WIIIP™

Assessment Service Bulletin Number 5

Overview of the *WJ IV Interpretation and Instructional Interventions Program*™

Barbara J. Wendling, MA

Fredrick A. Schrank, PhD, ABPP

The authors of the WJ IV Interpretation and Instructional Interventions Program *(WIIIP™; Schrank & Wendling, 2015b) discuss the features of the WIIIP, a web-based program that helps examiners interpret WJ IV™ assessment results and link test and cluster scores from any of the* Woodcock-Johnson® IV *(Schrank, McGrew, & Mather, 2014a) batteries to associated instructional interventions. In addition, the WIIIP includes a number of qualitative checklists that, when completed, provide context to an individual's WJ IV scores and result in a more comprehensive WJ IV evaluation. Example excerpts as well as a complete sample report are provided to illustrate Comprehensive Report options, checklist options, and ways in which the WIIIP links WJ IV assessment results to intervention.*

Houghton Mifflin Harcourt

Reference Citation

- To cite this document, use:

  Wendling, B. J., & Schrank, F. A. (2015). *Overview of the WJ IV Interpretation and Instructional Interventions Program* (Woodcock-Johnson IV Assessment Service Bulletin No. 5). Rolling Meadows, IL: Riverside.

For technical information, please visit www.riversidepublishing.com or call Riverside Customer Service at 800.323.9540.

Overview of the *WJ IV Interpretation and Instructional Interventions Program*™

The *WJ IV Interpretation and Instructional Interventions Program* (WIIIP™; Schrank & Wendling, 2015b) represents a best-practice approach to linking WJ IV™ assessment results to individualized instructional interventions. The idea for an expert system that would link WJ IV test and cluster scores to instructional interventions emerged in response to pressing practice needs articulated by many professional examiners. Those needs resonated with the authors' philosophy that assessment is most valuable when it results in suggestions for instruction and underscored their fundamental belief that a quality evaluation should make a difference in the educational program of a student. To transform those practice needs and guiding philosophy into a practical tool for assessment practice, a database of evidence-based interventions was derived from the studies and recommendations of hundreds of researchers and scholars whose efforts spanned at least four decades of research and were based on data from thousands of research participants. The WIIIP generates a streamlined Comprehensive Report that includes an interpretive, narrative overview; the Table of Scores; and, if selected, interventions and/or checklist information. Additionally, a detailed description of the individual's performance on all WJ IV tests and clusters can be appended to the report.

The Comprehensive Report

The WIIIP Comprehensive Report offers an interpretive, narrative overview of an individual's performance on the tests and clusters administered from any or all of the WJ IV batteries (*Woodcock-Johnson® IV Tests of Cognitive Abilities* [WJ IV COG; Schrank, McGrew, & Mather, 2014b], *Woodcock-Johnson IV Tests of Oral Language* [WJ IV OL; Schrank, Mather, & McGrew, 2014b], *Woodcock-Johnson IV Tests Achievement* [WJ IV ACH; Schrank, Mather, & McGrew, 2014a]), including all available variation and comparison procedures. Narrative statements are derived from the WJ IV interpretive model articulated in the three WJ IV examiner's manuals (Mather & Wendling, 2014a; 2014b; 2014c) and the *Woodcock-Johnson IV Technical Manual* (McGrew, LaForte, & Schrank, 2014). Examiners may base the generated narrative on either standard score or proficiency range descriptors by selecting a preferred option. If desired, any of the program's checklists may be included in the resulting report, and a detailed description of the individual's performance on all WJ IV tests and clusters can be appended at the end of the Comprehensive Report. Examiners also can include targeted evidence-based and formative interventions in the report. Reports can be exported into a word processing program for editing and integration of additional (e.g., background) information.

To obtain any of the features available in the WIIIP, the examiner must select "Comprehensive Report" from the Report Type menu in the WJ IV online scoring and reporting program. The Comprehensive Report automatically includes the following information:

- Examinee identification information
- Interpretive overview
- List of evidence-based interventions (examiner may select any or all, or choose to exclude these)
- Table of Scores

Additional options that the examiner may choose to include in the Comprehensive Report are:

- Checklists (information from any completed checklists)
- Formative interventions (requires entry of item-level data)
- Language of instruction statements (if completed on WJ IV OL)
- Appendix A: Detailed Interpretation of Clusters and Tests

Interpretive Overview

The streamlined interpretive overview of WJ IV results presents a summary of information about the individual's performance on tests and clusters, as well as any available variation and/or comparison procedures for each battery administered. If all three batteries are administered, results from the WJ IV COG are presented first, followed by results from the WJ IV OL, and then results from the WJ IV ACH. Any available comparison procedures are reported last. The narrative summarizes performance on tests and clusters, then reports any relative strengths or weaknesses noted in the variation procedure. Any completed comparison procedures are summarized by identifying tests or clusters on which the individual scored significantly higher or lower than predicted. The interpretive overview is brief—one or two pages in length—depending on which batteries are administered. Examiners choose whether to base the interpretive overview on standard score or proficiency descriptors. A description of each option follows.

