



Debunking Dyslexia: Addressing literacy challenges in pediatric populations

Presented by WPS Assessment Consultant
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*I am an assessment consultant with Western Psychological Services.
I am a salaried employee and have no additional relevant financial
interests or conflicts of interest related to this presentation.*

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Learning Objectives

Participants will:

1. Identify characteristics of dyslexia and its impact on learning, language, and development
2. Describe constructs to comprehensively assess dyslexia across the lifespan
3. Identify approaches to provide focused intervention for dyslexia in pediatric populations



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“Dyslexia is an unexpected difficulty in reading for an individual who has the intelligence to be a much better reader. Commonly due to a difficulty in phonological processing (the appreciation of the individual sounds of spoken language), it affects the ability of an individual to speak, read, spell, and many times learn a second language.”

Sally and Bennett Shaywitz

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Definition of Dyslexia

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Definition of Dyslexia

International Dyslexia Association:

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.

Source: Adopted by the IDA Board of Directors, Nov. 12, 2002.

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Characteristics of Dyslexia

- Primary reading/spelling characteristics of dyslexia:
 - Difficulty reading words in isolation
 - Difficulty accurately decoding unfamiliar words
 - Difficulty with oral reading (slow, inaccurate, or labored without prosody)
 - Difficulty spelling

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Characteristics of Dyslexia, *(cont.)*

- The reading/spelling characteristics are most often associated with the following:
 - Segmenting, blending, and manipulating sounds in words (phonemic awareness)
 - Learning the names of letters and their associated sounds
 - Holding information about sounds and words in memory (phonological memory)
 - Rapidly recalling the names of familiar objects, colors, or letters of the alphabet (rapid naming)

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Characteristics of Dyslexia, (cont.)

- Variable difficulty with aspects of reading comprehension
- Variable difficulty with aspects of written language
- Limited vocabulary growth due to reduced reading experiences



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English and Spanish Characteristics

Figure 3.6. Characteristics of Dyslexia in English and Spanish

English	Spanish
Phonological awareness	Phonological awareness—may be less pronounced
Rapid naming	Rapid naming
Regular/irregular decoding	Decoding—fewer “irregular words” in Spanish
Fluency	Fluency—often a key indicator
Spelling	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.	

(Texas Education Agency, 2021)

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Screening Versus Evaluation

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Screening Data Gathering

Figure 2.4. Sources and Examples of Screening Data

Quantitative Information	Qualitative Information
Results of— <ul style="list-style-type: none"> • Current screening instruments • Previous screening instruments • Formal and informal classroom reading assessments • Additional brief and targeted skill assessments 	<ul style="list-style-type: none"> • Observations of student during screening (See Figure 2.3, Student Behaviors Observed During Screening) • Other observations of student progress • Teacher observations • Parent/guardian input (e.g., family history, early language skills) • Current student work samples • Work samples from earlier grade(s) • Intervention history

(Texas Education Agency, 2021, p. 16)

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Evaluation Materials

- Used for the purpose for which the evaluation or measures are valid or reliable
- Include material(s) tailored to assess specific areas of educational need and not merely material(s) that are designed to provide a single, general intelligence quotient
- Selected and administered to ensure that when a test is given to a student with impaired sensory, manual, or speaking skills, the test results accurately reflect the student's aptitude, achievement level, or whatever other factor the test purports to measure rather than reflecting the student's impaired sensory, manual, or speaking skills
- Selected and administered in a manner that is not racially or culturally discriminatory

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Evaluation Materials, (cont)



- Include multiple measures of a student's reading abilities such as informal assessment information (e.g., anecdotal records, district universal screenings, progress monitoring data, criterion-referenced evaluations, results of informal reading inventories, classroom observations)
- Administered by trained personnel and in conformance with the instructions provided by the producer of the evaluation materials
- Provided and administered in the student's native language or other mode of communication and in the form most likely to yield accurate information regarding what the child can do academically, developmentally, and functionally unless it is clearly not feasible to provide or administer

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Considerations for Evaluating English Learners

- Knowledge of first and second language acquisition theory
- Knowledge of the written system of the first language: transparent (e.g., Spanish, Italian, German)
- Knowledge of the student’s literacy skills in native and second languages
- Knowledge of how to interpret results from a cross-linguistic perspective
- Knowledge of how to interpret TELPAS (Texas English Language Proficiency Assessment System) results
- Knowledge of how to interpret the results of the student’s oral language proficiency in two or more languages in relation to the results of the tests measuring academic achievement and cognitive processes as well as academic data gathered and economic and socioeconomic factors

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Areas for Evaluation: All Students

Figure 3.4. Areas for Evaluation

Academic Skills	Cognitive Processes	Possible Additional Areas
<ul style="list-style-type: none"> • Letter knowledge (name and associated sound) • 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

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Three Questions for Dyslexia Identification

- Do the data indicate the following characteristics?
 - Difficulty with accurate and/or fluent word reading
 - Poor spelling skills
 - Poor decoding ability
- Do the difficulties (typically) result from a deficit in the phonological component of language?
- Are difficulties unexpected for the student’s age in relation to the student’s other abilities and provision of effective classroom instruction?


