



# Data Interpretation Guide: Dyslexia & Language Hypothesis Generation

This guide reflects **commonly recommended approaches for integrating multiple assessment measures** to inform instructional decisions and support hypothesis generation. It is designed to help teams organize data and identify patterns as part of a **broader, multi-source evaluation process**.

For a more comprehensive, research-based perspective, see *Fletcher, Lyon, Fuchs, & Barnes (2018)*, which emphasizes **response to intervention (RTI)** as the primary standard for identifying learning disabilities, while outlining the role of additional assessments in supporting diagnosis and intervention planning.

Consistent with a **body of evidence approach**, these tools are not intended to serve as stand-alone diagnostic determinations, but rather to **support thoughtful interpretation of data within the broader instructional context**.

## 1. Identifying the "Unexpected" Reading Gap

- **The Data Point:** Compare **Receptive Vocabulary (Vocabulary Reading)** to **Nonsense Word Fluency (NWF)** or **Oral Reading Fluency (ORF)**.
- **The Interpretation:** If the student scores in the **Average/High range for Vocabulary** but the **Low/At-Risk range for NWF/ORF**, this is a classic "Dyslexia Profile." It confirms the reading struggle is *unexpected* given the student's underlying language ability.
- **The Action:** Focus on **Explicit, Systematic Phonics (Tier 2/3)**.

## 2. Screening for "Double Deficit" (Naming Speed)

- **The Data Point:** Review **Rapid Automated Naming (RAN)** alongside **Phonemic Awareness (PA)**.
- **The Interpretation:**
  - **Low PA + Average RAN:** Phonological Dyslexia (Standard intervention applies).
  - **Average PA + Low RAN:** Naming Speed Deficit (Fluency will be the primary hurdle).
  - **Low PA + Low RAN: Double Deficit.** These students are the most "at-risk" and typically require more intensive, longer-duration intervention to see gains.

- **The Action:** Prioritize **high-repetition fluency drills** and rapid word-recognition practice.

### 3. Differential Diagnosis: Dyslexia vs. Language Disorder (DLD)

- **The Data Point:** Compare **Oral Expressive Language** to **Encoding (Spelling)**.
- **The Interpretation:**
  - **Low Spelling + Average Expressive Language:** Consistent with **Dyslexia**. The deficit is likely isolated to the phonological/orthographic loop.
  - **Low Spelling + Low Expressive Language:** This suggests **Developmental Language Disorder (DLD)** or a co-morbid condition. The student likely struggles with grammar, word-finding, and following multi-step oral directions in addition to reading.
- **The Action:** Consult with a **Speech-Language Pathologist (SLP)**; intervention must include oral language structures, not just phonics.

### 4. Assessing Phonological Memory & Working Memory

- **The Data Point:** **Nonsense Word Repetition (NWR)**.
- **The Interpretation:** A low score here indicates the student has trouble "holding" sounds in their mind. Even if they know their letter sounds, they may "lose" the beginning of a word by the time they reach the end of it.
- **The Action:** Use **visual anchors** (Elkonin boxes, letter tiles) to reduce the "cognitive load" on their working memory during decoding tasks.

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### Quick-Reference: Profile Summary Table

| Profile                  | Receptive Vocab | RAN        | Encoding (Spelling) | NWR (Memory) | Primary Need                |
|--------------------------|-----------------|------------|---------------------|--------------|-----------------------------|
| <b>Classic Dyslexia</b>  | Average+        | Average    | Low                 | Low/Avg      | Multi-Sensory Phonics       |
| <b>Double Deficit</b>    | Average+        | <b>Low</b> | Low                 | Low          | Intensive Phonics + Fluency |
| <b>Language Disorder</b> | <b>Low</b>      | Average    | Low                 | <b>Low</b>   | Oral Lang + Vocabulary      |