Standard Score Option

The standard score option describes the individual's position within a normal distribution of age or grade peers. Table 1 illustrates the classifications utilized by the WIIIP to describe the range in which the obtained standard score falls. Examiners can select a confidence level (68%, 90%, or 95%), which generates a statement about the range of scores surrounding the obtained standard score.

An example of the narrative that appears when using the standard score option and the 68% confidence level follows:

> Samantha's overall intellectual ability, as measured by the WJ IV General Intellectual Ability (GIA) standard score (124), is in the superior range of others her grade. There is a 68% probability that her true GIA score would be included in the range of standard scores from 121 to 128.

Table 1.
WJ IV Classification for Obtained Standard Score

Obtained Standard Score Range	WJ IV Classification
131 and above	Very Superior
121 to 130	Superior
111 to 120	High Average
90 to 110	Average
80 to 89	Low Average
70 to 79	Low
69 and below	Very Low

Proficiency Option

The proficiency option, based on the individual's *W* Difference score (*W* DIFF), describes the examinee's functionality on the test or cluster. The *W* DIFF is the distance between the examinee's ability and the ability of average age or grade mates on the same task. The *W* DIFF documents how far from average (above or below) the individual's performance is, and the *W* DIFF label describes proficiency on the task rather than relative standing in a group. Table 2 illustrates the classifications, also referred to as proficiency levels, utilized by the WIIIP to describe the range in which the *W* DIFF falls. Examiners can elect to include the *W* DIFF in the "Table of Scores." The proficiency option may be particularly helpful when one goal of the evaluation is instructional planning. The *W* DIFF is used to generate a list of interventions in the WIIIP and is discussed in the subsequent section on "Evidence-Based Interventions and Accommodations." Consult the *WJ IV Interpretation and Instructional Interventions Program Manual and Checklists* (Schrank & Wendling, 2015a), located as a PDF on the Resource tab of the WJ IV online scoring and reporting program, for detailed information about the *W* scale and the *W* DIFF.

An example of the narrative that appears when using the proficiency option follows:

Samantha's overall intellectual ability, as measured by the WJ IV General Intellectual Ability cluster, is advanced when compared to others in her grade.

Table 2.
WJ IV Proficiency Levels for W *DIFF Value Ranges*

W DIFF Range	WJ IV Proficiency Level
+31 and above	Very Advanced
+14 to +30	Advanced
+7 to +13	Average to Advanced
–6 to +6	Average
–13 to –7	Limited to Average
–30 to –14	Limited
–50 to –31	Very Limited
–51 and below	Extremely Limited

At times the proficiency information provides insights into performance that are not revealed by standard scores or percentile ranks. For instance, if considering just the standard score in the following example, important information about the individual's functioning is missed. We may conclude that a standard score of 87 is low average and, therefore, not problematic. However, the proficiency information indicates that the

individual's performance is limited and that age-level tasks involving inductive reasoning will be very difficult. It is recommended that examiners consider the different levels of information provided in the WJ IV to fully understand the examinee's performance on the test.

Standard score statement: Her Concept Formation standard score is in the low average range (percentile rank of 20; standard score of 87).

Proficiency statement: Her inductive reasoning is limited (RPI of 66/90); she will probably find it very difficult to succeed on age-level tasks involving rule-based categorization.

When using the WIIIP, the selection of which option to use for the basis of the interpretive overview is made in the *Report Style* menu entry. The examiner can click on the Report Style box to reveal the choices. The default is set to Standard Scores, so if Proficiency is the desired option, the examiner must select it. This menu also provides the following additional options: exclude instructional recommendations, exclude language of instruction statements, and include the detailed test appendix. If for some reason an examiner does not want available interventions or language of instruction statements to be included, he or she must choose to exclude them. Conversely, if an examiner wishes to include the detailed test and cluster interpretation, he or she must choose to include the appendix.

Optional Detailed Interpretation of Clusters and Tests

The Comprehensive Report automatically provides a concise interpretive overview and analysis of an individual's performance on the WJ IV. As previously noted, examiners may elect to append a detailed test and cluster interpretation to the report. The appendix, which appears at the end of the Comprehensive Report, provides information about each ability measured, including a description of the examinee's developmental level, a comparison to age or grade peers using a standard score range classification, and a description of his or her proficiency level. Paragraphs also may include information about how the examinee will likely respond to similar tasks presented at his or her age or grade level. Sometimes a paragraph will draw attention to critical information obtained from the examinee's developmental band or instructional zone to describe a level at which instruction with similar tasks will be too easy or too difficult for him or her. Other paragraphs provide additional information about performance within a cluster when the examinee's scores on the tests that compose that cluster vary significantly.

