

Linguistic Demands & Dyslexia Assessment

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The International Dyslexia Association defines “dyslexia” in the following way:

Dyslexia is a specific learning disability that is **neurobiological** in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the **phonological component of language** that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.



Linguistic Demands and Dyslexia Assessment

- Dyslexia is often defined as a **language-based** reading disability.
- How can we address the **linguistic demands** of dyslexia assessment when evaluating students who are in the **second acquisition process**?
- How do we consider the **degree** of linguistic demands of dyslexia assessments when reviewing student results in determining dyslexia identification for students with a **bilingual background**?

“Degree of Linguistic Demand” refers to the amount of linguistic facility required by a given test.





What is facility?

The ability to do or learn something well and easily; a natural aptitude.

"he had **a facility for** languages"





Linguistic Demands and Dyslexia Assessment

- Students identified as having **dyslexia** typically experience primary difficulties in phonological awareness, including phonemic awareness and manipulation, single-word reading, reading fluency, and spelling.
- Individuals who are reading in a language different from their native language will, at least for some period of second language learning, show evidence of poor reading skills (Everatt et al.,2010)



Linguistic Demands and Dyslexia Assessment

- Students learning a **second language** may experience difficulties in phonological awareness, including phonemic awareness and manipulation, single-word reading, reading fluency, and spelling.
- Even in bilingual settings, young learners have to cope with the **demands** of two languages simultaneously and often fall behind their monolingual peers (Wilkinson, Ortiz, Robertson, & Kushner, 2006)

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Figure 3.3. Additional Data Sources for English Learners

- Home Language Survey
- Assessment related to identification for limited English proficiency (oral language proficiency test and norm-referenced tests—all years available)
- Texas English Language Proficiency Assessment System (TELPAS) information for four language domains (listening, speaking, reading, and writing)
- Instructional interventions provided to address language needs
- Information regarding previous schooling inside and/or outside the United States
- Type of language program model provided and language of instruction

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Figure 3.6. Characteristics of Dyslexia in English and Spanish

English	Spanish
Phonological awareness Rapid naming Regular/irregular decoding Fluency Spelling	Phonological awareness—may be less pronounced Rapid naming Decoding—fewer “irregular words” in Spanish Fluency—often a key indicator Spelling—may show fewer errors than in English, but still more than students that do not have dyslexia

Reading comprehension may be a weakness in both English and Spanish.



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Figure 3.5. Dyslexia in Transparent and Opaque Orthographies

Opaque	Transparent
Early and marked difficulty with word-level reading Fluency and comprehension often improve once decoding is mastered	Less difficulty with word-level reading More difficulty with fluency and comprehension



Linguistic Background

- A transparent written language has a **close letter/sound correspondence** (Joshi & Aaron, 2006).
- Students with dyslexia who have or who are being taught to read and write a transparent language **may be able to decode** real and nonwords adequately but demonstrate serious difficulties in reading rate with concurrent deficiencies in phonological awareness and **rapid automatized naming** (RAN).
- Phonological awareness—may be less pronounced



Additional Considerations for ELs

- Know about first and second language acquisition theory
- Know about the written system of the first language: transparent
- Know about the student's literacy skills in native and second languages
- Investigate or seek help on how to interpret results from a cross-linguistic perspective
- Investigate and seek help on how to interpret TELPAS (Texas English Language Proficiency Assessment System) results



Additional Considerations for ELs

- If there is not a test in the native language of the student, informal measures of evaluation such as reading a list of words and listening comprehension in the native language may be used
- **Informal measures** of evaluation such as reading a list of words and listening comprehension in the native language
- Ask parent, interpreter, or other adult to help interpret measures
- Was the student having difficulties prior to change of placement? When did difficulties begin?



Norm-Referenced Measures

- Standardized Assessments compare students to a set of norms to gain an index of their relative standing,
- Is the student similar to those on whom the test was standardized? (Language History? SES? Background Experiences?)
- How do Culturally & Linguistically Diverse individuals compare?
- Could these measures lead to unfair or biased assessment?

Normative Information

- Sample Selection Procedures
- Demographic Characteristics of the Sample
- Stratification of the Sample

Read the Examiner's Manual!!!