Source: Dyslexia Handbook, p. 31

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2015 OSERS Letter

- Nothing in IDEA that prohibits the use of the terms *dyslexia*, *dyscalculia*, and *dysgraphia* in evaluation, eligibility determinations, or IEP documents
- IDEA includes Child Find mandate



UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF SPECIAL EDUCATION AND REHABILITATIVE SERVICES
THE ASSISTANT SECRETARY

October 23, 2015

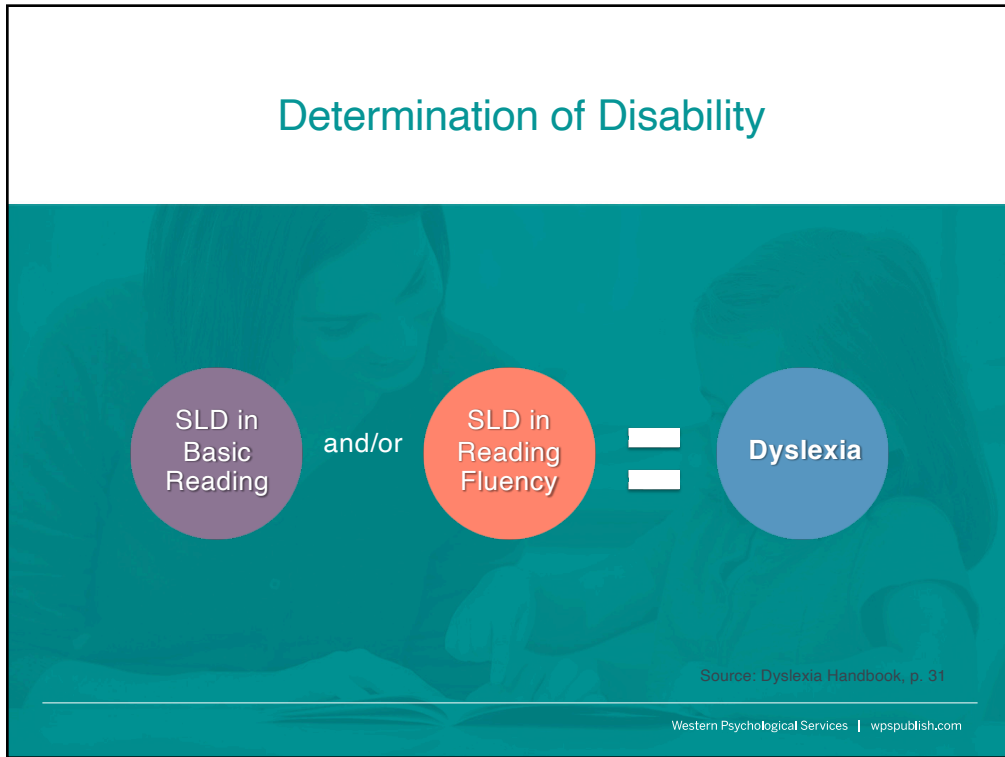
Dear Colleague:

Ensuring a high-quality education for children with specific learning disabilities is a critical responsibility for all of us. I write today to focus particularly on the unique educational needs of children with dyslexia, dyscalculia, and dysgraphia, which are conditions that could qualify a child as a child with a specific learning disability under the Individuals with Disabilities Education Act (IDEA). The Office of Special Education and Rehabilitation Services (OSERS) has received communications from stakeholders, including parents, advocacy groups, and national disability organizations, who believe that State and local educational agencies (SEAs and LEAs) are reluctant to reference or use dyslexia, dyscalculia, and dysgraphia in evaluations, eligibility determinations, or in developing the individualized education program (IEP) under the IDEA. The purpose of this letter is to clarify that there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents.

Under the IDEA and its implementing regulations “specific learning disability” is defined, in part, as “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, *dyslexia*, and developmental aphasia.” See 20 U.S.C. §1411(b)(10) and 34 CFR §300.8(c)(10) (emphasis added). While our implementing regulations contain a list of conditions under the definition “specific learning disability,” which includes dyslexia, the list is not exhaustive. However, regardless of whether a child has dyslexia or any other condition explicitly included in this definition of “specific learning disability,” or has a condition such as dyscalculia or dysgraphia not listed expressly in the definition, the LEA must conduct an evaluation in accordance with 34 CFR §300.304.200.311 to determine whether that child meets the criteria for specific learning disability or any of the other disabilities listed in 34 CFR §300.8, which implements IDEA’s definition of “child with a disability.”

For those students who may need additional academic and behavioral supports to succeed in a

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Current Dyslexia Evaluations

- Use of Multiple Tests
 - Different norm samples
 - Different age and grade ranges
 - Different types of test scores
- Access to various tests



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Before Using a New Test

- Study the manual and familiarize yourself with the kit's components and materials.
- Ask a colleague or supervisor if you have questions.
- Thoroughly practice giving and scoring the subtest items.
- Administer the test to at least three persons before using it in a real situation.
- Have an experienced practitioner observe your practice testing and review your scoring and interpretation.

