A Guide to Reading Fluency and the Assessment of Specific Learning Disabilities in the Individuals with Disabilities Education Improvement Act of 2004

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Introduction:

"Students who do not develop reading fluency, regardless of how bright they are, are likely to remain poor readers throughout their lives."
National Reading Panel, 2000

In January 2003, the Wisconsin Department of Public Instruction (DPI) published the *Specific Learning Disability Assessment and Decision-Making Technical Assistance Guide*. This document described seven areas of Specific Learning Disability (SLD) under Wisconsin law in effect at that time. The Individuals with Disabilities Education Act (IDEA) of 2004 and its final regulations added reading fluency as a new area of SLD.

This document, *"Guide to Reading Fluency and the Assessment of Specific Learning Disabilities in the Individuals with Disabilities Education Improvement Act of 2004,"* provides guidance on the assessment of reading fluency as an eligibility area for SLD consistent with federal and state law and regulations. An operational definition of reading fluency consistent with scientific research and theory will be discussed, and assessments of reading fluency that meet the requirements outlined in state and federal law will be identified.

The Legal Basis for Inclusion of Reading Fluency in IDEA 2004:
IDEA 2004 and federal regulations at §300.309 establish a new area of qualification for specific learning disabilities (SLD) in reading fluency. Reading fluency can now be considered, along with reading comprehension and basic reading skill, as an area in which a child could qualify for a specific learning disability in reading. The entire content of the regulations can be accessed at the U.S. Department of Education web site: www.ed.gov

The comments and analysis of the final federal regulations to IDEA 2004 include statements supporting the addition of reading fluency as an area to consider when determining whether a child has a Specific Learning Disability. The regulations specify the process for a comprehensive evaluation of any suspected disability. Section §300.304 stipulates that no single procedure be used for determining eligibility. The IEP team is instructed to use a variety of assessment tools and strategies that will provide information that assists in the determination of the child's educational needs.

The section continues with a requirement for the use of "technically sound instruments." Further, assessments must not be discriminatory on a racial or cultural basis; must be used for the purposes for which they are valid and reliable; and must be administered by trained and knowledgeable personnel in accordance with any instructions provided by the producer of the assessments. §300.306 states, "(i)n interpreting evaluation data for the purpose of determining if a child is a child with a disability . . . each public agency must draw upon information from a variety of sources, including aptitude and achievement tests, parental input, and teacher recommendations as well as information about the child's physical condition, social or cultural background, and adaptive behavior . . . ."

The *Specific Learning Disability Assessment and Decision-Making Technical Assistance Guide (2003)* defines an effective assessment as "efficient, specific, sensitive, accurate, easily interpreted, succinct, and instructionally relevant" (p. 11). To meet these criteria, an effective assessment is said to be: 1) efficient if it is not excessively time-consuming, 2) sensitive if it detects small differences in skills or performance, 3) easily interpreted if the information gained is easily understood by others, 4) succinct if it provides a summary record of the data, and 5)

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instructionally relevant if the data are useful in educational planning (goals, objectives, and lessons) (p. 11).

Defining Reading Fluency

Three interdependent but distinct elements characterize fluent reading: accuracy, rate, and prosody. Accuracy relates to the ability to decode words in text (not in isolation) without error. Rate refers to the ability to automatically decode words. Rate can also be characterized by age appropriate chunking strategies and a repertoire of "sight" words. Prosody is the use of appropriate phrasing and expression and is believed to be an important factor in comprehension (Rasinski, 2004, A).

A fluent reader moves beyond simple decoding to automatically recognize words, interpret text, and retain salient details of what has been read (Rasinski, 2004, A). This reflects the interdependent nature of reading fluency. Success in all three areas is needed to proceed to good comprehension. Fluency can vary, even for skilled readers. It can depend on the type of text (narrative, expository, poetry), familiarity with the vocabulary, background knowledge of the subject, the number of sight words, and the amount of practice the reader has had with a particular text or type of text. The development of fluency comes from many successful opportunities to practice reading.

