

On The Value of Language Assessments for Children with Confirmed/Suspected Dyslexia

41st ANNUAL PBIDA CONFERENCE
 READING AND THE ROAD TO RESILIENCY

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Elleseff Bio

- Bilingual speech language pathologist who specializes in assessing language and literacy disorders of monolingual, bilingual, multicultural, internationally & domestically adopted, at-risk children with communication and psychiatric disorders
- Clinical instructor at the RWJ Medical School Dept. of Psychiatry
- Clinical Supervisor at Rutgers Day School, an outpatient facility located in a hospital setting for children with significant psychiatric disturbances and concomitant language and literacy impairments
- Workshop and Conference Presenter in the areas of language and literacy
- Member of New York and New Jersey Fetal Alcohol Spectrum Disorders (FASD) multidisciplinary teams

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Specialties and Subspecialties

- On-site **evaluations** of complex speech, language, and literacy-based disorders for **pediatric clients** 3-24 years of age
- Comprehensive **independent speech-language and literacy (IEE) evaluations**, in-depth consultations and **second opinion** services (*attorney involvement)
- Comprehensive **dyslexia, reading disability and literacy** evaluations
- **Professional Development** courses and district in-services pertaining to language and literacy
- **Professional teleconsultations and Parent teleconsultations**
 - Comprehensive speech-language and literacy assessment services for **internationally adopted children** with speech, language and communication delays, as well as psychiatric and neurological impairments.
 - Comprehensive speech-language and literacy assessments and design detailed intervention programs for children with identified or suspected **Fetal Alcohol Spectrum Disorder (FASD)**
 - Speech-language services for children diagnosed with **psychiatric disturbances** as well as behavioral and emotional impairments

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Overview

- This workshop will review the role of language in dyslexia diagnosis and explain why children with suspected/confirmed dyslexia symptoms must receive a comprehensive language and social communication assessment in addition to undergoing literacy testing.
- It will explain how undetected language deficits can adversely hamper literacy interventions causing the students to plateau in their reading/writing gains.
- It will offer explanations regarding which areas of language should be tested for assessment purposes as well as which speech language testing is most sensitive to the detection of language and literacy difficulties in children with confirm/suspected dyslexia.

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Learning Objectives

- At the end of this presentation learners will be able to
 1. Discuss the connection between language and literacy
 2. Identify risk factors associated with language and literacy disorders
 3. Identify the most sensitive general and targeted language assessment instruments for students 6-18 years of age
 4. Identify the most sensitive literacy assessment instruments for students 6-18 years of age
 5. Describe clinical language and literacy assessment procedures that can be used to supplement formal testing in order to diagnostic accuracy

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Developmental Language Disorder (DLD)

- Children have difficulties comprehending what is being said to them as well as expressing selves unrelated to obvious biomedical issues (e.g., ASD, HI, ID, etc.)
 - Normal development in all areas with the exception of language
- Specific Language Impairment (SLI) was the old label
- Recent name change better reflects the types of difficulties children have (Bishop, Snowling, Thompson, Greenhalgh, and The CATALISE Consortium, 2017)
 - Difficulties persist to adulthood
 - Significantly impact functioning
 - Require additional assistance
 - SLP assessment and treatment
 - Special education placements

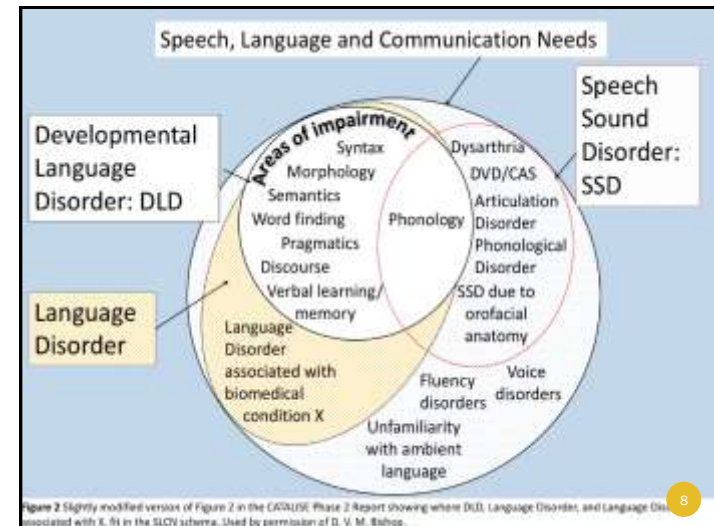
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The term Developmental Language Disorder (DLD) should be used for children where...