Following is an example of a cluster description followed by a test description, both obtained from the WJ IV COG (Schrank, McGrew, & Mather, 2014b). This type of information is included in the appendix for each test and cluster administered.

Cluster description: Comprehension-Knowledge (*Gc*) is a language-based measure of Samantha's declarative knowledge. It includes semantic memory and the ability to communicate her knowledge and understanding verbally. Samantha's verbal knowledge and comprehension are above those of the average individual at age 30. Her Comprehension-Knowledge standard score is in the very superior range (percentile rank of 99.6; standard score of 140). Her verbal ability is very advanced (RPI of 100/90); she will probably find it extremely easy to succeed on age-level verbal knowledge and comprehension tasks.

Test description: Concept Formation is a test of fluid reasoning. This test required Samantha to use inductive reasoning in categorical thinking. Samantha's performance on Concept Formation is comparable to that of the average individual at age 8-1. Her Concept Formation standard score is in the low average range (percentile rank of 20; standard score of 87). Her inductive reasoning is limited (RPI of 66/90); she will probably find it very difficult to succeed on age-level tasks involving rule-based categorization.

"Table of Scores"

The "Table of Scores" is included in all WIIIP or WJ IV score reports and is most likely familiar to examiners who use the WJ IV. The "Table of Scores" lists the Woodcock-Johnson IV clusters and tests administered and the various scores requested when the report was generated. The default template for the "Table of Scores" includes the obtained *W* score for the test or cluster, the age equivalent (if age norms are selected) or grade equivalent (if grade norms are selected), the relative proficiency index (RPI), and the standard score with the 68% confidence band. However, the examiner may customize the "Table of Scores" by selecting from the following score types: percentile rank (with or without confidence band), cognitive-academic language proficiency (CALP), age equivalent (AE), grade equivalent (GE), RPI, standard score (with or without confidence band), proficiency descriptor, normal curve equivalent (NCE), stanine, *T* score, *z* score, *W* score, *W* DIFF, and developmental zone (age or grade). Not every score available can be selected at the same time due to page width constraints. In addition to the administered tests and clusters, the user may select any of the available variations and/or comparisons to include in the table.

Checklists

The importance of qualitative information is recognized and reinforced throughout the WJ IV and the WIIIP. In the WJ IV, each Test Record has a "Test Session Observations Checklist." Additionally, the WJ IV ACH (Schrank, Mather, & McGrew, 2014a) Test Record includes qualitative observations for the 11 tests in the ACH Standard Battery. The WIIIP also includes six reproducible checklists designed to help organize and integrate information about the examinee. When a checklist is completed, that information can be entered into the web-based program and it then appears in the Comprehensive Report. The six checklists are:

- Reason for Referral Checklist
- Parent's Checklist: School Age
- Teacher's Checklist: School Age
- Classroom Behavior Observation Form
- Self-Report Checklist: Adolescent/Adult
- Writing Evaluation Scale

Detailed information about each checklist is found in Chapter 3 of the WIIIP Manual and Checklists (Schrank & Wendling, 2015a), and the reproducible checklists are located in Appendices A through F of the manual (PDF), which is located on the Resource tab of the WJ IV online scoring and reporting program. Examiners with access to the WIIIP may download the manual and print the checklists as needed.

Reason for Referral Checklist

This checklist is used to document who made the referral; what that person's relationship is to the examinee; the primary reason for the referral, which may include specific details; and common questions that should be addressed in the evaluation. The Reason for Referral Checklist can be completed in advance, or the information may be entered directly into the web-based program. When completed, the reason for referral information appears in a narrative format as a brief introductory section of the Comprehensive Report.

Parent's Checklist: School Age

A parent, grandparent, guardian, or other parent-surrogate may complete this checklist. Reports from two parents or guardians may be included if desired. Parts I though V pertain to the referred individual's developmental history, and Parts VI through VIII describe the individual's current personality and behaviors. The information collected appears in a narrative format in a section of the Comprehensive Report titled "Parent's Report."

Teacher's Checklist: School Age

There are six parts to this checklist, which is completed by the examinee's teacher. In Part I, the teacher rates the examinee's oral language ability and achievement. This section corresponds to nine clusters available in the WJ IV. In Part II, the teacher indicates the grade level at which the student is receiving instruction. In Part III, the teacher chooses up to three words from a list of 37 words that best describe the student's temperament and mood. In Part IV, the teacher rates the student's classroom behavior in several areas based on observations over the past month. The teacher's primary concern about the student is identified in Part V. Any problem behaviors noted in the classroom are indicated in Part VI and rated as to how those behaviors impede the student's opportunity to learn as well as how disruptive the behavior is to others.