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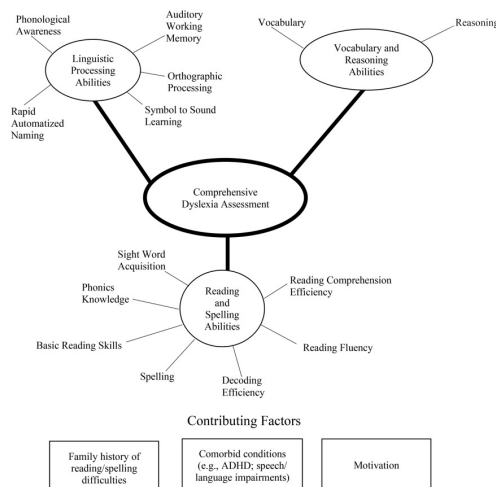


Tests of Dyslexia (TOD™)

Nancy Mather, PhD, R. Steve McCallum, PhD,
Sherry Mee Bell, PhD, Barbara J. Wendling, MA

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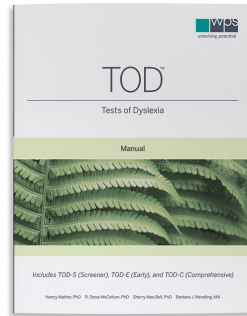
TOD Conceptual Framework: Main Components of a Dyslexia Evaluation



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TOD: Overview



- Ages 5 years, 0 months–89 years, 11 months
 - (Grade K–Adult)
- Administration Time:
 - TOD-S 10-15 minutes
 - TOD-E 20-35 minutes
 - TOD-C 30-40 minutes
- Individual or Group Administration*
- Scoring: standard scores, composite scores, percentile rank, confidence interval, and growth scores
- Screen and identify individuals with dyslexia
- Published: 2024

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TOD Examiner Qualifications

- To administer and score:
 - familiar with and competent in psychological or educational testing, or by a paraprofessional with training in assessment
- To interpret and apply results:
 - a professional with training and experience in child development, psychology, and/or education, or a person who is supervised by such a professional



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TOD Users

- The following professionals are examples of who may use the TOD:
 - Classroom teachers (TOD-S)
 - Reading specialists/interventionists/coaches
 - Special educators/educational diagnosticians
 - School psychologists/psychologists/neuropsychologists
 - Speech and Language Pathologists
 - Professionals/Paraprofessionals with training in assessment

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TOD Components

- TOD-Screener
- TOD-Early
- TOD-Comprehensive
- TOD Rating Scales
- TOD-Dyslexia Interventions and Recommendations



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TOD Uses

- Screen for reading and spelling difficulties
- Address screening, diagnosis/identification, and intervention-based assessment goals for individuals
- Provides empirical evidence linking the performance of an individual to the probability that the individual has dyslexia
- Addresses referral questions beyond dyslexia diagnosis



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TOD Purposes

- The TOD typically has two purposes:
 - Using the TOD-S to screen for risk of dyslexia in either a group or individually and to determine if further assessment with the TOD-C or TOD-E is needed
 - Using the TOD-S in conjunction with either the TOD-C or TOD-E (depending on age/grade), and TOD Rating Scales to conduct a comprehensive dyslexia evaluation in cases where there is already a referral question regarding dyslexia

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English Language Fluency

- The TOD was standardized on individuals who demonstrated fluency in English
 - Sample also included bilingual and multilingual individuals who were fluent in English
 - No significant differences in scores between monolingual English individuals and those who are bilingual, multilingual, and/or non-native English speakers
 - If an examinee does not exhibit sufficient English proficiency to learn and communicate in English, then it is not appropriate to base interpretation of the scores on the TOD norms, although the item responses can provide qualitative clinical information

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Reading and Spelling Skills

- Reading and spelling skills measured by the TOD:
 - Sight Word Acquisition
 - Irregular word reading (untimed and timed)
 - Phonics Knowledge
 - Pseudoword reading (untimed and timed)
 - Spelling (regular and exception words)
 - Reading Rate (Oral Reading Fluency [timed])
 - Reading Comprehension Efficiency (timed passage reading with questions)

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Linguistic Processing Skills

- Linguistic processing skills measured by the TOD:
 - Phonological Awareness
 - Blending and Segmenting
 - Manipulation
 - Rapid Automatized Naming (RAN)
 - Letters
 - Numbers
 - Working Memory
 - Orthographic Processing
 - Visual–Verbal Paired-Associate Learning

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Vocabulary and Reasoning Skills

- Abilities that do not require reading or spelling. Comparing the results of this domain with results from the other two domains can be useful in making a diagnosis of/identifying dyslexia.
- Oftentimes, people with dyslexia have average or above average vocabulary and reasoning skills.



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Tests of Dyslexia (TOD) Tests

TOD-Screener	TOD-Early*	TOD-Comprehensive*
1. Picture Vocabulary+ 2. Letter and Word Choice 3. Word Reading Fluency (Early) OR Question Reading Fluency (Comprehensive)	1. Picture Vocabulary+ 2. Letter and Word Choice 3. Word Reading Fluency 4. Sounds and Pseudowords 5. Rhyming 6. Early Rapid Number and Letter Naming 7. Letter and Sight Word Recognition 8. Early Segmenting 9. Letter and Sound Knowledge	1. Picture Vocabulary+ 2. Letter and Word Choice 3. Question Reading Fluency 4. Phonological Manipulation 5. Irregular Word Spelling 6. Rapid Letter Naming 7. Pseudoword Reading 8. Word Pattern Choice 9. Word Memory 10. Picture Analogies 11. Irregular Word Reading 12. Oral Reading Efficiency 13. Blending 14. Segmenting 15. Regular Word Spelling 16. Silent Reading Efficiency 17. Rapid Number and Letter Naming 18. Letter Memory 19. Rapid Pseudoword Reading 20. Rapid Irregular Word Reading 21. Symbol to Sound Learning 22. Listening Vocabulary 23. Geometric Analogies
Dyslexia Risk Index (DRI) = Bold Tests	Early Dyslexia Diagnostic Index (EDDI) = Bold Tests	Dyslexia Diagnostic Index (DDI) = Bold Tests
*If a child is in first or second grade, but does not read connected text, choose TOD-Early. If a child is in first or second grade, and reads connected text, choose TOD-Comprehensive. +Picture Vocabulary is helpful in the interpretation of the EDDI and DDI. Tests 10-23 in the TOD-Comprehensive are useful for additional diagnostic information and interpretation but are not required for the DDI.		