- 1 The child has language difficulties that create barriers to communication or learning in everyday life
- 2 The child's language problems are unlikely to be resolved by five years of age
- 3 The problems are not associated with a known biomedical condition such as brain injury, neurodegenerative conditions, or chromosome disorders

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Hierarchy of Oral Language Development

- **Listening**
 - Comprehension of words, phrases, sentences, stories
- **Speaking**
 - Speaking single words, phrases, sentences, engaging in conversations, producing stories
- **Reading**
 - Words, sentences, short stories, chapter books, etc.
 - General topics
 - Domain specific topics (science, social studies, etc.)
- **Spelling**
- **Writing**
 - Words, sentences, short stories, essays
- Oral language develops along a continuum with listening comprehension and verbal expression being the foundational framework for development of later more complex abilities such as reading, spelling, and writing
- Effective assessment for learners struggling in the areas of literacy (e.g., reading) involve assessing not only their reading, writing, and spelling (literacy) abilities but also listening comprehension, oral expression and social communication



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Dyslexia as a Language Based Disorder

- **International Dyslexia Association:** “Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by... [list of symptoms] These difficulties typically result from a deficit in the phonological component of **language** that is often unexpected in relation to ... Secondary consequences may include problems in reading **comprehension** and reduced reading experience that can impede growth of **vocabulary** and background knowledge.” [language based areas]
- A number of researchers have confirmed that dyslexia is a language-based disorder (**Elbro, Borstrom, & Petersen, 1998; Shaywitz, 1998; Snowling, 1998**)
- **American Academy of Pediatrics, 2009** explicitly labeled dyslexia as a language-based disorder to counteract the misperception that it is a visually based disorder (Adlof & Hogan, 2017)
- Since dyslexia has been defined as a **language-based disability** it is very important to assess foundational areas of language to determine whether the child presents with covert oral language deficits affecting his/her ability to read and write.

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Types of Oral Language Deficits

- **Phonology** (understanding and use of speech sounds -phonemes)
- **Morphology** (understanding and use of word parts including morphemes, affixes, etc.)
- **Vocabulary and Semantics** (understanding how to define and manipulate words)
- **Syntax** (understanding and use of complex sentence structures)
- **Pragmatics** (understanding and use of language in social contexts)
- **Children with reading deficits can have difficulties in some or all of the above areas**
- Research indicates that oral language deficits place children at a higher risk for dyslexia (Catts et al, 2005; Adlof et al, 2017). Research also shows that having a Developmental Language Disorder (DLD) places children at a high risk of developing reading deficits (Adlof, 2017).
- **This is why a comprehensive language assessment should be a necessary component of all literacy evaluations**

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Special Note on Social Communication

- Numerous studies show that dyslexia is associated with depression, anxiety, attention, as well as behavioral problems (Arnold et al., 2005; Boyes, Leitao, Claessen, Badcock, & Nayton, 2016; Kempe, Gustafson, & Samuelsson, 2011; Huc-Chabrolle, Barthez, Tripi, Barthelemy, & Bonnet-Brihault, 2010; Knivsberg & Andreassen, 2008; Mammarella et al., 2014).
- Studies also indicate that there's a significant correlation between psychiatric impairments and poor social pragmatic functioning.
 - Benner, Nelson, and Epstein (2002) examined 26 studies (n= 2,796) that addressed students with EBD and language deficits and found that ~ 71% of students were identified with pragmatic language deficits.
 - Cohen et al., 1998 found that most common difficulties were in the areas of emotion decoding and social problem solving
 - Bryan, 1991 found that these children present with significant difficulties understanding another person's affective state
- **Assessment of social communication abilities should be a necessary component of all language and literacy evaluations**

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Risk Factors for Language and Literacy Disorders

- Genetic syndromes
- Intellectual disability
- Family history (genetic inheritance)
 - Speech language delay
 - Dyslexia/learning disability/special education
 - Psychiatric diagnoses
- Developmental history
 - Adoption/Foster care
 - Early childhood abuse, neglect, trauma
 - Delayed/disordered language development
 - Early intervention services
 - Preschool disabled program attendance
 - Social communication/Behavioral deficits
 - Early emerged learning deficits
 - Difficulty counting, reciting letters of alphabet, poor memory for names/novel words, etc.



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Idiopathic Causation

- A number of children with no recognizable family history of learning disabilities, may be at risk for future literacy deficits **if they display a pattern of linguistic difficulties during early development** (e.g., delayed developmental milestones)
- *If the child experiences any deficits in the foundational language areas such as listening and speaking, s/he will most certainly experience difficulties in more complex areas of language: reading, writing, and spelling.*



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Warning Signs of Literacy Deficits in Young Children

- Documented history of language impairment
- Receipt of therapy services from a very early age
 - Early intervention
 - Preschool-disabled eligibility
- Absence of early-onset linguistic deficits but presence of early-onset literacy difficulties
 - Difficulty remembering nursery rhymes and songs
 - Trouble remembering the letters of the alphabet
 - Trouble recognizing simple rhyming words, etc.
 - Even without a pertinent family history of literacy disabilities it may be **important for a child to undergo an early literacy assessment in order to determine whether intervention is warranted**

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General Literacy Testing (TILLS)

