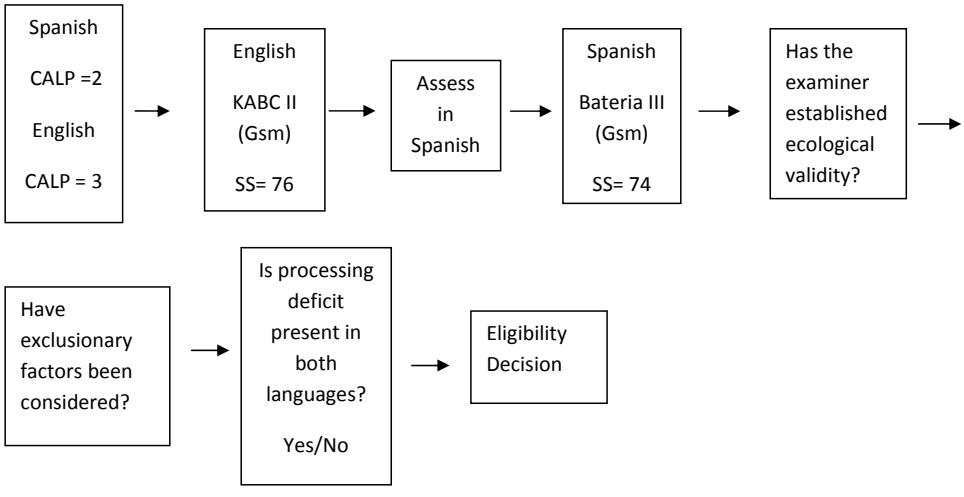
**Figure 2.** *Processing deficit decision tree for children that require Spanish.*




Bilingual (English and Spanish) assessment is appropriate when the student has minimal CALP scores (≤3) in both languages. This may indicate that the student is in the process of acquiring proficiency in one or both languages, or may have a speech and language impairment (SLI). If this is the case, it is advisable to consult with your speech and language therapist for further guidance. When CALP is limited in both languages, the examiner is advised to assess in both English and Spanish to establish that the processing limitations are evident in both languages. When this is the case, the examiner may elect to begin assessment in either language (Spanish or English) as both languages are at about the same level. It is important to note that bilingual assessment is *only* necessary when a disability is suspected, specifically when a CHC factor (processing area) is considered a weakness or when the examiner is considering an eligibility decision. Figure 3 (below) illustrates that the student's English CALP is three while the Spanish CALP is two. The examiner has determined that student has limited CALP in both languages and assessment must be undertaken in both languages in order to understand the student's abilities. The student scored at the below average range on the KABC II (Gsm=76) and at the below average range on

the Bateria III (Gsm = 74). It is noteworthy that the student scored at the below average range in both languages indicating a possible deficit. Eligibility will be considered after the examiner has established ecological validity and exclusionary factors.

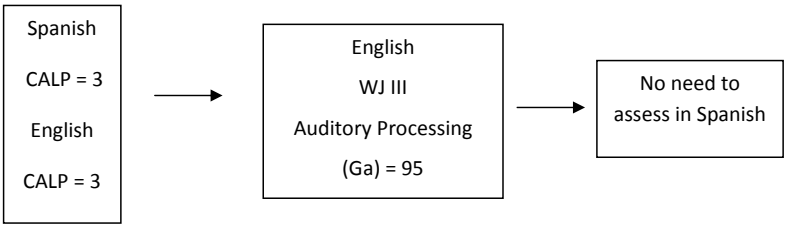
**Figure 3.** *Processing deficit decision tree for children that require both English and Spanish Assessment.*




The suspicion of a disability is confirmed when the examiner has established ecological validity and exclusionary factors have been considered as not being the primary factor in the student's learning difficulties. Ecological validity can be established through assessing patterns of deficits though multiple sources of information (cumulative reviews, SST files, etc), interviews (parent, teacher, and student), and observations (structured and unstructured) (Hale & Fiorello, 2004).