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TOD Rating Scales

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TOD Rating Scales

- Grade K–Adult (ages 5 years, 0 months–89 years, 11 months)
- Online administration and scoring
 - Parent/Caregiver Form
 - English and Spanish versions
 - Teacher Form
 - Self-Report Form (for TOD-C)
 - Scores: T-Scores

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TOD Rating Scales

- Each of the Rating Scales contains several yes-or-no questions related to:
 - family history
 - history of reading support
 - grade retention
 - previous diagnoses
- These are followed by a number of items with responses ranging from Strongly Disagree (1) to Strongly Agree (4)
 - A higher score on the Rating Scales is more indicative of dyslexia
 - Items measure the same skill areas as those tested by the TOD performance-based assessments

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TOD Rating Scales (cont.)

- Items are designed to elicit relevant background/history and content focusing on:
 - Motivation for Reading
 - General Reasoning
 - Verbal Comprehension
 - Orthographic Processing
 - Phonological Awareness
 - Rapid Automatized Naming
 - Memory
 - Basic Reading Skills
 - Reading Fluency
 - Reading Comprehension
 - Spelling

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TOD Rating Scales Dyslexia Risk Categories

Risk	Rating Scale T-Scores
Low to Moderate Risk* (About 84% of the population scores in this range)	59 and below
High Risk (About 14% of the population scores in this range)	60–69
Very High Risk (Less than 2% of the population scores in this range)	70 and above

*Low risk at lower end of range and moderate risk at higher end range.

Table 3.10: Risk for Dyslexia Based on Rating Scale T-Scores

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Standardization Sample

TOD-C Child Sample

- Parent/Caregiver Rating $n = 997$
- Teacher Rating $n = 448$
- Self-Rating $n = 1,066$

TOD-C Adult Sample

- Self-Report $n = 267$

TOD-E

- Parent/Caregiver Rating $n = 154$
- Teacher Rating $n = 142$

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Reliability

- TOD-C internal consistency:
.94 to .97
- TOD-C inter-rater correlations
among the scales range from
.77 to .81

- TOD-E internal consistency:
.95 to .97
- TOD-E inter-rater correlation
(Parent/Caregiver to Teacher)
= .75

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Validity

- Correlations between TOD-C Rating Scales and key scores from the TOD include:
 - Linguistic Processing Index ($r = -.42$ to $-.55$)
 - Reading and Spelling Index ($r = -.51$ to $-.84$)
 - Dyslexia Risk Index (derived from 2 screening tests) ($r = -.65$ to $-.71$);
 - Dyslexia Diagnostic Index (derived from 4 linguistic and 4 reading/spelling tests) ($r = -.64$ to $-.69$).

Note: Correlations are negative because the Rating Scales are scored in the opposite direction from the direct tests.

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TOD-C Classification Table for Parent Rating Scale Prediction of Reading LD

		Predicted		Percentage Correct
		No Reading LD	Reading LD	
Observed	No Reading LD	25	8	75.8
	Reading LD	7	26	78.8
Total				77.3

TOD-C Classification Table for Teacher Rating Scale Prediction of Reading LD

		Predicted		Percentage Correct
		No Reading LD	Reading LD	
Observed	No Reading LD	26	7	78.8
	Reading LD	5	28	84.8
Total				81.8

TOD-C Classification Table for Self-Rating Scale Prediction of Reading LD

		Predicted		Percentage Correct
		No Reading LD	Reading LD	
Observed	No Reading LD	28	5	84.8
	Reading LD	6	27	81.8
Total				83.3

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TOD-C Rating Scales Predict Group Membership

Reading Disability versus Matched Control

- Each of the TOD-C Rating Scales provides statistically significant improvement over chance in detecting reading disability status.
- All three rating scales provide impressive correct diagnostic decisions, 77%, 82%, and 83% for the Parent/Caregiver, Teacher, and Self-Rating Scales, respectively.
- TOD-C Rating Scales are credible predictors of students who have a learning disability in reading and, consequently, those who most likely have dyslexia.

