Assessment and Treatment of Dyslexia Among English Learnhers



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What is the School Population Today?

- 50.4 million students in schools today
- 35.4 million are in Pre-K- 8th grade
- 15.0 million are in high school (Condition of Education 2018, NCES)

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What is the School Population for ELLs?

- 9.5% of school population
- 4.8 million ELL students
- Increase from 8.1% of school population in 2000 (Condition of Education 2018, NCES)



What about Schools in 2026?

- •51.7 million students predicted to attend in 2026
- •36.4 million in Pre-Kinder to 8th grade in 2026
- •15.6 million predicted to attend high school in 2026
- •Therefore more than 5 million ELLs predicted to attend in

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Condition of Education (2018)

*The number of children and youth ages 3—21 receiving special education services was 6.7 million, or about 13.2 percent of all public school students, in 2015-2016. Some 35 percent of students receiving special education services had specific learning disabilities."

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ELLs and Learning Disabilities

•Under-identification during the elementary school years •Over-identification during the middle and high school years



Knowledge and Practice Standards

Examples for assessment standards include:

- Inderstand the differences among and purposes for screening, progress monitoring, diagnostic, and outcome assessments.
- Understand basic principles of test construction and formats
- Know and utilize in practice well-validated screening tests designed to identify students at risk for reading difficulties.
- Understand/apply the principles of progress monitoring and reporting with Curriculum Based Measures

- Curriculum Based Measures
 Know and utilize in practice informal diagnostic surveys of phonological and phoneme
 awareness, decoding skills, oral reading fluency, comprehension, spelling, and writing.
 Know how to read and interpret the most common diagnostic tests used by
 psychologists, speech language professionals, and educational evaluators.
 Integrate, summarize and communicate the meaning of educational assessment data for
 sharing with students, parents, and other teachers

 (Integrational Diselective Association, 2018)

(International Dyslexia Association, 2018)

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Gold Standard for ELLs



• The appropriate use of assessment tools and practices, as well as the communication of assessment results to families and decision makers, requires that all stakeholders be capable of understanding and interpreting the results of academic assessments administered to English language learners in English or home language, as well as English language proficiency assessments

(Promoting the Educational Success of Children and Youth Learning English: Promising Futures- National Academy of Sciences, 2017)

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Seven Factors That May Influence ELLs Language and Academic Development

Consider the following:

- · Learning Environment
- · Academic Achievement and Instructional Factors
- Oral Language and Literacy Factors
- · Personal and Family Factors
- · Physical and Psychological Factors
- Previous Schooling Factors
- · Cross-Cultural Factors

(Hamayan, Marler, Sanchez-Lopez and Damico, 2013)

Learning Environment

Consider the following:

- Equitable conditions within the school
- · Materials are culturally and linguistically responsive
- · Certified teachers who understand needs of ELLs
- Multilevel reading materials to support ELLs with content knowledge $\,$
- High quality English language instruction with native language support
- Professional development opportunities to deliver culturally relevant and linguistically responsive pedagogy

Hamayan, Marler, Sanchez-Lopez and Damico (2013)

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Academic Achievement and Instructional Factors

Consider the following:

- Collaboratively plan how to systematically evaluate and improve ELLs academic language and achievement
- Determine ways to support the goals and increase comprehension of input



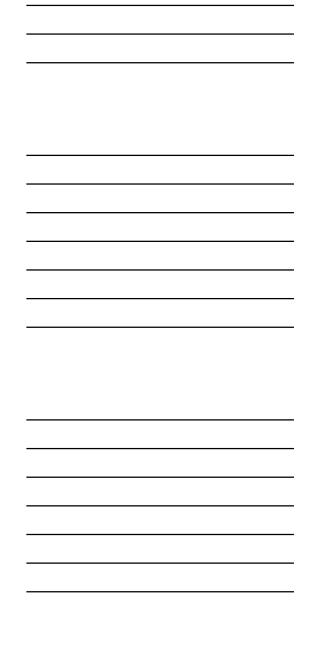
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Oral Language and Literacy Factors

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Consider the following:

- First language experiences
- · Any delays reported by family
- · Second language experiences
- · Continuity of services
- Opportunities for native language literacy
- Literacy instruction addressing five core areas of literacy instruction in native and/or second language
- · Academic and social literacy
- · Home literacy practices