- The **Test of Integrated Language & Literacy Skills (TILLS)** is an assessment of oral and written language abilities in students 6–18 years of age composed of 15 subtests.
- Assesses literacy skills such as **reading fluency, reading comprehension, phonological awareness, spelling, as well as writing** in monolingual as well as simultaneously bilingual school age children.

| Language Modality | Language Domains | |
|-------------------|--------------------------------------|--|
| | Subtest/Word Level | Subtest/Operational Level |
| Listening | 1. Reciprocity Responses | 6. Listening Comprehension |
| | 2. Phonemic Awareness | 8. Following Directions |
| Speaking | 4. Password Repetition | 3. Story Retelling |
| | | 11. Social Communication |
| Reading | 10. Nonword Reading | 7. Reading Comprehension |
| | 11. Reading Fluency | |
| Writing | 9. Nonword Spelling | 12b. Written Expression - Discourse Score |
| | 12a. Written Expression - Word Score | 12c. Written Expression - Sentence Combining Score |
| Spelling | 13a. Digit Span Forward | 5. Disguised Story Retelling |
| | 13b. Digit Span Backward | |

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TILLS (cont.)

- Standardized to identify language and literacy disorders
- Excellent psychometric properties

Table 3.4. Sensitivity and specificity levels by age for all ages tested by the TILLS

| Age groups | Sensitivity | Specificity |
|---------------------|-------------|-------------|
| 6-year-olds | 84% | 82% |
| 7-year-olds | 84% | 86% |
| 8-year-olds | 97% | 100% |
| 9-year-olds | 83% | 81% |
| 10-year-olds | 81% | 81% |
| 11-year-olds | 86% | 82% |
| 12-year-olds | 83% | 100% |
| 13-year-olds | 84% | 86% |
| 14- to 18-year-olds | 87% | 87% |

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TILLS (cont.)

- Subtests Sensitivity to Language and Literacy Impairments Based on Age Groups

Table 2.2. TILLS subtests that support diagnosis of language and literacy disorders at different ages

| Age range (years) | Identification Code ^a | Sensitivity | Specificity | Cut score ^b |
|-------------------|---|-------------|-------------|------------------------|
| 6;0-7;11 | 1. Vocabulary Awareness (VA) 2. Phonemic Awareness (PA) 4. Nonword Repetition (NWRRep) | 84 | 84 | 24 |
| 8;0-11;11 | 1. Vocabulary Awareness (VA) 5. Nonword Spelling (NWSpell) 10. Nonword Reading (NWRRead) 12. Written Expression-Discourse Score (WE-Disc) | 88 | 85 | 34 |
| 12;0-18;11 | 2. Phonemic Awareness (PA) 5. Nonword Spelling (NWSpell) 7. Reading Comprehension (RC) 11. Reading Fluency (RF) 12. Written Expression-Word Score (WE-Word) | 88 | 90 | 42 |

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Assessment Tasks and What They Measure

- Following directions** tasks correlate with working memory functioning and are sensitive to **reading deficits** ([Lahey & Bloom, 1994](#); [Cowan, 1996](#); [Baddeley, 2003](#))
- Grammatical structure** deficits particularly in the area of tense-marking & agreement incl. past tense '-ed', third person singular '-s', 'be' and 'do' etc., is sensitive to language deficits ([Rice & Wexler, 1996](#); [Loeb and Leonard, 1991](#); [Rice and Wexler, 1996](#); [Oetting and Horohov, 1997](#); [van der Lely and Ullman, 2001](#))
- Vocabulary breadth, depth, quality as well as manipulation** tasks (e.g., naming definitions, synonyms, relationships among semantically related words, explaining multiple meaning words, etc.) are sensitive language deficits ([McGregor, Oleson, Bahnsen, & Duff, 2013](#); [Marinellie & Johnson, 2002](#); [Norbury, 2005](#); [Sheng & McGregor 2010](#))
 - Children with DLD possess not only "fragile knowledge of the core meaning of individual words, but fragile semantic connections between words" ([Nation, 2014, p.2](#))

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Assessment Tasks (cont.)

- Narrative deficits** place children **at risk for reading deficits** ([McCabe & Rosenthal-Rollins, 1994](#); [Reese, Suggate, Long & Schaughency, 2010](#); [Gilmore, Klecan-Aker, & Owen, 1999](#); [Griffin et al., 2004](#); [Stothard, Snowling, Bishop, Chipchase, & Kaplan, 1998](#)) and significantly correlate with **social communication deficits** ([Norbury, 2014](#); [Norbury, Gemmell & Paul, 2014](#))
- Sentence recall and nonword repetition** tasks are sensitive to both language and literacy deficits ([Dollaghan & Campbell, 1998](#), [Alloway & Gathercole, 2005](#))
 - Sentence recall** has been increasingly recognized as a useful indicator of learning difficulties including specific language impairment or SLI (relabeled Developmental Language Disorder, DLD), dyslexia, phonological short-term memory deficits, as well as reading comprehension deficits ([Alloway & Gathercole, 2005](#))
- Nonword repetition** is commensurate with both spoken and written deficits as well as reflects deficits in phonology and verbal short-term memory ([Ramus et al., 2013](#); [Gathercole and Baddeley, 1990](#); [van der Lely and Howard, 1993](#); [Montgomery, 1995](#); [Gallon et al., 2007](#)).