Many reading researchers have noted the widening gap in experience with reading, vocabulary, and language that develops over time when children who have sufficient daily practice with reading are compared to those who do not. This is often referred to as "The Matthew Effect." When determining the presence of a disability, teams should make a careful determination of whether a child has a disability or lack of opportunity. One important method for making this determination is to monitor progress in word recognition and comprehension when providing an evidence-based, small-group intervention.

Fluency may be viewed as the bridge between basic word decoding and comprehension (Rasinski, 2004, A). The importance of fluency to successful reading and comprehension can be understood by way of analogy to public speaking. Good public speakers use accurate articulation, appropriate pace, phrasing and expression (Rasinski, 2004, A). A good speaker will speak in phrases, utilize cadence, place emphasis on certain words, and vary their volume and intonation to help carry a comprehensible message to the listener. Contrast that with a dull or very anxious speaker who reads in a slow, plodding, and monotonous way without expression, cadence, or apparent interest in the listeners' understanding.

The National Assessment of Educational Progress (NAEP) found that 44% of fourth grade students could not fluently read grade level text. The most effective reading curricula directly and explicitly address fluency. However, classroom reading instruction should avoid over-reliance on oral reading to improve fluency as a part of daily classroom practice. Silent reading practice, choral reading, paired reading, and modeling are all important elements of classroom reading instruction that may help improve fluency.

While fluency is an important component of a reading curriculum, this should not be confused with overemphasizing reading speed and losing meaning. Stressing reading rate can also have a deleterious effect on comprehension. When looking for an effective reading curriculum, the three aspects of fluency need to be taught explicitly. Reading rate develops as a function of efficient decoding skills, opportunities for successful practice, and learning to read with expression (Rasinski, 2004, B).

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Assessments of Reading Fluency

There are a variety of reading fluency assessments available that allow for data-based documentation of repeated assessments of achievement at reasonable intervals, as specified in IDEA regulations. Fluency measures can also meet requirements to be effective, efficient, specific, sensitive, accurate, easily interpreted, succinct, and instructionally relevant as outlined in Chapter 115, Wisconsin State Statutes.

An exploration of some norm- and criterion-referenced fluency assessments can be found in Table 2. **The list is neither exhaustive nor does it represent tests and assessments endorsed by the Wisconsin Department of Public Instruction or the author.** Although many assessments may assess aspects of fluency, the inclusion of an assessment on this list should not be construed as an indication that it is an accurate measure of any or all of relevant aspects of fluency. The assessment of fluency may require multiple subtests from different instruments and any decision should be based on converging evidence of a deficit in all the relevant dimensions of fluency.

IEP teams are responsible for determining the assessment instruments and methods needed to complete a comprehensive evaluation of an individual student. When selecting assessment instruments, only those that have demonstrated sufficient reliability and validity should be considered.

Do you need a composite score from an Achievement Test?

Cluster scores are to be utilized **whenever possible** and must correspond directly to one of the eight areas of achievement currently specified in federal law and regulations. PI 11, Wisconsin Administrative Code, requires the use of individually administered norm-referenced tests of academic achievement. Any measured deficit on an achievement test must be supported by direct measures of classroom achievement.

Reading fluency is characterized in the research as including rate, accuracy, and prosody. Because there does not appear to be a standardized instrument that provides a cluster score for **all three** aspects of fluency, it would appear that the use of a cluster score alone would not be sufficient to measure for all aspects of reading fluency (i.e. prosody is neglected). However, use of a cluster score from a normative instrument that accounts for accuracy and rate in its calculation, or use of a normative assessment of accuracy and rate at the subtest level can be used, provided the instrument has adequate reliability and validity to the domain of reading fluency. Prosody would then be assessed with other, possibly qualitative measures, as provided in the appendix to this guide.

One final caution is important regarding the use of cluster or composite scores that are named “fluency” by test publishers or developers. Test administrators should take care to assure that the score derived from a composite is actually based upon the aspects of fluency identified as important by the research and not contaminated by subtests or measures that assess aspects of reading that are not relevant to fluency.