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TOD Rating Scales: Uses and Limitations

Uses

- Stand-alone screener as indicator of the need for further testing or monitoring
- In conjunction with the TOD-Screener (3 group-administered tests) to improve prediction of risk
- In conjunction with the TOD-Early and TOD-Comprehensive to improve diagnostic accuracy
- In conjunction with other dyslexia/reading screeners to improve prediction of risk

Limitations

- Requires further validation in clinical practice

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Tests of Dyslexia— Screener

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TOD-Screener (TOD-S)

- Grade K–Adult (ages 5 years, 0 months–89 years, 11 months)
- Universal screener measuring reading fluency, orthographic processing, and vocabulary knowledge
 - Produces a Dyslexia Risk Index (DRI)
- Administration Time: 10-15 minutes
- Response Booklet:
 - Grades K–1
 - Grades 2–5
 - Grade 6–Adult
- Individual or group administration
 - Online option

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TOD-S Tests

Subtest	Description
1S: Picture Vocabulary	Examinee looks at four pictures and circles the one that best depicts a word that the examiner presents orally
2S: Letter and Word Choice	Examiner reads a letter or word aloud and the examinee circles the correct letter, or correctly spelled word, from a choice of four options (e.g., A, O, K, M; <i>prak, park, karp, rakp</i>).
3S: Word/Question Reading Fluency Part A: Grades K-1 (2 minutes) Part B: Grades 2 + (3 minutes)	Part A: Examinee looks at a picture and then circles the correct word from a row of four words as quickly as possible. Part B: Examinee reads questions silently and then circles the correct response from a row of four words as quickly as possible (e.g., What can we eat? <i>tree, ball, egg, shoe</i>).

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Dyslexia Risk Index

- Two TOD-S tests (*Letter and Word Choice; Word or Question Reading Fluency*) yield the Dyslexia Risk Index (DRI).
- Indicates the need for further evaluation.
- DRI scores in the at-risk range suggest further testing is needed with the TOD-C or TOD-E.

Table 3.2 Risk for Dyslexia Based on Dyslexia Risk Index (DRI) Standard Score

Risk	Interpretive description	Standard Score range
No or Low Risk	Above Average	110-130
Possible Risk*	Average	90-109
At-Risk	Below Average	89 and below

*Lower possible risk at high end of average range and higher possible risk at lower end of average range.

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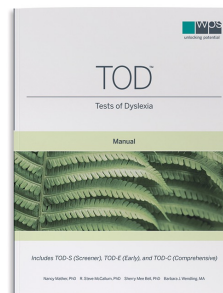
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Tests of Dyslexia—Early

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TOD-Early

- Grades K–2 (ages 5 years, 0 months–9 years, 3 months)
 - Grades K–2 not reading connected text
- 9 tests (3 from the Screener)
- Gives a broader view of the student's reading and spelling skills
- Measures basic reading skills, spelling, phonological processing, rapid automatized naming
- Individual administration



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TOD-E Indexes

Early Reading and Spelling Index	Early Linguistic Processing Index
Letter and Word Choice	Rhyming
Word/Question Reading Fluency	Early Rapid Number and Letter Naming
Sounds and Pseudowords	Early Segmenting
Letter and Sight Word Recognition	
Letter and Sound Knowledge	
Early Dyslexia Diagnostic Index (EDI)	

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TOD-E Composites

Early Sight Word Acquisition	Early Phonics Knowledge	Early Basic Reading Skills	Early Phonological Awareness
Letter and Word Choice	Sounds and Pseudowords	Letter and Sight Word Recognition	Rhyming
Letter and Sight Word Recognition	Letter and Sound Knowledge	Letter and Sound Knowledge	Early Segmenting

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TOD-E Tests

Subtest	Description
4E. Sounds and Pseudowords	<ol style="list-style-type: none"> 1. Examinee points to or says the number of the picture that begins with the sound the examiner says. 2. Examinee tells the sound that a letter makes. 3. Examinee reads aloud phonically regular nonsense words
5E. Rhyming	<p>Examinee points to or says the number of a picture that rhymes with a word that the examiner presents orally.</p> <p>Examinee provides a rhyming word for a word that the examiner presents orally.</p>

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TOD-E Tests

Subtest	Description
6E. Early Rapid Number and Letter Naming	Examinee is presented with rows of letters (A B C) and numbers (1 2 3) in a random sequence and must name as many as possible in 1 minute
7E. Letter and Sight Word Recognition	<ol style="list-style-type: none"> 1. Examinee points to and then names specific letters 2. Examinee points to and then reads sight words
8E. Early Segmenting	<ol style="list-style-type: none"> 1. Examinee breaks apart compound words 2. Examinee breaks multisyllabic words into syllables. 3. Examinee breaks words into phonemes.
9E. Letter and Sound Knowledge	The examinee points to or says the letter or letters that represent the first, last, or middle sound in words that the examiner presents

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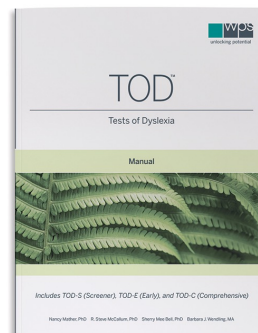


Tests of Dyslexia—Comprehensive

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TOD-Comprehensive (TOD-C)

- Grade 1–Adult (ages 6 years, 0 months–89 years, 11 months)
 - Grade 1–2 reading connected text
- 23 total tests (includes 3 from TOD-S)
- Designed as a diagnostic assessment



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TOD-C Indexes

Reading and Spelling Index	Linguistic Processing Index
Letter and Word Choice	Phonological Manipulation
Word/Question Reading Fluency	Rapid Letter Naming
Irregular Word Spelling	Word Pattern Choice
Pseudoword Reading	Word Memory
Dyslexia Diagnostic Index (DDI)	