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Assessment Tasks (cont.)

- **Phonemic awareness and alphabetic knowledge** have been identified in a number of studies as key indicators of emergent reading mastery during the early elementary school years ([Anderson, Hiebert, Scott, & Wilkerson, 1985](#); [Adams, 1990](#); [Snow, Burns, & Griffin, 1998](#); [Wood & McInerney, 2001](#))
- **Nonword reading** tasks are sensitive to phonologically based reading deficits ([Herrmann, Matyas, & Pratt, 2006](#); [Rack et al, 1992](#))
- **Nonword Spelling** tasks are more sensitive to the determination of spelling abilities in non-transparent languages because they allow acceptance of alternative plausible spelling patterns, as opposed to real word spelling assessments, which allow only one correct spelling ([Lovett & Steinbach, 1997](#))

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Are Vocabulary Tests Useful for School Aged Children

- One-word vocabulary tests are often used in the assessment process to qualify children for speech and language services ([Betz, Eickhoff, & Sullivan, 2013](#))
- Studies have found that single word vocabulary tests have poor psychometric properties and/or are not representative of **linguistic competence embedded in life-activities** ([Gray et al, 1999](#); [Ukrainetz & Blomquist, 2002](#); [Bogue, DeThorne, Schaefer, 2014](#))
- Single word vocabulary tests can overinflate testing scores and not represent the child's true expressive language competence. Even when a student truly has solid or even superior vocabulary knowledge and naming skills, doesn't mean that s/he **can effectively utilize these abilities during the narrative production as well as reading and writing tasks.**

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Assessing Subtle Deficits

- Evidence informed SLPs will review the **child's background history, available medical and educational records** and distribute **comprehensive checklists** to parents and teachers so they could identify the students' **specific deficit areas** for identification of **best testing batteries to administer**
 - Assess areas of parental/teacher concern coupled with areas known to be sensitive to language and literacy deficits
 - **Narratives**
 - **Social communication**
 - **Reading fluency and comprehension**
 - **Written composition**

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Assessing Metalinguistic Abilities

- **Select Subtests from the Clinical Evaluation of Language Fundamentals -5 Metalinguistics (for children 9+ years of age)**
 - The *Multiple Meanings* subtest of the CELF-5:M actually does quite a decent job evaluating the student's ability to recognize and interpret different meanings of selected lexical (word level) and structural (sentence level) ambiguities.
 - The *Figurative Language* subtest of the CELF-5:M may also be quite useful for the evaluation of the student's ability to interpret figurative expressions (idioms) within a given context. However, the multiple-choice option of matching each expression with another figurative expression of similar meaning is not representative of authentic real-life experiences. As a result of the presence of the multiple-choice option, score overinflation may occur with those children who do well given compensatory strategies but who have difficulty generating novel spontaneous responses.

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CELF-5:M Limitations

- Late age of administration (starts at 9)
- Presence of visual and written stimuli on select testing subtests negates authentic real life experiences
 - Open ended questions without visuals based on videos or photos would be far more beneficial
- Higher functioning students easily pass despite having pervasive deficits

| Total Metalinguistics, Meta-Pragmatics, or Meta-Semantics Index | Standard Cut Score | Sensitivity | Specificity |
|---|--------------------|-------------|-------------|
| -1 SD | 85 | .96 | .78 |
| -1.5 SD | 77 | .74 | .93 |
| -2 SD | 70 | .31 | .96 |

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Assessing Semantic Flexibility Skills

- Generation of definitions, synonyms, antonyms, multiple-meaning words, etc
- **The Metalinguistics subtest from the Expressive Language Test—Second Edition: Normative Update (ELT-2: NU)**
- The *Metalinguistics-Defining* subtest of the **ELT-2** assesses the student's ability to define abstract words pertaining to language (e.g., explain the meaning of words such as *poem, verb, sentence, compound word, question, etc.*).
- Metalinguistics refers to the ability to think about, talk about, and manipulate language. Metalinguistic skills are necessary for classroom learning. Students who demonstrate competency in this area show an understanding of how language works.
- Students with poor metalinguistic skills have difficulty learning to read, write, and spell. They may not know that spoken words are made up of smaller units of sounds that have beginnings and endings. They may not know that words can form sentences or paragraphs. Students with poorly developed metalinguistic skills cannot use language to talk about concepts like sounds, words, letters, titles, or stories.
- The **Flexible Word Use subtest from the WORD-3 Elementary** assesses the student's ability to provide two different meanings for verbally presented words **without using the presented word** in the actual definitions.