Personal and Family Factors

Consider the following:

- · Socioeconomic status
- · Family dynamics
- Expectations and aspirations
- · Parental engagement
- · Student interests
- Experiential background



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Physical and Psychological Factors

Consider the following:

- Health
- · Nutrition
- · Mental health
- · Social and emotional development
- · Strong feelings of belonging



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Previous Schooling Factors

Consider the following:

- · Formal and/or informal schooling
- · Continuous or interrupted instruction
- · Cohesive instructional program within school
- · Look beyond school records
- · Language of instruction models
- Opportunities with all content areas



Cross Cultural Factors

Consider the following:

- ELLs go through multicultural identities
- · Home identity and/or school identity
- · Adults must value diversity
- · Use cultural and linguistic differences as a resource
- · Reduce cultural and linguistic biases



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Specific Learning Disorder DSM-5

- Specific learning disorder is diagnosed through clinical review of individual's developmental, medical, educational, family history, reports of test scores teacher observations and response to academic interventions.
- Student must exhibit persistent difficulty with reading, writing, arithmetic or mathematical reasoning.
- Academic skills must be below average in culturally and linguistically appropriate tests of reading, writing or math.
- Disorder is not explained by developmental, neurological, sensory or motor disorders and it must interfere with academic achievement, occupational performance, or activities of daily living.



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Communication Disorder DSM-5

- Language disorder (includes receptive and/or expressive type)
- Speech sound disorder
- Childhood onset fluency disorder
- Social communication disorder



Dyslexia

- A specific learning disability
- Neurological in origin Difficulties in accurate and/or fluent word recognition
- Poor spelling and decoding
- Phonological component of language deficit
- Unexpected in relation to cognitive abilities and effective instruction
- Secondary consequences are: -Reduced reading experiences
- -Reading comprehension
- -Vocabulary and background knowledge

(International Dyslexia Association, 2002)



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What about basic principles of assessment for ELLs?

Cross-Language Battery- Formal and Informal Measures

- O Phonological Awareness (pl
- o Word, Sentence and Paragraph Reading
- o Spelling of Sounds and Words
- $\circ~$ Reading Fluency at Word, Sentence and Paragraph level
- o Reading Comprehension-Open and Closed format
- O Vocabulary- Receptive and Expressive
- o First and Second Language and Literacy Acquisition Stages
- o Cognitive aspects related to Literacy Acquisition
- Other data sources

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Tests that are widely used:

- Woodcock-Johnson, Test of Achievement (WJ IV-Spanish and WJ IV- English)
- Wechsler Individual Achievement Test-Fourth Edition (WIAT-IV)
- Test of Word Reading Efficiency-Second Edition (TOWRE-2)
- Gray Oral Reading Tests-Fifth Edition (GORT-5)
- Test of Early Written Language-Third Edition (TEWL-3)
- Test of Written Language-Fourth Edition (TOWL-4)
- Test of Written Spelling-Fifth Edition (TWS-5)
 Comprehensive Test of Phonological Processing-Second Edition (CTOPP2, STOPP)
- Clinical Evaluation of Language Fundamentals (4th Edition-Spanish and 5th Edition-English)



Tests that are widely used:

*Tejas Lee (K-3)

*Texas Primary Reading Inventory (K-3)
*Dynamic Indicators of Basic Early Literacy Skills (DIBELS, K-6)

*Indicadores dinámicos del éxito en la lectura (IDEL, K-3)

*Expressive One Word Picture Vocabulary (Bilingual Edition)
*Receptive One Word Picture Vocabulary (Bilingual Edition)
*Receptive One Word Picture Vocabulary (Bilingual Edition)
*Preschool Language Scale- 5 (Spanish/English)
*lowa AchievementTest (K-12) Logramos (K-2, 5**)
*Stanford AchievementTest-10** Edition (K-12) Aprenda (K-12)

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Tests that are widely used:

- Kaufman Brief Intelligence Test-Second Edition (KBIT-2)
- Wechsler Intelligence Scale for Children- Fifth Edition (WISC-V)
- Woodcock-Johnson, Test of Cognitive Abilities (WJ IV)
- Gray Silent ReadingTest (GSRT)
- Test of Silent Word Reading Fluency-Second Edition (TOSWRF-2)
- Test of Phonological Awareness-Second Edition: Plus (TOPA-2+), Kindergarten and Early Elementary Version
- Beery-Buktenica Developmental Test of Visual-Motor Integration-Sixth Edition (BEERY
- Bender Visual-Motor Gestalt Test-Second Edition (Bender-Gestalt II)

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Decision Making

A team of knowledgeable persons who understand....

