# Are the WJ IV Tests of Cognitive Abilities Language-Loaded? One Evaluator's Perspective

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# About the Session:

- The importance of oral language cannot be overstated. It is the primary means for interacting with others, serves as the primary tool for learning, and is the foundation for academic success (p. 63). This session will discuss the interpretive considerations of the WJ IV family of tests to improve diagnostic precision for students with disabilities including second language learners.

# Learning Objectives

The participants will be able

- Use the WJ IV to distinguish between a language disorder and second language development.

- Describe the relationship between cognition, language, and achievement using the WJ IV

- Increase the interpretive power of the WJ IV regarding the degree of linguistic influence on learning.

# Critique

For several years, I have heard evaluators in workshops and trainings make statements describing the Woodcock-Johnson IV Tests of Cognitive Abilities (WJ IV Cog) as having a limitation of being "language loaded" and not suitable for emergent bilingual students and sometimes with students with specific learning disabilities. Critiques question the accuracy of the information and worry because students "don't do well." I worry these critiques reflect a fundamental misunderstanding of the uses and limitations of testing and an over-dependence on norm-referenced test data. This often opens the door to discuss improved practice and bigger conversations about language. Here are some things to consider about the WJ IV Cog being "language loaded."

1.  **Cognition does not occur without a degree of language development.** In other words, cognition does not operate independent from language. When examining the task demands of the WJ IV Cog, some tests require more advanced language development than other tasks. Just like in the classrooms, language demands shift when asked to do certain tasks. "Turn to page 6" does not have the language demands of "according to the story, what is the perspective of the main character." A test, whose main purpose is to understanding learning in the classroom, needs to reflect the type of tasks a student may encounter in the classroom. To reduce the language demands of every test would compromise the generalizability and usefulness of the test. To have a range of tasks that require advanced cognitive and linguistic demands as well as simpler tasks that have reduced cognitive and linguistic demands is a strength of the instrument, not a limitation.

2. **To understand the influence of language in the WJ IV Cog, an examiner must be skilled in test selection and test interpretation.** Understanding task demands of the tests assist the examiner in selection and interpretation. For example, *Concept Formation*, a higher order thinking ability of fluid reasoning (G*f*) requires a higher degree of listening comprehension to follow the instructions than *Number Series (Gf)* test that has significantly reduced language demand in the instructions. In a similar manner, the language demands of the working memory tests of the *Verbal Attention* test are higher compared to the *Picture Recognition* test. The language demands must be considered when interpreting student results. This is helpful in distinguishing if an emergent bilingual struggles due to reasoning or memory or due to the language demands.

3. **The high majority of kids referred for testing in schools are referred for a specific learning disability, most often in reading.** The definition of SLD, by definition requires language to be considered alongside of cognition (i.e., "psychological process involved in using language"). This essentially links the construct of cognition and language by the phrase "involved in." The WJ IV Cog allows us to examine this link and use the information to assist in the identification process. In addition, the definition includes the phrase "listen, think, and speak." The WJ IV Cog is validated to consider these abilities. The validity chapter of the WJ IV Technical Manual describes the inputs (Listen), cognitive processes, (Thinking), and the outputs (Speak) for each test. An examiner will find this information helpful when trying to understand the learner.

4. **Overdependence and overreliance on norm-referenced tests is often evident within the "language-loaded" criticism.** There is often a fundamental misunderstanding regarding the proper use of a norm-referenced test when assessing emergent bilinguals.  This is especially true in test selection and interpretation. In order to select appropriate tools, language proficiency must be predetermined prior to test selection using multiple sources of data. In the same vein, to interpret performance multiple sources of data need to be used. These are principles from the Responsible Test Interpretation Standards from the Standards for Educational and Psychological Testing.  When any test is used in isolation or "over-relied" on, we risk interpretive errors.

Something else that often gets over-looked is the test manual guidance for special populations (P. 43 for Emergent Bilinguals). For special populations, the WJ IV Cog has general guidelines to consider when assessing students with second language needs as well as kids we suspect of having learning disabilities. The process of testing these special populations is often as important as the product (test scores) of the test. We gain insight from maneuvering through the different tasks that tap into specific abilities. These insights also help us seamlessly transition to other tests included in the WJ IV family. For example, since the Woodcock-Munoz Language Survey III is co-normed with the WJ IV direct comparisons can be made.