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Table 1: Critical Aspects of Reading Fluency

Compiled by Mitchell Lambert, MSE

Accuracy

- **Ability to decode words accurately**
- **Mastery is characterized by moving beyond conscious and inaccurate decoding into automatic and accurate decoding (a large and instantaneous "sight" vocabulary is developed)**
- **Reflected by percent of words read correctly in a given passage**

Rate

- **Ability to decode words automatically**
- **Suggests minimal use of conscious cognitive resources in decoding (allows freedom of these resources for comprehension)**
- **Assumes that fast reading reflects automatic word recognition**
- **Reflected by words read correctly per minute**

Prosody

- **Is qualitative; the ability to use expression & phrasing**
- **A degree of automaticity is necessary in reading before prosody improves**
- **Incorporates cadence or rhythm, phrasing and variation in tone/expression embedded in silent and oral reading**
- **The more qualitative nature of prosody lends itself well to being assessed by a rubric**
- **6 markers have been identified by Dowhower (1991)**
    - **presence or lack of pauses**
    - **length of phrases between pauses**
    - **number of appropriate vs. inappropriate phrases**
    - **duration of final words of syntactic phrases**
    - **change of pitch at punctuation**
    - **stress or accent**

Table 2: Normative, Criterion, and Qualitative Assessments of Aspects of Reading Fluency

Measure	Age/Grade Description	Aspect of Fluency Assessed/ Subtests	Norm or Criterion Referenced	URL available
Advanced Decoding Skills Survey	Grade 2 and up who make fewer than 2 errors on the beginning survey	Accuracy in decoding; Error Analysis; qualitative observations	Criterion Qualitative	Free for download at: http://www.cdl.org/resource-library/pdf/adv_decoding_srv.pdf
Beginning Decoding Skills Survey	Any reader over 6:6 experiencing reading difficulty	Accuracy in decoding; Error analysis; qualitative observations	Criterion Qualitative	Free for download at: http://www.cdl.org/resource-library/pdf/beg_decoding_srv.pdf
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	K-6 Measures of 5 Big Ideas; accuracy & fluency	**Subtests**: Nonsense words Oral Reading Fluency	Criterion or can use local or US norms	Free for download at: http://dibels.uoregon.edu/
Early Reading Diagnostic Assessment (ERDA)	K-3	**Scales/Subtests**: Passage Fluency Composite	Normative	http://harcourtassessment.com
Gray Oral Reading Test IV (GORT-IV)	Ages: 6:0-18:11 Passages of increasing difficulty and length	**Scales/Subtests**: **Fluency Composite**=rate + accuracy scores **Overall Reading Ability**=fluency + comprehension scores	Normative	www.agsnet.com

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Measure	Age/Grade Description	Aspect of Fluency Assessed/ Subtests	Norm or Criterion Referenced	URL available
Hasbrouck & Tindal Oral Reading Fluency Data Norms	Grades 1-8	Used with CBM to obtain accuracy and rate data (words read correct per minute) across grades and to establish goals.	Normative	Free for download at: http://www.readnaturally.com/pdf/oralreadingfluency.pdf
Kaufman Test of Educational Achievement-2 (KTEA-2)	Vary—check manual.	**Subtests** (part of a **fluency composite**) Word Recognition Fluency, Decoding Fluency	Normative	www.agsnet.com
Levels of Performance for Word Decoding Accuracy	Calculation of % of words read correctly in an Independent Reading Inventory or leveled text	CBM procedure reflects levels of word decoding accuracy: Independent, instructional, and frustration levels	Criterion	See appendices for instructions on use of CBM method and expected levels of performance
Multidimensional Fluency Scale	Rubric that rates prosody	1-4 rating of expression and volume; phrasing; smoothness; pace	Qualitative	See appendices
NAEP's Integrated Reading Performance Record	A more basic rubric of prosodic aspect of fluency	4 levels of qualitative description	Qualitative	See appendices