- * Language and Literacy Development
- * Second Language Acquisition
- * Reading Process
- * Language and Literacy Instruction
- * Assessments
- * District, State and Federal guidelines



Multiple Sources of Data

- Parent observations
- Teacher observations
- School work
- · Academic history
- Informal benchmarks
- Formal benchmarks



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Questions to Ask

- Are the reading difficulties due to one or more of primary characteristics of dyslexia and reading disability?
- Are the difficulties related to phonological processing deficit?
- · Do the difficulties exist across languages?
- Are the reading, spelling and phonological processing deficits unexpected?
- Does the student demonstrate cognitive ability to support age-level academic knowledge?

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Questions to Ask

- Are considerations provided for dyslexia profiles of native languages that are transparent?
- Do team of decision makers understand that in transparent languages dyslexics may demonstrate primarily a weakness in fluency and spelling?
- Are considerations provided for students oral proficiency levels in native and second language?
- What about individuals from the various socioeconomic levels?



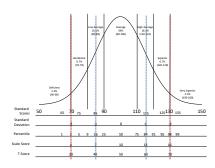
Questions to Ask

 Are the secondary characteristics of dyslexia evident in reading comprehension, vocabulary and background knowledge in relation to reduced reading experiences?



- Does the student have strengths that could be assets?
- Are co-existing deficits complicating the identification and the potential response to intervention?
- Do we need further assessment, observations and/or other data?

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Case Studies

- 11-year-old Hispanic male in U.S. 1 year
- He has a twin brother-no difficulties, Dad is dyslexic
- Family is intact and of average SES
- He has received 1 year of ESL, Speech Emergence Stage
- IQ English SS 6
- Bilingual accommodations with some verbal comprehension questions in native language SS 74
- Bilingual verbal comprehension SS 61
- Auditory processing SS 81 Oral Lang. E-58 S-75
- Math Cal.SS 115 Math Reasoning SS 89
- Basic Reading SS 80 in English SS 85 in Spanish
- Reading Fluency 70,80 Spelling 80,85 Written lang. 80, 82 PA 80, 83



Case Studies

- 8-year-old Hispanic female in U.S. 3 years
- · Mom is dyslexic
- Family is intact and low SES
- Received immersion instruction all 3 years- Intermediate level for 2nd language
- IQ English SS 95
- Bilingual verbal comprehension SS 92
- Auditory processing SS 94 Oral Lang. E-70 S-75
- Math Cal.SS 95 Math Reasoning SS 90
- Basic Reading SS 93 in English SS 91 in Spanish
- Reading Fluency 87, 89 Reading Comprehension SS 85, 89 Spelling 90,95 Written lang. 78, 80 PA 92, 93

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Case Studies

- 8-year-old Hispanic male in U.S. 5 years
- Dad is dyslexic
- Family is intact and low SES
- Received immersion instruction all 5 years- Intermediate level for 2nd language
- IQ English SS 85
- Bilingual verbal comprehension SS 70
- Auditory processing SS 84 Oral Lang. E-72 S-75
- Math Calculation SS 99 Math Reasoning SS 90
- Basic Reading SS 70 in English SS 75 in Spanish
- Reading Fluency 70,72 Reading Comprehension SS 70, 74 Spelling 70,72
- Written language 77, 80 PA 82, 83

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Case Studies

- Same child now at age 12
- Family is intact and low SES
- Received immersion instruction all 9 years
- Advanced level for 2nd language acquisition
- Auditory comprehension SS 92, 90
- Oral language SS 105
- Math Calculation SS 113 Math Reasoning SS 108
- Basic Reading SS 92 in English SS 95 in Spanish
- Reading Fluency 95,97 Reading Comprehension SS 92, 90 Spelling 88, 84
- Written language 77, 80 PA 95, 93

National Literacy Panel Report for Language Minority Youth and Children



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Guidelines for Educating ELLs in Kindergarten-5th grade

- Provide explicit instruction in literacy components.
- Develop academic language during content area instruction.
- Provide visual and verbal supports to make core content comprehensible.
- Encourage peer-assisted learning opportunities.
- Capitalize on students' home language, knowledge, and cultural assets.
- Screen for language and literacy challenges and monitor progress.
- Provide small-group academic support in literacy and English language development for students.