(Normative Information p.43 CTOPP2)



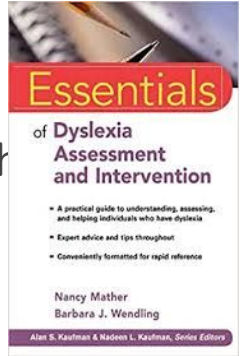
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Figure 3.4. Areas for Evaluation

Academic Skills	Cognitive Processes	Possible Additional Areas
<p>Letter knowledge (name and associated sound)</p> <ul style="list-style-type: none">• Reading words in isolation• Decoding unfamiliar words accurately• Reading fluency (rate, accuracy, and prosody are assessed)• Reading comprehension• Spelling	<ul style="list-style-type: none">• Phonological/phonemic awareness• Rapid naming of symbols or objects	<ul style="list-style-type: none">• Vocabulary• Listening comprehension• Verbal expression• Written expression• Handwriting• Memory for letter or symbol sequences (orthographic processing)• Mathematical calculation/reasoning• Phonological memory• Verbal working memory• Processing speed

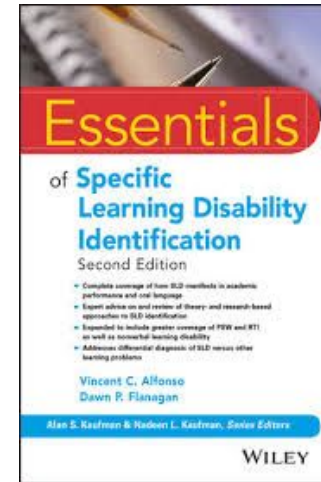
Evaluation of Dyslexia in Culturally And Linguistically Diverse Individuals

- Evaluation of ELLs exclusively in English is likely to produce the most biased results.
- A one-time assessment may not provide the most accurate picture of the individual.
- Is the source of reading difficulties lack of exposure to English? Explicit Intervention?
- What the child taught word attack strategies? (ELA/SLA)

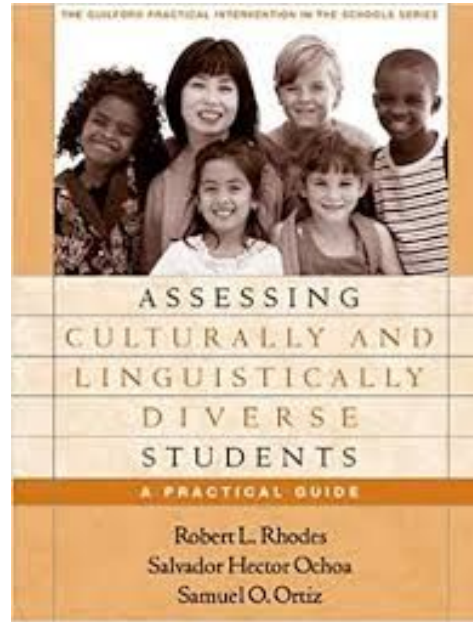


Evaluation of Dyslexia in Culturally And Linguistically Diverse Individuals

- First & Second Acquisition Processes
- Language Proficiency
- Dominance and Development
- Native-language vs English-only instruction
- Level of acculturation
- Parental Education
- Socioeconomic Status
- Opportunity for learning



Assessing Culturally and Linguistically Diverse Students





Impact and Extent of Cultural & Linguistic Influences

Linguistic Demand (i.e., high, moderate, and low) refers to the linguistic facility required by a given test and is based on three factors:

1. Verbal versus nonverbal language requirements on the part of the examiner (in administration of the test)
2. Receptive language requirements on the part of the examiner
3. Expressive language requirements on the part of the examinee