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Assessing Narrative Abilities

- Best assessed clinically by asking students to summarize a read book or a viewed movie
 - Quick and efficient way to assess multiple areas of language
 - Provide more detailed information regarding macrostructural (story grammar elements, perspective taking, etc.) and microstructural elements (vocabulary, syntax, and grammar) as well as child's thought processes and socio-emotional functioning
- Preschool (3-6 years old)
 - Wordless picture books
- Early Elementary (7-12 years old)
 - Picture books
- Middle School/High School (13-18 years old)
 - Delayed retelling favorite book or movie

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Narrative Assessment: Sample Materials

- SALT Elicitation Books (FREE Scripts and Rubrics)
- **Frog Where Are You** (Mercer Mayer, 1969)
 - Preschool-1st grade
- **Pookins Gets Her Way** (Helen Lester, 1986)
 - 2nd grade
- **Porcupine Named Fluffy** (Helen Lester, 1987)
 - 3rd grade
- **Dr. De Soto** (William Steig, 1982)
 - 4-6th grade



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What do Narratives Reveal?

- Sequencing Ability
 - Story order
- Working Memory
 - Recall of relevant details
- Grammar
 - Sentence structure errors, run-on sentences, etc.
 - Use of temporal markers and cohesive ties to connect the story
- Vocabulary
 - Immature vs. age-level
 - Word retrieval issues vs. lexical fluency
- Pragmatics and perspective taking
 - Topic cohesion / coherence
 - Use of anaphoric references
 - Insight into character's feelings, beliefs, thoughts



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Assessing Social Communication

- **Social Language Development Test Elementary (SLDTE-NU)**
Ages 6-11:11
- Focuses on language-based skills of social interpretation and interaction with friends
- Assesses students' language-based responses to portrayed, peer-to-peer situations
- Subtests:
 - **Making Inferences**
 - **Interpersonal Negotiations**
 - **Multiple Interpretations**
 - **Supporting Peers**



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SLDTE-NU Updates and Limitations

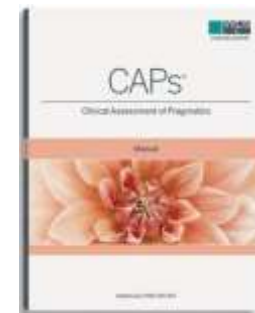
- **Social Language Development Index cutoff score of 90 has sensitivity of .82, a specificity of .86 which are both acceptable**
- Previously separated tasks on *Making Inferences* (2 tasks) and *Interpersonal Negotiations* subtests (3 tasks) have now been combined, which is not as convenient for treatment planning purposes
 - Many students can recognize the visual cues but unable to assume perspectives
 - They can recognize problems but unable to solve or justify them

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Assessing Social Communication (cont.)

- Clinical Assessment of Pragmatics (CAPs)
- Video assessment for ages 7-18 comprised of 6 subtests
- **Instrumental Performance Appraisal**
 - Awareness of Basic Social Routines
- **Social Context Appraisal***
 - Reading Context Cues
- **Paralinguistic Decoding**
 - Reading Nonverbal Cues
- **Instrumental Performance**
 - Using Social Routine Language
- **Affective Expression***
 - Expressing Emotions
- **Paralinguistic Signals***
 - Using Nonverbal Cues



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Strengths and Limitations

- The normative sample consisted of **914** individuals out of which **137** (or **15%**) included individuals with atypical language development: **ASD: N-18; SLI: N-27; Other (Learning Disabilities): N-92.**
- Excellent Sensitivity and Specificity Cut Scores (at 1, 1.5 & 2 SD) for clients with ASD**
- Some subtests are more sensitive than others***

Table 8.8
Classification of Autism Spectrum Disorders by SD

| Care Composite SD | Sensitivity | Specificity |
|-------------------|-------------|-------------|
| -1 SD | 1.00 | 0.85 |
| -1.5 SD | 1.00 | 0.8 |
| -2 SD | 0.90 | 0.97 |

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School-Age Tests of Reading, Spelling & Writing



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Tests of Reading at Word Level

- Word Fluency**
 - Rapid Automated Naming/Rapid Alternating Stimulus RAN/RAS (5-10 mins to administer)**
 - RAN is a consistent **predictor of reading fluency** in all orthographies and is a quick a reliable way to determine adequate reading fluency via timed tasks.
- Word Reading**
 - The Test of Silent Word Reading Fluency (TOSWRF-2) (3 mins to administer)**
 - Assesses the students' ability to recognize printed words accurately and efficiently
 - Test of Silent Contextual Reading Fluency (TOSCRF-2) (3 mins to administer)**
 - The TOSCRF-2 is a companion to the *Test of Silent Word Reading Fluency- Second Edition (TOSWRF-2)*. While the TOSWRF-2 measures a student's ability to recognize individual words accurately and efficiently, the TOSCRF-2 measures a student's essential contextual reading abilities (i.e., word identification, word meaning, word building, sentence structure, comprehension, and fluency).