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Measure	Age/Grade Description	Aspect of Fluency Assessed/ Subtests	Norm or Criterion Referenced	URL available
Qualitative Reading Inventory (QRI)	Pre-primer-High School Graded word lists and passages read both silently and aloud	Assess narrative and expository. Accuracy, rate, and comprehension. Word recognition, oral fluency and comprehension. Silent reading comprehension, and listening comprehension	Criterion	www.ablongman.com
Test of Word Reading Efficiency (TOWRE)	Ages: 6:0-24:11	**Subtests**: Sight word efficiency-leveled word lists Phonetic Decoding Efficiency-nonsense words	Normative	www.proedinc.com
Wechsler Individual Achievement Test-II (WIAT)	Pre K-College	**Subtests**: Word Reading, Pseudo-word decoding	Normative	http://harcourtassessment.com
Woodcock Reading Mastery Test (WRMT)	K-12	**Subtests**: Word Identification, Word Attack	Normative	www.agsnet.com
Woodcock-Johnson Tests of Achievement III (WJ-III)	K-12	**Subtests**: Word Attack, Letter-Word Identification, Reading Fluency	Normative	www.agsnet.com

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Appendix A: Multidimensional Fluency Scale for Reading Prosody

The following rubric can be used to rate a reader on a 1-4 scale in the areas of expression and volume, phrasing, smoothness, and pace. Having multiple raters listen to the child can increase reliability. A recording of a session of curriculum based probes can be used to give multiple raters who are familiar with the range of fluent reading that is appropriate at a grade level an opportunity to rate the performance. It may be helpful to prompt the child to read the passage as if they were reading to an entire class or a particular audience and to do their best expressive reading.

Area	1	2	3	4
Expression and Volume	Reads as if just trying to "get words out." Little sense of trying to make text sound like natural language. Tends to read in a quiet voice	Begins to use voice to make text sound like natural language in some areas but not in others. Focus remains largely on pronouncing words. Still reads in a quiet voice.	Makes text sound like natural language throughout the better part of the passage. Occasionally slips into expressionless reading. Voice volume is generally appropriate throughout the text.	Reads with good expression and enthusiasm throughout the text. Varies expression and volume to match his or her interpretation of the passage.
Phrasing	Reads in monotone with little sense of phrase boundaries; frequently reads word-by-word	Frequently reads in two and three word phrases, giving the impression of choppy reading; improper stress and intonation fail to mark ends of sentences and clauses	Reads with a mixture of run-ons, mid sentence pauses for breath, and some choppiness; reasonable stress and intonation.	Generally reads with good phrasing, mostly in clause and sentence units, with adequate attention to expression.
Smoothness	Makes frequent extended pauses, hesitations, false starts, sound-outs, repetitions, and/or multiple attempts.	Experiences several “rough spots” in text where extended pauses or hesitations are more frequent and disruptive	Occasionally breaks smooth rhythm because of difficulties with specific words and/or structures.	Generally reads smoothly with some breaks, but resolves word and structure difficulties quickly, usually through self-correction.
Pace	Reads slowly and laboriously.	Reads moderately slowly.	Reads with an uneven mixture of fast and slow pace.	Consistently reads at a conversational pace; appropriate rate throughout reading.

Scores range 4-16. Usually a score below 8 indicates that fluency/prosody may be a concern.
Adopted from Zutell & Rasinski, 1991.

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Appendix B: NAEP's Integrated Reading Performance Record Oral Reading Fluency Scale

Level 4	Reads in primarily large, meaningful phrase groups. Although some regressions, repetitions, and deviations from text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author's syntax is consistent. Some or most of the story is read with expressive interpretation.
Level 3	Reads primarily in three or four word phrase groups. Some smaller groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present.
Level 2	Reads primarily in two word phrases with some three or four word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to larger context of sentence or passage.
Level 1	Reads primarily word-by-word. Occasional two or three word phrases may occur, but these are infrequent and/or do not preserve meaningful syntax.

From *Listening to Children Read Aloud* by U.S. Department of Education, National Center for Education Statistics. 1995, Washington, D.C.