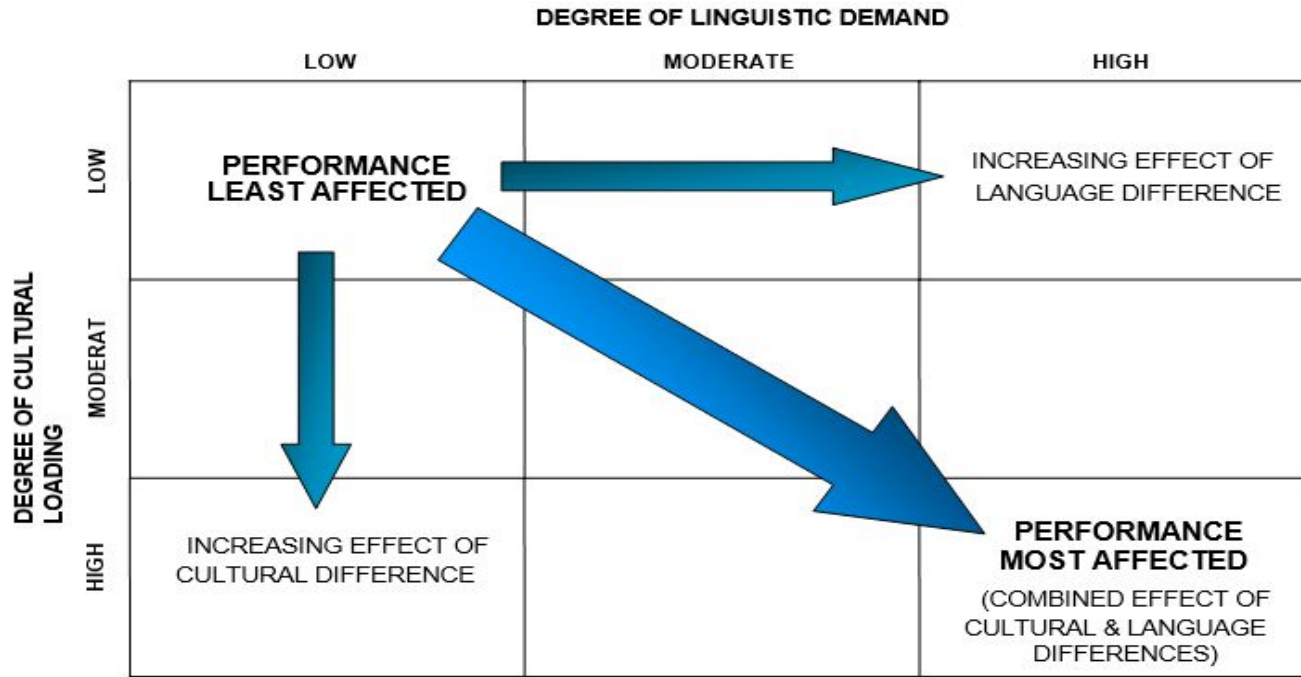
Source: Ortiz, S. O., Flanagan, D. P. & Alfonso, V. C. (2015). Cross-Battery Assessment Software System (X-BASS v1.0). New York: Wiley & Sons, Inc



Impact and Extent of Cultural & Linguistic Influences

Degree of Cultural Loading (i.e., high, moderate, and low) refers to (1) the degree to which a particular test or subtest contains or requires familiarity, specific knowledge, or an understanding of U.S. mainstream culture; and (2) the degree to which a particular test or subtest requires expressive or receptive language skills, because the ability being measured is language based, the correct response requires verbal competency

Source: Ortiz, S. O., Flanagan, D. P. & Alfonso, V. C. (2015). Cross-Battery Assessment Software System (X-BASS v1.0). New York: Wiley & Sons, Inc



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Linguistic Demands?



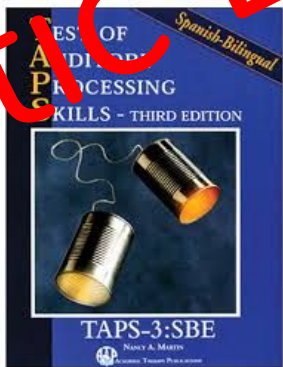
Factors to Consider....

- What is the task?
- What are the **receptive** and **expressive** demands?
- Where is the student in the language acquisition process?
- Is this skill developmentally appropriate for this child's age?
- Has this concept been taught in native language?
- Has child received explicit instruction on this skill?



Factors to consider when interpreting screening results...

- Identification of dyslexia more challenging than identifying other forms of disability
- No definitive test score that invariably identifies dyslexia.
- Dyslexia is a neurobiological disorder that exists along a continuum of severity.
- Behaviors are **unexpected** for an individual's age, educational level, or cognitive abilities, (persist over time and interfere with his/her learning).
- How does the student's performance compare to other English Learners?



Linguistic Demands?



Resources

Flanagan, D. P., Ortiz, S.O. & Alfonso, V.C. (2013). Essentials of Cross-Battery Assessment, Third Edition. New York: Wiley & Sons, Inc.

Flanagan, D.P. & Ortiz, S.O. (2012). Essentials of Specific Learning Disability Identification. New York: Wiley & Sons, Inc.

Mather, N. & Wendling, B. J. (2012). Essentials of Dyslexia Assessment and Intervention, New York: Wiley & Sons, Inc.

Rhodes, R., Ochoa, S. H. & Ortiz, S. O. (2005). Comprehensive Assessment of Culturally and Linguistically Diverse Students: A practical approach. New York: Guilford.

Ortiz, S. O., Flanagan, D. P. & Alfonso, V. C. (2015). Cross-Battery Assessment Software System (X-BASS v1.0). New York: Wiley & Sons, Inc



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