(Promoting the Educational Success of Children and Youth Learning English: Promising Futures- National Academy of Sciences, 2017)

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What is Structured Literacy?

Instruction that emphasizes:

The structure of language

- o the speech sound system (phonology)
- o the writing system (orthography)
- o the structure of sentences (syntax)
- $\circ \quad meaningful \ word \ parts \ (morphology)$
- o meaning (semantics)

The organization of spoken and written discourse for deep reading and effective written communication $% \left(1\right) =\left(1\right) \left(1\right)$

O their aspects of cognition related to literacy acquisition

WHAT IS STRUCTURED LITERACY?

- The ultimate goal of Structured Literacy instruction is the development of deep levels of comprehension and expression and lifelong reading and writing habits.
- This instruction <u>enhances reading and academic achievement</u> of <u>all</u> students and <u>is essential for those students who are not</u> <u>meeting grade level standards</u>.

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Considerations for Well-Designed Interventions

Language	Literacy
phonology	phonological awareness, phonics, spelling
morphology	phonics, fluency, spelling, vocabulary
semantics	vocabulary, reading comprehension
syntax	fluency, written composition
pragmatics	comprehension, use

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Instructional Design: Integrated Strands

Vocabulary, Concept Knowledge, Oral Language

Phonemic Awareness Spelling

Letter-Sound Recognition

Word Recognition

Repeated Connected Text Reading

Comprehension Strategies

Considerations for Well-Designed Interventions

- · Lessons are designed for individual student need in specific areas necessary for intervention
- · Lessons are cumulative and repetitious with constant reviewing and monitoring of each student
- Cross linguistic features are explicitly taught and used as a resource for $2^{\rm nd}$ language literacy development
- · A focus on oral language and vocabulary is incorporated throughout intervention cycle
- · Correction and reinforcement is given immediately
- Errors are minimized through direct modeling of correct responses and immediate feedback
- Progress is continuously monitored
- Practice is scaffolded
- · Support is gradually withdrawn as the student masters the material

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Language and Literacy Stages

- · Keep in mind Dr. Jeanne Chall's Stages of Literacy development and Second Language Acquisition when designing and determining appropriate interventions
- · Some students will require foundational skills others may not
- There are differences regarding individual student needs and thus treatment design
- ${}^{\bullet}$ The majority of English language learners can benefit from oral language opportunities and instruction.

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Chall's Stage 0: Pre-Reading

- o Ages 0-6 (native language age estimate)
- o Language awareness
- o Letter recognition
- o Letter naming
- o Word recognition
- o Awareness of purpose for reading
- o Relationship between pictures and print
- o Relationship between written and spoken word
- o Rhyming
- o Alliteration
- o Segmentation







Chall's Stage 1: Decoding

- o Ages 6-7 (native language age estimate)
- ${\scriptstyle o\;\; Alphabetic\; principle}$
- o Letter to sound correspondence
- o Graphic elements inwards
- o Assimilation process
- o Analyze whole to part
- o Analyze part to whole



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Chall's Stage 2: Confirmation

- o Ages 7-8 (native language age estimate)
- o Confirms previous learning
- o Fluency
- o Phonics knowledge confirmation
- o Word recognition accuracy
- o Reading speed increases
- o Attends to meaning of text



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Chall's Stage 3: Reading for Learning

- o Ages 9-14 (native language age estimate)
- o Motivation for reading
- o Reads to learn new information
- o Reads content area subjects
- o Vocabulary is enlarged
- o World knowledge expands
- o Reads from one view point