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Additional Tests of Reading, Spelling and Writing

- Phonological Awareness**
 - The Phonological Awareness Test -2 (PAT-2)** Ages 5-10
 - Comprehensive Test of Phonological Processing-2 (CTOPP-2)** Ages 4-24
- Reading Fluency and Comprehension**
 - Gray Oral Reading Test-Fifth Edition (GORT-5)** Ages 6-24
 - Test of Reading Comprehension, Fourth Edition (TORC-4)** Ages 7-18
 - Nelson Denny Reading Test (NDRT)** Ages 14-4yr
- Tests of Spelling**
 - Test of Written Spelling-5 (TWS-5)** Ages 6-18
 - Spelling Performance Evaluation for Language and Literacy (SPELL-2)** Ages 7-21
- Test of Writing**
 - Test of Written Language-Fourth Edition (TOWL-4)** Ages 9-17

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Special Note on NDRT

- Standardized reading test of Vocabulary and Reading Comprehension that measures the reading ability of high school (14+ or 9th grade) and college students (4 year)
 - Vocabulary
 - 80-100 multiple-choice items with five response option
 - 15 minute time limit
 - Reading Comprehension
 - Students read 5-8 passages and to respond to 36-38 multiple-choice questions based on the content of those passages
 - 20 minute time limit

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Clinical Assessment of Reading and Writing

COMPILED ORF NORMS

Hasbrouck & Tindal (2017)

From Hasbrouck, J. & Tindal, G. (2017). An update on computer ORF norms. Technical Report #1002. Eugene, OR: International Research in Reading, University of Oregon.

| Grade | Percentile | Fall WCPM* | Winter WCPM* | Spring WCPM* | Grade | Percentile | Fall WCPM* | Winter WCPM* | Spring WCPM* |
|-------|------------|------------|--------------|--------------|-------|------------|------------|--------------|--------------|
| 1 | 90 | | 97 | 116 | 4 | 90 | 155 | 168 | 184 |
| | 75 | | 59 | 61 | | 75 | 125 | 163 | 162 |
| | 50 | | 29 | 60 | | 50 | 94 | 120 | 133 |
| | 25 | | 16 | 34 | | 25 | 75 | 95 | 105 |
| | 10 | | 8 | 18 | | 10 | 60 | 71 | 83 |
| 2 | 90 | 111 | 131 | 148 | 5 | 90 | 239 | 263 | 289 |
| | 75 | 84 | 109 | 124 | | 75 | 155 | 180 | 189 |
| | 50 | 50 | 64 | 100 | | 50 | 121 | 133 | 148 |
| | 25 | 16 | 19 | 22 | | 25 | 87 | 109 | 119 |
| | 10 | 23 | 35 | 43 | | 10 | 64 | 84 | 102 |
| 3 | 90 | 154 | 163 | 186 | 6 | 90 | 285 | 309 | 324 |
| | 75 | 104 | 132 | 130 | | 75 | 150 | 166 | 179 |
| | 50 | 83 | 97 | 112 | | 50 | 132 | 145 | 146 |
| | 25 | 59 | 79 | 91 | | 25 | 112 | 116 | 122 |
| | 10 | 40 | 62 | 63 | | 10 | 89 | 93 | 91 |

*WCPM = Words Correct Per Minute

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A Note on Reading Comprehension

- Many children with reading difficulties can read and comprehend short paragraphs containing factual information of decreased complexity but **longer, more complex, and increasingly abstract age-level text**.
- Reading Comprehension* subtest of the **CELF-5**, allows students to keep the text and refer to it when answering questions. **Such option inflates scores and does not provide an accurate view of their comprehension abilities.**
- GORT-5** contains reading comprehension passages, which the students need to answer after the stimuli booklet has been removed from them. The passages are **far more simplistic than the academic texts** so the students may do well on this test **yet still continue to present with significant comprehension deficits**
- Woodcock Johnson IV's** *Passage Comprehension* subtest gives the students sentences with a missing word, and the students are asked to orally provide the word. **However, filling-in a missing word does not adequately assess comprehension.**
- Wechsler Individual Achievement Test®-Third Edition (WIAT-III)**'s *Reading Comprehension* subtest requires the student to read a passage and answer questions by referring back to the text. **Just because a student can look up the answers in text does not mean that they understand the text.**

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Clinical Reading Comprehension Assessment

- Comprehension Plus (Grades 1-6)
- Continental Press ([HERE](#)/[HERE](#))
 - Reading for Comprehension (Grades 1-8)
 - General/Specific States (FL, IL, NJ, NY)
 - Content Reading (Grades 2-8)
 - Science
 - Social Science
 - Geography
- Select grade level text
- Ask student to read and summarize it
 - Calculate reading fluency sample (1 minute)
- Ask student the main idea of text
- Ask student abstract comprehension questions pertaining to the text