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TOD-C Composites

Sight Word Acquisition	Phonics Knowledge	Basic Reading Skills	Decoding Efficiency
Irregular Word Reading	Pseudoword Reading	Pseudoword Reading	Rapid Pseudoword Reading
Rapid Irregular Word Reading	Rapid Pseudoword Reading	Irregular Word Reading	Rapid Irregular Word Reading

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TOD-C Composites

Spelling	Reading Fluency	Reading Comprehension Efficiency
Irregular Word Spelling	Word/Question Reading Fluency	Question Reading Fluency
Regular Word Spelling	Oral Reading Efficiency	Silent Reading Efficiency

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TOD-C Composites

Phonological Awareness	Rapid Automatized Naming	Auditory Working Memory	Orthographic Processing
Phonological Manipulation	Rapid Letter Naming	Word Memory	Letter and Word Choice
Blending	Rapid Number and Letter Naming	Letter Memory	Word Pattern Choice
Segmenting			

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TOD-C Composites

Vocabulary	Reasoning	Vocabulary and Reasoning 2	Vocabulary and Reasoning 4
Picture Vocabulary	Picture Analogies	Picture Vocabulary	Picture Vocabulary
Listening Vocabulary	Geometric Analogies	Picture Analogies	Picture Analogies
			Listening Vocabulary
			Geometric Analogies

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TOD-C Tests

Subtest	Description
4C. Phonological Manipulation	<p>Substitution: examinee changes a word, syllable, or phoneme to make a new word</p> <p>Deletion: examinee takes away a word, syllable, or phoneme to make a new word</p>
5C. Irregular Word Spelling	Examiner orally presents words that contain irregular sound-symbol correspondences of increasing difficulty, and the examinee spells them in the Response Booklet
6C. Rapid Letter Naming	Examinee is presented with rows of confusable letters (e.g., <i>b, d, p</i>) in a random sequence and must name the letters as rapidly as possible in 1 minute
7C. Pseudoword Reading	Examinee says the sounds associated with letters and then reads aloud pseudowords

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TOD-C Tests, (cont.)



Subtest	Description
8C. Word Pattern Choice	Examinee looks at a row of four letter groups (e.g., bho, wob, ohb, obh) and chooses the one that conforms to spelling patterns of typical of real English words
9C. Word Memory	Examinee listens to a string of words and then repeats the words in reverse order
10C. Picture Analogies	Examinee selects one of four response options that complete a picture analogy presented in an <i>A</i> is to <i>B</i> as <i>C</i> is to ? matrix format
11C. Irregular Word Reading	Examinee first reads aloud letters and then words that contain irregular sound– symbol correspondences of increasing difficulty
12C. Oral Reading Efficiency	Examinee reads a grade-level passage aloud for 1 minute.

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TOD-C Tests, (cont.)



Subtest	Description
13C. Blending	Examinee blends compound words, syllables, and phonemes to make a whole word
14C. Segmenting	Examinee breaks apart compound words, syllables, and phonemes.
15C. Regular Word Spelling	Examinee spells words presented orally by the examiner containing regular sound–symbol correspondences that increase in difficulty.
16C. Silent Reading Efficiency	Examinee silently reads passages of increasing difficulty and answers comprehension questions in the Response Booklet while being timed
17C. Rapid Number and Letter Naming	Examinee is presented with rows of three numbers and three uppercase letters (e.g., 9 3 E 6 F L) and must name them as quickly as possible in 1 minute

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TOD-C Tests, (cont.)

Subtest	Description
18C. Letter Memory	Examinee listens to a string of letters and then repeats the letters in reverse order.
19C. Rapid Pseudoword Reading	Examinee says the sounds associated with letters and then reads nonsense words as quickly as possible in 1 minute
20C. Rapid Irregular Word Reading	Examinee reads aloud words that contain irregular sound-symbol correspondences of increasing difficulty in 1 minute
21C. Symbol to Sound	Examinee is presented with symbols that represent letter sounds and must blend the sounds into real words.
22C. Listening Vocabulary	Examinee says (or points to) one of four words that best answers a question that the examiner reads orally
23C. Geometric Analogies	Examinee selects one of four response options that completes a symbolic/abstract analogy presented in an <i>A</i> is to <i>B</i> as <i>C</i> is to ? matrix format

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TOD Interpretation

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Areas for Evaluation: All Students

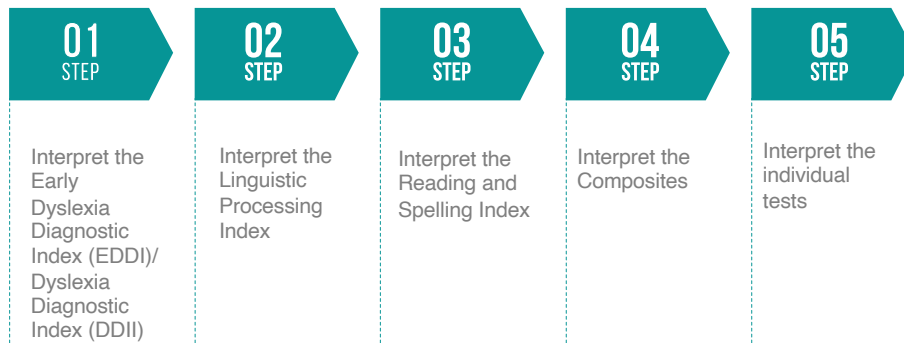
Figure 3.4. Areas for Evaluation

Academic Skills	Cognitive Processes	Possible Additional Areas
<ul style="list-style-type: none"> • Letter knowledge (name and associated sound) • 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

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Interpretation



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Dyslexia Risk Index

- Two TOD-S tests (*Letter and Word Choice; Word or Question Reading Fluency*) yield the Dyslexia Risk Index (DRI).
- Indicates the need for further evaluation.
- DRI scores in the at-risk range suggest further testing is needed with the TOD-C or TOD-E.