Chall's Stage 4: Multiple Viewpoints

- o Ages 14-18 (native language age estimate)
- o Reads text with layers of facts
- o Reads text with multiple viewpoints
- $_{\scriptscriptstyle 0}$ Interacts with more complex text



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Chall's Stage 5: **Construction and Reconstruction**

- o Ages 18-adult (native language age estimate)
- o Selective reading
- o Forms opinions
- o Forms Judgment
- o Constructive reading



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Second Language Acquisition (Krashen and Terrell, 1983)

· Stage I: Silent or Preproduction Stage

- · Comprehends up to 500 receptive words
- · Responds through gestures
- · Understands new words that are made comprehensible
- · Reluctant to speak





Second Language Acquisition

(Krashen and Terrell, 1983)

• Stage II: Early Production Stage

- · Comprehends up to 1000 receptive words
- Speaks in 1 or 2 word phrases
- · Provides short answers
- · Answers simple yes/no, who/what questions



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Second Language Acquisition

(Krashen and Terrell, 1983)

• Stage III: Speech Emergence Stage

- Comprehends up to 3000 words
- · Speaks in simple sentences
- · Asks simple questions
- · Grammatical errors are present in speech



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Second Language Acquisition

(Krashen and Terrell, 1983)

• Stage IV: Intermediate Language Proficiency Stage

- Comprehends up to 6000 words
- · Speaks in complex sentences
- · States opinions
- · Asks for clarification



Second Language Acquisition

(Krashen and Terrell, 1983)

• Stage V: Advanced Language Proficiency Stage

- · Comprehends academic words
- · Participates fully in grade level classroom activities
- · Speaks with appropriate use of grammar
- Vocabulary is comparable to same age native speakers



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ELL Instructional Strategies

- The implementation of effective instructional strategies becomes more complex when teaching English to ELL students because teachers must be knowledgeable in following areas:
 - The relationship between oral language proficiency and the development of oracy and literacy skills in both languages.
 - The similarities and differences between the first and second languages, and how to incorporate this knowledge into instruction.
 - The skills levels of the student in both languages.

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Considerations for Instruction

- ELLs can benefit from explicit, early and intensive instruction in phonological awareness to build decoding skills. Use familiar sounds when possible
- ELLs can benefit from learning new sounds of the English language and when possible teach partial transfers before no transfer concepts
- · ELLs can benefit from learning letter and sound correlations
- Introduce concepts that transfer directly from native language and English, next consider partial transfers and finally provide instruction of concepts that do not transfer across languages
- ELLs can benefit from fluency instruction with text that may be culturally and linguistically relevant
- ELLs can benefit from multiple opportunities for vocabulary instruction and practice. Use similar morphemes across languages.
- ELLs can benefit from explicit comprehension strategy instruction and the use of various text structures



What Are Features for Success?

- ${\color{red}\bullet} \ Evidence-based \ screenings \ and \ assessments$
- Instruction with Evidence-Based Practices for students on the literacy continuum
- A Determination to Implement with Fidelity
- Progress Monitoring and Data Analysis for Differentiated Instruction
 An Implementation Support System for Schools
- Considerable Effort towards Building a Team of Support
- A Framework for Sustainability
- Celebrations and Opportunities to Feature Success

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Institute of Education Sciences **Practice Guides**



Improving Adolescent Literacy: Effective Classroom and Intervention Practices



Assisting Students Struggling with Reading RTI and Multi-Tiered Intervention in Grades



Teaching Academic Vocabulary and Content Knowledge to English Learners in Linguist Learners in Upper Elementary and Middle School

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Resources

The International Dyslexia Association

www.eida.org

The National Center for Culturally Responsive Educational Systems (NCCRESt) www.Nccrest.org

CEC Division for Culturally and Linguistically Diverse **Exceptional Learners**

www.cec.sped.org

Office English Language Acquisition

www.ed.gov/office/oela

Additional Resources

- Center for Applied Linguistics www.cal.org
- Center on Instruction for ELLs



- $IES\ Practice\ Guide\ Effective\ Literacy\ and\ English\ Language\ Instruction\ for\ English\ Learners\ in\ the\ Elementary\ Grades $$ $http://ied.ed.gov/ncee/wwc/pdf/practiceguides/20074011.pdf $$$
- Colorín Colorado www.colorincolorado.com

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