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Appendix C: Levels of Performance for Word Decoding Accuracy

Informal reading inventories can be used to determine a student's accuracy in reading in a given level of text. Accuracy is calculated by determining the percentage of words a reader correctly decodes over a given interval and has been demonstrated to be a valid measure of reading proficiency. The given level of accuracy on a passage can be used to make instructional decisions regarding the appropriateness of a text for a reader. Generally accepted levels of accuracy and their criteria are:

Independent: able to read the text or texts of similar difficulty without assistance	97-100% accurate
Instructional: able to read the text or texts of similar difficulty with some instructional assistance	90-96% accurate
Frustration: likely to find that the text is too difficult to read even with assistance	Below 90% accurate

Appendix D: Procedure for Calculating Reading Rate and Reading Accuracy

Select several passages of approximately 250-300 words written at the student's grade level. Choose a passage that has not already been taught and that the student has not already read. Trade books, curriculum based probes with a readability formula, or a leveled informal reading inventory such as the QRI could all be used.

You may also wish to have materials above or below the student's grade level to adjust the assessment as appropriate. OKAPI is a tool for creating curriculum based assessment (CBA) reading probes at different levels. It is available from Intervention Central at: www.interventioncentral.com/htmdocs/tools/okapi/okapi.shtml

1. Instruct the student that you would like to listen to her do some of her best reading. Emphasize that the student should read in a normal manner (some students may try to impress with how fast they can read). You may wish to record the session for later review or to submit it to multiple raters for scoring on a rubric. This procedure can be further enhanced by instructing the student to orally retell the passage after they have finished. This provides an informal measure of comprehension and memory.
2. Prepare two copies of the passage; one for your marking and a separate copy for the student to read. When the student begins to read the passage, begin timing for one minute. While the student is reading, make note of any uncorrected errors. Self-corrected errors are not marked as incorrect. Errors include mispronunciations, substitutions, reversals, omissions, or words supplied by the examiner after a two-three second wait. Note that additions are not marked incorrect. If the student reads "bikes" or "biked" for the written word "bike" it is not marked incorrect. When the minute has passed, mark the last word attempted. If the student skips a whole line in the text cross it out and allow the student to continue reading uninterrupted. The line is not counted toward the error count or the words read in the passage.
3. Complete two additional probes with two different passages, using the median score to represent the student's typical performance.
4. Count the number of words read correctly in 60 seconds. This is called Words Correct per Minute (WCPM).
5. Calculate the student's **accuracy** by dividing the number of words read correctly per minute (WCPM) by the total number of words read or attempted in the passage (WCPM + any uncorrected errors). The WCPM/WCPM+ uncorrected errors x 100% will give you the percentage of the accurate reading for the passage. This can be compared to the "Independent, Instructional, and Frustration" levels in Appendix C.
6. The WCPM score by itself represents the student's **rate** and can be compared to the student's grade level peers using the data on Oral Reading Fluency found at: www.readnaturally.com/pdf/oralreadingfluency.pdf

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Appendix E: Determining Significant Discrepancy

The following information, taken from *Specific Learning Disability Assessment and Decision-making Technical Assistance Guide*, chapter 5, pgs. 42-50, is provided to assist IEP teams in determining a significant discrepancy for the area of reading fluency.

Assessment Procedures:

- A significant discrepancy must be determined using reliable and valid individual norm-referenced tests of ability and academic achievement, standard assessment procedures, and a standard regression formula.
- Scores derived from non-standard administration may not be used to determine whether a significant discrepancy exists consistent with PI 11.
- Wisconsin rules direct IEP teams to use the full scale or composite ability scores when using the regression formula to determine if a significant discrepancy exists.
- Subtest scatter alone does not imply the existence of SLD.
- Measured deficits on an individual achievement test **must** be supported by direct measures of classroom achievement.
- Cluster scores should be utilized whenever possible. The cluster or subtest used **must correspond DIRECTLY to ONE of the eight areas of achievement as defined in regulation.**

Reliability and Validity:

- Only tests that include clusters or subtests that have sufficient reliability and validity should be used diagnostically to obtain scores for discrepancy analysis. The rule of thumb is that intellectual ability tests should have reliabilities at or greater than .95, while achievement test scores should have reliabilities around .90 or greater. Cluster or subtest scores for achievement should generally have standard errors of measurement (SEM) of no more than four points.
- Professionals who administer and analyze results of standardized tests must be thoroughly trained and hold appropriate professional licensure. The evaluator must carefully choose instruments that can reliably and validly assess the eight achievement areas. Note that the qualifications for administering tests differ substantially from those for interpretation of results.
- **Age norms** should be used for calculating achievement test scores unless there is compelling evidence that using an age norm will result in an invalid score because age mates are not an appropriate comparison group. The evaluator might use grade norms if the student's age is well outside the possible age range of students who could have received similar levels of instruction. The evaluator should always determine which reference group to use for scoring **prior** to administering the test.
- **Severe discrepancy cut-scores are applied only when a student is initially identified** as having SLD. Cut-scores are **not** used to determine if a student continues to have the impairment of SLD upon reevaluation.
- The Wisconsin SLD Regression Table may only be used for tests with means of 100 and standard deviations of 15. The intersection of the correlation column and the intellectual ability row contains the achievement score that meets the criteria for a severe discrepancy in accordance with PI 11 (i.e. the "cut score").
- If there is any question about the accuracy of using the closest rather than exact correlation, or if tests have a mean of 10 and standard deviation of 3, the computer program designed for implementing this criterion should be used. The computer program

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must be used when the SLD Regression Table cannot be used, such as when the achievement test has a mean of 10 and standard deviation of 3, unless an equivalent discrepancy calculation is provided by the test publisher. For tests with means other than 10 or 100, and standard deviations other than 3 and 15 respectively, please contact John Humphries at DPI for further assistance (608-266-7189). The two Wisconsin Regression Calculation programs are available at: http://www.dpi.wi.gov/sped/eligild.html

- If the student unquestionably meets all other criteria and the student's score comes close (up to three pts.) but does not meet the cut-score, the IEP team may determine the student has a significant discrepancy.
- If correlations between the ability and achievement subscales are not included from the professional literature or test publisher, a .62 correlation is recommended for use as a default value.

Summary and Considerations:

- The significant discrepancy requirement is only one of three criteria for SLD eligibility in Wisconsin. A student does not automatically meet SLD criteria because a significant discrepancy exists.
- Full scale or composite ability scores are used to determine whether a significant discrepancy exists. The GAI from the WISC-IV may be used in certain circumstances. The reader is encouraged to read and study the technical reports available from the publisher to review the conditions in which this alternative may be used.
- Only valid and reliable scores may be used for the regression calculation.
- The decision to document discrepancy using means other than the Wisconsin regression procedure should be based on professional knowledge supported in relatively recent peer-reviewed publications.

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Appendix F: Applied Case Study

John is having another difficult year in reading. He transferred to Lake Walleye Elementary School last year at the beginning of third grade. Teachers reported he was already behind his peers in reading, and is continuing to struggle in class as of mid-fourth grade. The Reading Specialist reports that she is seriously concerned about John's ability to perform grade level work. His teacher reported that although he appeared to work diligently on the WKCE assessment, there were large portions of the test that he had not even begun when time ran out. When John was asked about his hesitancy in reading, he reported that he "hated reading," a statement that the librarian verifies; John has not checked out a single book all year.

A review of records reveals that John's previous school also had concerns about his reading. John seems to be falling farther behind in all subjects this year as more demands are placed on the students to complete work at home and independently. John was considered for retention in 1st grade, but was promoted after he made progress in a reading decoding intervention with a resource teacher. John's scores on last year's reading comprehension test were in the minimal range, and he also scored in the bottom 10% of a district assessment of reading. John's attendance and disciplinary records are unremarkable and his family is reportedly very supportive, but frustrated. Medical and developmental histories are typical and he passed the most recent hearing and vision screenings without issue.

The school-based intervention team has been doing some work with John since early in the year. They completed some informal assessments that raised concern that John might be too far behind to catch up with the level of intervention resources they can provide. The intervention team collected the following data:

- John appears to have good basic decoding strategies; he read a grade-level list of words with 80% accuracy and the previous grade's word list with 95% accuracy. However, both word lists were laborious for him. It took him a lot longer than a typical peer to attempt all the words on the list and he had to say the word several times before he connected all the pieces fluently.
- An assessment of John's listening comprehension revealed that he was capable of answering most direct and several inferential questions with grade level passages that were read to him.
- An informal reading inventory was completed and John was found to be well below the frustration level with grade level text. His reading rate was 55 words correct per minute on the QRI with grade level material. He could read up to 89 words per minute with second grade level material, but even then, the reading teacher reported he read mechanically, with little expression and did not appear to understand much of what he had just read.
- John's classroom teacher has been plotting his words read correctly on third grade passages about once a week using curriculum based measures. She has seen some growth since the beginning of the year, but it has recently reached a plateau and it did not look like John was going to close the gap very much on his peers by the end of the year.