Table 3.2 Risk for Dyslexia Based on Dyslexia Risk Index (DRI) Standard Score

Risk	Interpretive description	Standard Score range
No or Low Risk	Above Average	110-130
Possible Risk*	Average	90-109
At-Risk	Below Average	89 and below

*Lower possible risk at high end of average range and higher possible risk at lower end of average range.

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Dyslexia Diagnostic Index

- TOD-C Dyslexia Diagnostic Index (DDI) and TOD-E Early Dyslexia Diagnostic Index (EDDI) both require administering 8 tests.
- The DDI and EDDI indicate the probability of dyslexia.

Table 3.4. Probability of Dyslexia Based on Dyslexia Diagnostic Index (DDI) Standard Score

Probability	Interpretive description	Standard score range
Extremely Low Probability (About 10% of the population scores in this range)	Well Above Average	120 and above
Very Low Probability (About 15% of the population scores in this range)	Above Average	110 – 119
Low to Moderately Probability* (About 50% of the population scores in this range)	Average	90 – 109
High Probability (About 15% of the population scores in this range)	Below Average	80 – 89
Very High Probability (About 8% of the population scores in this range)	Well Below Average	70 – 79
Extremely High Probability (About 2% of the population scores in this range)	Significantly Below Average	69 and below

*Low risk at high end of average range and moderate risk at lower end of average range.

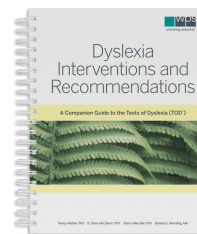
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Dyslexia Interventions and Recommendations A Companion Guide to the Tests of Dyslexia

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A Companion Guide to the Tests of Dyslexia

- **Section 1.** Structured Literacy: An Approach to Intervention
- **Section 2.** Phonological/Phonemic Awareness
- **Section 3.** Moving from Speech to Print/Orthographic Mapping
- **Section 4.** Sight Word Acquisition
- **Section 5.** Phonics and Structural Analysis
- **Section 6.** Spelling
- **Section 7.** Reading Fluency
- **Section 8.** Vocabulary
- **Section 9.** Reading Comprehension
- **Section 10.** Accommodations
- **Section 11.** Self-Advocacy/Strengths/Transitions
- **Appendix:** Teaching Students with Dyslexia
- **Glossary of Terms**



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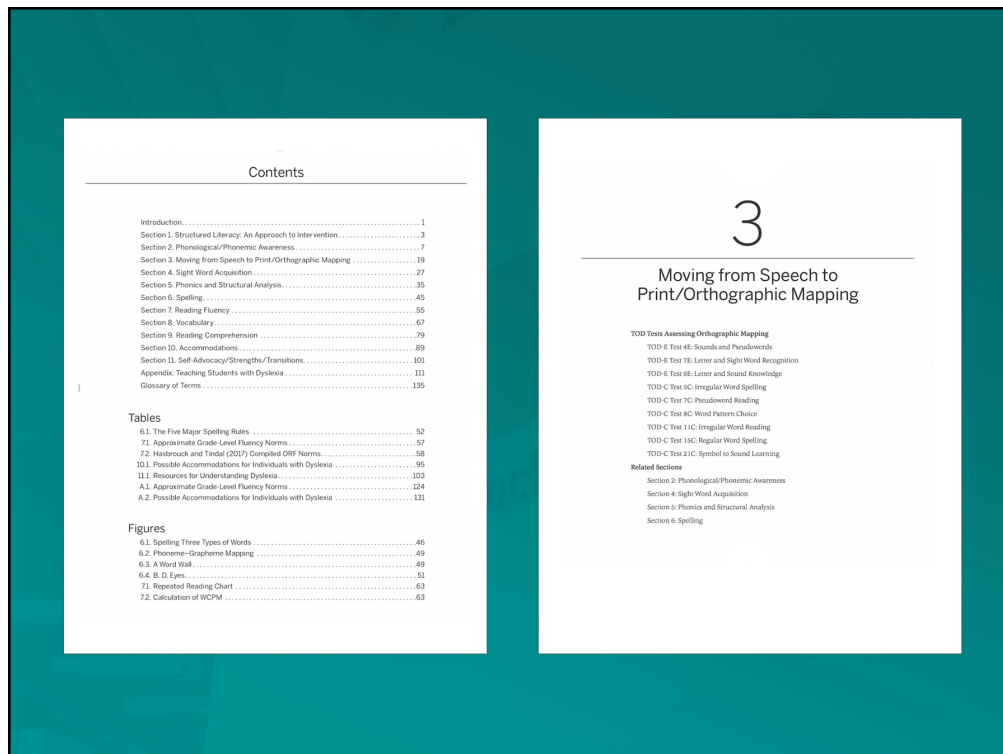
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Organization of Each Section