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Informal Writing Assessments

- Why assess adolescent writing abilities?
- Language impairments in childhood persist into adolescence ([Beitchman et al, 1996](#); [Stothard et al, 1998](#))
- Older students continue to experience difficulties with impaired vocabulary ([Johnson et al. 1999](#)); morphology ([Clahsen, et al, 1997](#)); and syntax ([Norbury et al, 2001](#))
- These impairments translate into written composition in the areas of vocabulary, clausal density as well as generation of novel ideas ([Puranik et al, 2006](#))
- Production of written text is an area of ‘marked vulnerability’ for adolescents with language impairment ([Dockrell et al, 2009](#))

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Written Assessment Types (Nippold, et al, 2005, 2009, 2012)

- **Narrative Writing**
 - “As adolescents mature, they pay more attention to the thoughts, emotions, motivations, and inner reactions of the characters in the stories they encounter ([Bamberg & Damrad-Frye, 1991](#); [Botvin & Sutton-Smith, 1977](#); [Stein & Glenn, 1979](#)), which may prompt them to use: abstract nouns (ABNs; e.g., anticipation, curiosity, loneliness) and metacognitive verbs (MCVs; e.g., decide, imagine, realize) in their writing” ([Sun & Nippold, 2012](#))
- **Expository Writing**
 - The predominant genre used in the classroom beginning in 4th grade - high school ([Nippold & Scott, 2015](#))
 - Requires more sophisticated level of syntactic development ([Nippold et al, 2009](#); [Scott & Windsor, 2000](#); [Verhoeven et al., 2002](#))
 - Students with LD exhibit syntactic deficits in expository discourse ([Nippold et al., 2009](#); [Scott & Windsor, 2000](#))
- **Persuasive Writing**
 - Highly valued (by schools) genre, which assesses the student’s ability to use sophisticated syntax, semantics, and pragmatics to convince readers to adopt a particular perspective or perform a desired action [Nippold, Ward-Loneragan, & Fanning, 2005](#)

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Narrative Writing: Younger Children

- Directions: *At this time, I would like you to write a story. Please write a story about something funny, sad, or scary that happened to you and a friend. You get to decide what to write about. It can be anything that was funny, sad, or scary. If you can’t think of something that really happened, you can make it up. It doesn’t have to be a true story. You can use your imagination, if you want. It’s up to you.*
- *The following outline will help you organize your thoughts and write a good story. In your story, be sure to do the following:*
 1. Tell where the events took place (setting).
 2. Tell who the main people are (characters).
 3. Tell everything that happened in the story (plot).
 4. Tell about the problems that came up (problems).
 5. Explain what the characters tried to do (attempts).
 6. Explain how things turned out (outcome).
 7. Tell how everyone felt during the events (thoughts).
 - ([Sun & Nippold, 2012](#))

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Narrative Writing (cont.)

- Keep this list of points in front of you as you write your story. As you address each point, try to write a full paragraph of your own ideas. You will have **20 minutes** to complete your work. I have given you a booklet of lined paper to use in writing your story. Please put your name, age, and grade level on the booklet.
- As you do this work, please use your best writing style with complete sentences and correct grammar, spelling, and punctuation. If you are aren’t sure how to spell a word, make your best guess. Try to write neatly, using a pen or pencil. If you make a mistake, just cross it out or use an eraser. Keep going until I ask you to stop writing.
- Do you have any questions?
- The title of your story is “**What Happened One Day.**”
 - [Sun, L., & Nippold, M.A. \(2012\).](#) Narrative writing in children and adolescents: Examining the literate lexicon. *Language, Speech, and Hearing Services in Schools*, 43, 2-13

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Expository Writing Outline

- In your essay, be sure to explain the following:
 1. **What is friendship?**
 2. **Why is it important to people?**
 3. **How can friendship make life more enjoyable?**
 4. **What kinds of things do friends like to do together?**
 5. **How can people become good friends?**
 6. **What kinds of actions can damage friendships?**
 7. **How can people remain good friends over time?**
- Keep this list of questions in front of you as you write your essay. As you answer each question, try to write a full paragraph of your own ideas. You will have **20 minutes** to complete your work. **Please put your name, age, and grade level on your booklet of lined paper.**
- As you do this work, use your best writing style with complete sentences and correct grammar, spelling, and punctuation. If you aren't sure how to spell a word, make your best guess. Try to write neatly, using a pencil. If you make a mistake, just cross it out or use an eraser. Keep going until I ask you to stop writing.
- Do you have any questions?