Because of the long-standing nature of John's difficulty and apparent resistance to the interventions, John was referred to the school team for an assessment of a possible learning disability.

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A formal observation and review of class work was conducted on several different occasions during activities where the students were to be reading independently or in small groups. The School Psychologist observed that:

- John attempted to read during silent reading time, but separated himself from his peers and hid the book he was attempting, which still appeared too hard. After appearing to attempt the book for a few minutes John just flipped through the pages and looked at some of the pictures. He spent about half of the interval looking around at others or "staring off."
- The class was appropriately engaged during the silent reading time and most of the students were quietly reading while the teacher circulated the room and had quiet conferences with the students about what they were reading. John raised the book over his face when the teacher was in his vicinity and appeared to be trying to hide.
- A review of John's "Literature Journal" revealed that he wrote as little as possible about the day's reading, typically no more than two scribbled sentences. A high achieving student was writing ten sentences and an average student wrote about six or seven. John's handwriting was legible although he made many spelling errors.
- Classroom quizzes that related to reading were reviewed and they contained many errors and unanswered questions. John's teacher reports that he frequently will not complete tests in the time allotted if they require writing, and he seems to misunderstand some questions. Lately she has been accepting his paper early and then having him finish the questions during lunch recess. This accommodation has not improved his scores.
- John's classroom teacher, reading teacher, and a special education teacher all completed a rubric of reading prosody on a reading sample recorded during the assessment period. Out of 16 possible points, John's raters scored him as a 5 or 6 on the rubric, and well below an average or even low average peer in his class.
- A processing deficit interview was given to the John and the teacher and they both identified significant deficits in the area of "Acquisition."
- Standardized assessments were used for intelligence and academic achievement. The school psychologist examined the manuals for both tests and determined that the technical qualities were adequate for both tests. They were administered consistent with publisher directions and the following scores were obtained, using norms for 10-year 4-month-old children:
    - WISC-IV Full Scale IQ SS=105
    - Gray Oral Reading Test IV (GORT-IV):
        - Rate SS= 6
        - Accuracy SS=7
        - Fluency (Rate + Accuracy) SS=6
    - Kaufman Test of Educational Achievement II (KTEA-II)
        - Word Recognition Fluency SS=76
        - Decoding Fluency SS=66
        - Reading Fluency Composite (Word Recognition Fluency **plus** Decoding Fluency) SS=71
- Discrepancy Analysis
    - John's Full Scale IQ score was compared to his achievement scores using the Excel spreadsheets provided by DPI (http://www.dpi.wi.gov/sped/eligild.html). For the GORT-IV, the Excel program for achievement tests with a mean of 10 and a standard deviation of 3 was used. The correlation was set at 0.62, SD for the IQ test was set to 15, and the SD for the achievement test was set to 3 (see GORT-IV Manual p. 56).

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- For the GORT-IV, the regression analysis revealed an achievement cut score of 7. John's score on the fluency composite (SS=6) is below the cut score.
- For the KTEA-II, use the Excel program for achievement tests with a mean of 100 and a standard deviation of 15. John's score on the KTEA-II also met the cutoff of 83.

All the data support a severe delay in classroom achievement in reading fluency (including accuracy, rate and prosody), an information processing deficit, and a discrepancy between IQ and achievement. The IEP team determined John to be a child with a specific learning disability in the area of reading fluency, and determined there is a need for special education services. The data gathered from the intervention team could be used to make goals regarding John's current WCPM and a rate of growth that would have him meet the standards that apply to all students and could help in the determination of exit criteria.

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Appendix G: References, Resources, and Links

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