- Provides an introduction to the skill area being presented
- Provides guidance on selecting recommendations and interventions including a general sequence of expected skill development
- Lists the TOD tests related to the skill area as well as related sections
- Provides a number of interventions ranging from beginning skill level to more advanced skill level
- Lists references

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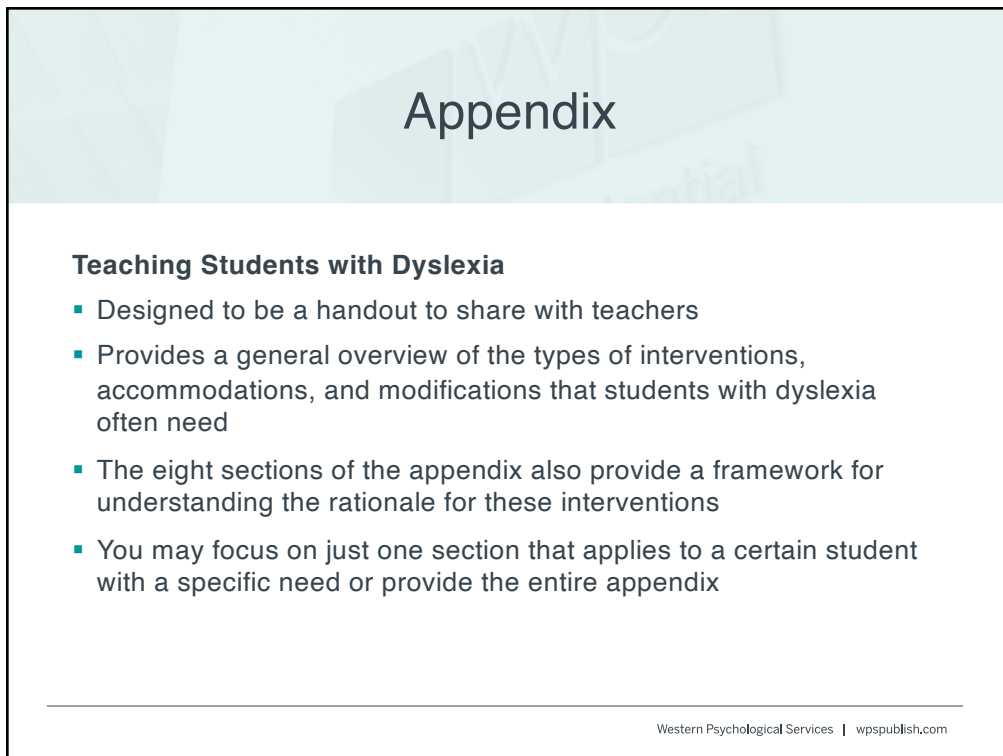
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TOD Training Courses

Join the [mailing list](#) to stay up to date on all things TOD, including discounts, case studies, events, and more.



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WPS Resources



Assessments



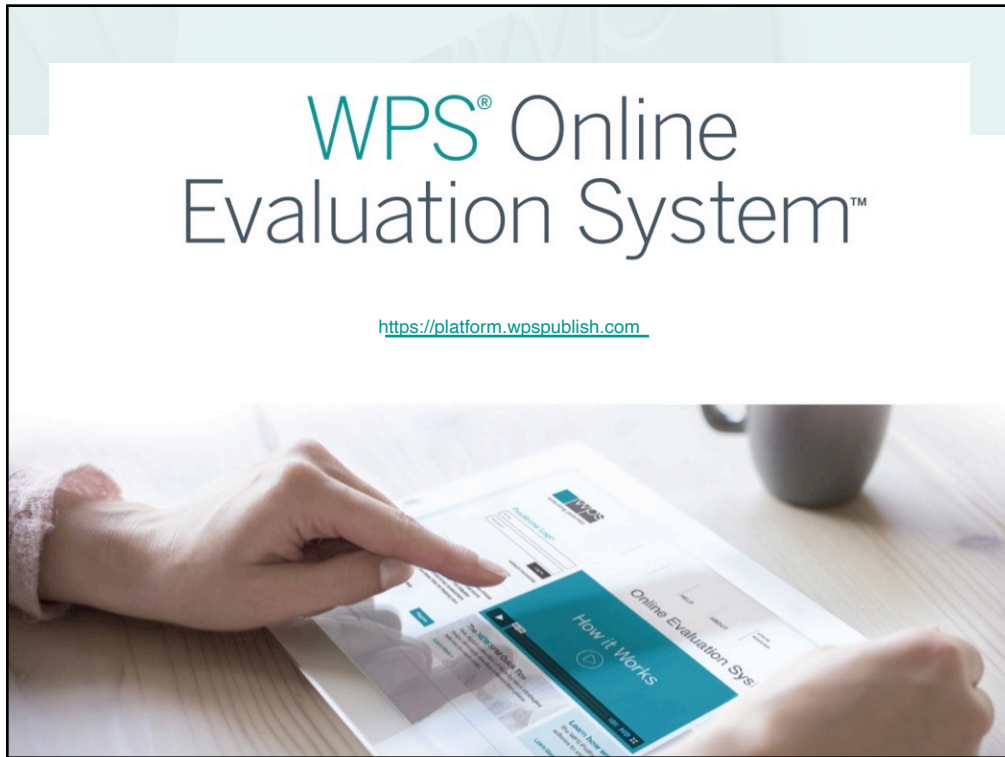
Resources



Training

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