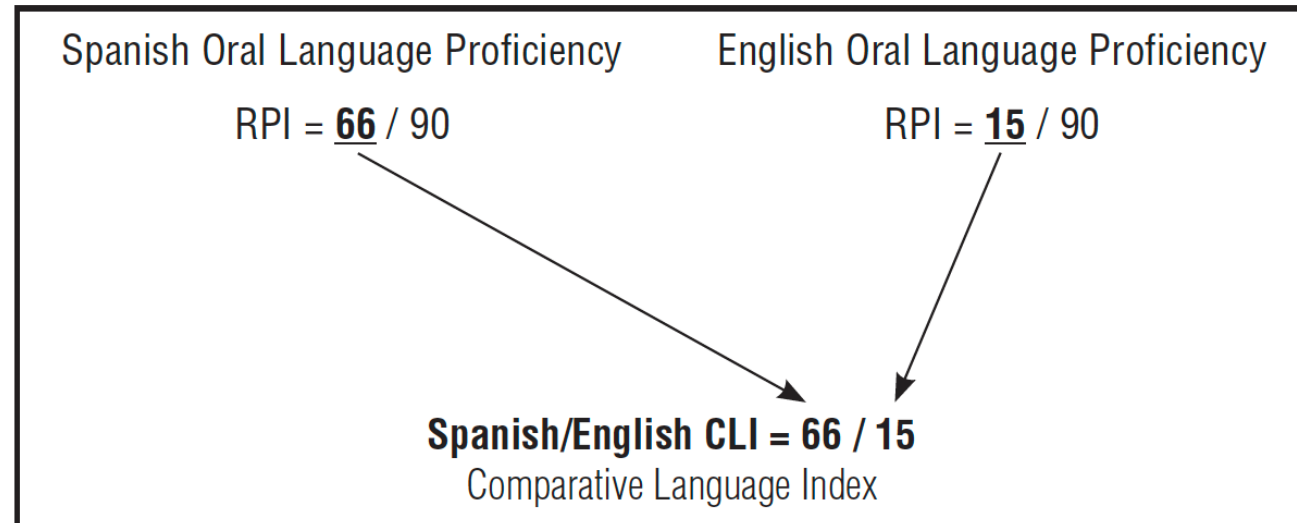# Test Manual: Emergent Bilinguals (WJ IV Cog. P. 43)

# Pg 60-WJ IV OL

**Table 5-2.**
*CALP Levels and Corresponding Implications*

| | CALP Level | *W* Difference | RPI | Instructional Implications |
|---|---|---|---|---|
| 6 | Very Advanced | +31 and above | 100/90 | Extremely easy |
| 5 | Advanced | +14 to +30 | 98/90 to 100/90 | Very easy |
| 4–5 (4.5) | Fluent to Advanced | +7 to +13 | 95/90 to 98/90 | Easy |
| 4 | Fluent | −6 to +6 | 82/90 to 95/90 | Manageable |
| 3–4 (3.5) | Limited to Fluent | −13 to −7 | 67/90 to 82/90 | Difficult |
| 3 | Limited | −30 to −14 | 24/90 to 67/90 | Very difficult |
| 2 | Very Limited | −50 to −31 | 3/90 to 24/90 | Extremely difficult |
| 1 | Extremely Limited | −51 and below | 0/90 to 3/90 | Nearly impossible |

# Comparative Language Index

**Figure 5-5.**
*Determining the Spanish/ English Comparative Language Index for Jorge, a third-grade boy.*

Spanish Oral Language Proficiency          English Oral Language Proficiency

RPI = **66** / 90                                              RPI = **15** / 90

**Spanish/English CLI = 66 / 15**
Comparative Language Index

# Comparative Language Index

**Table 5-8.**
*WJ IV OL Comparative Language Index*

| Comparative Language Index | |
|---|---|
| **English Cluster** | **Spanish Cluster** |
| *Oral Language* | *Lenguaje oral* |
| Test 1: Picture Vocabulary | Test 10: Vocabulario sobre dibujos |
| Test 2: Oral Comprehension | Test 11: Comprensión oral |
| | |
| *Broad Oral Language* | *Amplio lenguaje oral* |
| Test 1: Picture Vocabulary | Test 10: Vocabulario sobre dibujos |
| Test 2: Oral Comprehension | Test 11: Comprensión oral |
| Test 6: Understanding Directions | Test 12: Comprensión de indicaciones |
| | |
| *Listening Comprehension* | *Comprensión auditiva* |
| Test 2: Oral Comprehension | Test 11: Comprensión oral |
| Test 6: Understanding Directions | Test 12: Comprensión de indicaciones |

# Language in Brief

# Task Demands

| 4: Passage Comprehension | Reading & Writing Ability (*Grw*) *Reading comprehension* (RC) | Visual (text) | Identifying a missing key word that makes sense in the context of a written passage | Construction of propositional representations; integration of syntactic and semantic properties of printed words and sentences into a representation of the whole passage | Oral (words) |
|---|---|---|---|---|---|

# Task Demands

| Cognitive Test | Primary Broad CHC Ability<br>*Narrow Ability* | Stimuli | Task Requirements | Cognitive Processes | Response |
|---|---|---|---|---|---|
| 1: Oral Vocabulary<br>A: Synonyms<br>B: Antonyms | Comprehension-Knowledge (*Gc*)<br>*Lexical knowledge* (VL)<br>*Language development* (LD) | Auditory (words) | Listening to a word and providing a synonym; listening to a word and providing an antonym | Semantic activation, access, and matching | Oral (words) |
| 2: Oral Comprehension<br>(*11: Comprensión oral*) | Comprehension-Knowledge (*Gc*)<br>*Listening ability* (LS) | Auditory (text) | Listening to an oral passage and identifying a missing key word that makes sense | Construction of propositional representations through syntactic and semantic integration of orally presented passages in real time | Oral (words) |

# Examples

- Case 1 (CALP, Task Demands)
- Case 2 (CLI)
- Case 3 (High Language)

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