Conversely, if the CHC factor (processing area) is at or above the average range, then assessment in the other language is not warranted. It does not constitute a concern because the student is performing comparable to children at his or her age and grade. Figure 4 (below) illustrates that the student has a CALP level of three in both languages. The examiner determines that both English and Spanish assessment may be required if a disability is suspected. The WJ III (Ga) is administered in English and the student's score is at the average range. Because the score is at the average range, the examiner determines that no further assessment is necessary because the student scored at the average range. Again, assessment in the second language is only necessary when a processing deficit is evident and the examiner is considering eligibility. Nonverbal assessment is appropriate when the examiner does not speak the language or if the student has been diagnosed as having a speech and language impairment.

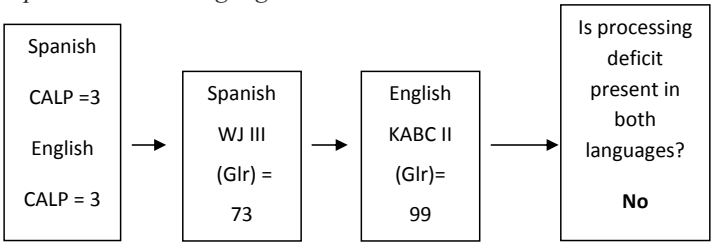
**Figure 4.** *No processing deficit concern.*




Lastly, the examiner may have determined to assess in both English and Spanish, based on CALP scores, and in the process determined that the student's abilities revealed low skills in one language but not the other. The examiner may conclude that low scores in one language may be due to ELD and not necessarily a disability. Figure 5 (below) illustrates that the examiner has determined that the student has limited CALP in both languages and assessment must be undertaken in both English and Spanish in

order to understand the student's abilities. The student scored the below average range on the Bateria III (Glr=73) and at average range on the KABC II (Glr = 99). It is noteworthy that there is a discrepancy between Spanish and English assessment. The examiner may conclude that the lack of consistency on the measures may be due to linguistic factors and not a disability. Therefore, eligibility may not be a decision in this scenario.

**Figure 5.** *Deficit present in one language but not the other.*




To minimize cultural and linguistic bias in test selection, the reader is advised to review the Cultural Language Interpretative Matrix (CLIM) and the Culture-Language Test Classifications (C-LTC) in Flanagan et al. (2007). The CLIM and C-LTC are constructed to analyze several cognitive assessments rating each subtest with regard to linguistic and cultural loading. These tools can be helpful when the school psychologist is assessing a child who is culturally and linguistically diverse. As mentioned above, Rhodes et al.'s (2005) Multidimensional Assessment Model for Bilingual Individuals (MAMBI) also guides the examiner in selecting the appropriate language of assessment. The MAMBI considers the following variables: degree of language proficiency (CALP), previous instructional modality, current grade of the student, and mode of assessment (Rhodes et al., 2005, p. 171). As mentioned above, establishing CALP levels is essential when assessing children that are classified or suspected of being ELL. In the context of multiple sources of information and observations, establishing CALP is an important aid in determining how to effectively conduct an assessment that is culturally and linguistically appropriate.

## CONCLUSIONS

While assessing a bilingual student can be time-consuming and complex, MODEL provides the practitioner with a framework to systemically assess ELL children in a nondiscriminatory manner by a bilingual or monolingual English speaking school psychologist, using a qualified interpreter. Through the collection of multiple sources of information, which includes reviewing all relevant records and observations, the practitioner can develop a data-driven hypothesis(es) regarding the referred student. Through the hypothesis(es), selection of a culturally and linguistically valid battery of assessment is undertaken based upon CALP levels. With the selection of linguistically appropriate cognitive tools and a thorough review of multiple sources of information, the school psychologist can corroborate that a disability is present in L1 and L2.

MODEL can assist the school psychologist in deciphering whether the current academic difficulties are related to normal English language development or suspected learning disabilities. After completing the comprehensive assessment, school psychologists are better able to develop culturally and linguistically appropriate interventions that address academic, social emotional needs, and English language supports.

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