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Persuasive Writing

- “Persuasive writing is a demanding task that requires the use of complex language to analyze, discuss, and resolve controversies in a way that is clear, convincing, and considerate of diverse points of view”.
- **With the respect to semantics**, effective persuasive essays require the use of literate vocabulary words of low frequency such as later developing connectors (e.g., *first of all, next, for this reason, on the other hand, consequently, finally, in conclusion*) as well as metalinguistic and metacognitive verbs (“metaverbs”) referring to acts of speaking (e.g., *assert, concede, predict, argue, imply*) & thinking (e.g., *hypothesize, remember, doubt, assume, infer*)
- **With respect to syntax**, a typical adolescent is expected to write complex sentences possessing nominal, adverbial, as well as relative clauses
- **With respect to pragmatics**, as students mature, their sensitivity to the perspectives of others improves, as a result, their persuasive essays increase in length (i.e., *total number of words produced*) and they are able to offer a greater number of different reasons to support their own opinions
- [Nippold, Ward-Lonergan, & Fanning, 2005](#)

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Persuasive Writing: Circus Controversy

- **Materials:** Test booklet for the essay with black and white photos of elephants, dogs, tigers, leopards, and clowns performing in a circus
- **Instructions:** Introduce the task to the students by referring to the black and white photos and telling them that they will be asked to write an essay on the topic of animals performing in a circus.
- **Prompt:** People have different views on animals performing in circuses. For example, some people think it is a great idea because it provides lots of entertainment for the public. Also, it gives parents and children something to do together, and the people who train the animals can make some money. However, other people think having animals in circuses is a bad idea because the animals are often locked in small cages and are not fed well. They also believe it is cruel to force a dog, tiger, or elephant to perform certain tricks that might be dangerous.
- I am interested in learning what you think about “**The Circus Controversy**”, and whether or not you think circuses with trained animals should be allowed to perform for the public. You have **20 minutes** to write an essay. Tell me exactly what you think about the controversy. Give me many good reasons for your opinion. Please use your best writing style, with correct grammar and spelling, and good handwriting. If you aren't sure how to spell a word, just take a guess.
- Do you have any questions? (Answer all questions before beginning the writing.)

• [Nippold, M.A., Ward-Lonergan, J.M., & Fanning, J.L. \(2005\).](#) Persuasive writing in children, adolescents, and adults: A study of syntactic, semantic, and pragmatic development. *Language, Speech, and Hearing Services in Schools, 36*, 125-138

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Writing Assessment Scoring

- **Mechanics** – is there appropriate use of punctuation, capitalization, abbreviations, etc.?
- **Grammatical and syntactic complexity** – are there word/sentence level errors/omissions? How is the student's sentence structure?
- **Semantic sophistication**-use of appropriate vs. immature vocabulary
- **Productivity**-did the student generate enough paragraphs, sentences, etc.?
- **Cohesion and coherence**- Is the writing organized? Does it flow smoothly? Does it make sense? Are the topic shifts marked by appropriate transitional words?
- **Analysis** – can the student edit and revise his writing appropriately?

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Conclusion

- Because students with language and literacy impairments continue to be underserved in the schools it is highly important to use both psychometrically-sound standardized assessments and clinical language assessments (of relevant areas) are used in order to use targeted tasks **which adequately reflect the learner's difficulties in the "real world"**.
- Hence, it is important to ensure that assessments **yield diagnostic information** needed to formulate treatment goals for the students in question
- All students need to receive fair and appropriate assessments which will result in targeted and relevant therapeutic services
- Anything less is a denial of Free Appropriate Public Education (FAPE) to which **all students** are entitled to
- It is NEVER too late to help!

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New Smart Speech Therapy Resources

- **Best Practices in Bilingual Literacy Assessments and Interventions**
- **Comprehensive Literacy Checklist For School-Aged Children**
- **Dynamic Assessment of Bilingual and Multicultural Learners in Speech Language Pathology**
- **Differential Assessment and Treatment of Processing Disorders in Speech Language Pathology**
- **Practical Strategies for Monolingual SLPs Assessing and Treating Bilingual Children**

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Select Helpful Resources

- **The Checklists Bundle**
- **General Assessment and Treatment Start Up Bundle**
- **Multicultural Assessment Bundle**
- **Narrative Assessment and Treatment Bundle**
- **Introduction to Prevalent Disorders Bundle**
- **Social Pragmatic Assessment and Treatment Bundle**
- **Psychiatric Disorders Bundle**
- **Fetal Alcohol Spectrum Disorders Assessment and Treatment Bundle**
- **Assessment Checklist for Preschool Aged Children**
- **Assessment Checklist for School Aged Children**
- **Speech Language Assessment Checklist for Adolescents**
- **Differential Diagnosis of ADHD in Speech Language Pathology**
- **Creating Functional Therapy Plan**
- **Selecting Clinical Materials for Pediatric Therapy**
- **Social Pragmatic Deficits Checklist for Preschool Children**
- **Social Pragmatic Deficits Checklist for School Aged Children**
- **Language Processing Deficits Checklist for School Aged Children**

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