Classroom Behavior Observation Form

The Classroom Behavior Observation Form consists of three parts. Part I is a time sampling of behavior. Direct observations of the referred student and a comparison student are documented over a 15-minute time period at 30-second intervals. Any off-task behavior exhibited by the referred student is categorized by selecting one of eight listed behaviors. Part II is used to provide more information about any categories of problem behaviors noted during the time sampling of behavior. This would include a description of the behavior and how the behavior impedes the student's learning or disrupts other students. In Part III, the evaluator is asked to identify the primary problem behavior and provide an additional description about what was observed before, during, and after the behavior was exhibited.

Self-Report Checklist: Adolescent/Adult

If a referred adolescent or adult is capable of reading and understanding the checklist, he or she should be asked to complete it independently. There are five sections to complete. Part I reviews current home and health status. Part II includes questions on attitudes toward school, self, and others. Part III instructs the individual to rate his or her cognitive abilities and academic skills compared to others of the same age. The areas listed correspond to the seven CHC abilities (based on contemporary Cattell-Horn-Carroll theory) and nine language or academic areas. Part IV considers school history such as whether the student has ever repeated a grade or received special

education services. The final section, Part V, asks the individual to document his or her recollections of early schooling.

Writing Evaluation Scale

The Writing Evaluation Scale is an informal evaluation of the individual's writing competence, which can supplement the results of the WJ IV writing tests. The examiner selects one or more samples of the individual's writing, such as an essay or report written in class, and judges the sample by completing the ratings on the Writing Evaluation Scale. The scale can be used to evaluate narrative or expository writing.

Additional Qualitative Information

In addition to the six reproducible checklists, the WIIIP integrates information from the "Test Session Observations Checklist" (on the first page of each Test Record) and the qualitative observations for the 11 achievement tests in the WJ IV ACH Standard Battery. When an examiner completes any of these checklists and enters the information into the WIIIP, it appears in a section of the Comprehensive Report titled "Test Session Observations."

Evidence-Based Interventions and Accommodations

Over 500 evidence-based interventions are available in the WIIIP database. Multiple sources were reviewed in the process of choosing interventions that have research-based evidence of their effectiveness. Contemporary Cattell-Horn-Carroll (CHC) theory (McGrew et al., 2014; Schneider & McGrew, 2012) and an analysis of the cognitive processes required for test performance served as the basis for linking the WJ IV tests and clusters to associated interventions. The WIIIP compilation puts the interventions in one convenient location and eliminates the need for the examiner to try to find appropriate interventions in myriad sources. In addition, the interventions in the WIIIP are linked to the examinee's age and level of performance on the WJ IV and are generated when a score falls within a targeted range. The examiner simply selects the most appropriate interventions from the generated list to include in the Comprehensive Report in a section titled "Instructional Recommendations and Interventions."

The *W* DIFF is used to generate a list of applicable interventions. When an examinee's performance falls within the limited-to-average or lower range (−7 or lower), one or more associated interventions are triggered for that test or cluster. See Table 2 for the *W* DIFF ranges and proficiency levels.

Cognitive Interventions

The WIIIP links WJ IV COG (Schrank, McGrew, & Mather, 2014b) results to evidence-based interventions, recommendations, or accommodations that can help multidisciplinary teams address limitations identified from tests that measure specific cognitive abilities. The Cattell-Horn-Carroll (CHC) theory served as a bridge for linking limitations in cognitive abilities to interventions that can make a relevant contribution to a student's educational plan. To be relevant, cognitive assessment should result in evidence-based interventions or practical suggestions—recommendations that may not have surfaced if a comprehensive cognitive evaluation were not conducted.

In the example that follows, Samantha's performance on WJ IV COG Test 12: Nonword Repetition triggered an intervention because her *W* DIFF was −26, falling in the limited range. Test 12: Nonword Repetition measures phonological short-term memory. The task requires remembering and repeating increasingly complex nonwords.

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)
Nonword Repetition	475	5-6	35/90	–26	74 (70–79)

Teach Samantha to use a vocalization strategy to enhance the quality of Samantha's phonological representations when learning new words. Tell Samantha that when she encounters a new word, she should orally repeat (utter) the word. Rehearsing the utterance will solidify the connection between the phonological input and the output of the word.

Sometimes an accommodation may be recommended. In this example, Robert's performance on the WJ IV COG Short-Term Working Memory cluster triggered an intervention because his *W* DIFF was −20 on the cluster.

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)
S-T WORK MEM (*Gwm*)	502	10-1	49/90	–20	85 (81–89)

Accommodations may be useful in compensating for Robert's limitations in short-term working memory. Some examples include keeping oral directions short and simple, asking Robert to paraphrase directions to ensure understanding, and providing visual cues for directions or steps to be followed.

Oral Language Interventions

The WJ IV OL (Schrank, Mather, & McGrew, 2014b) and the WIIIP provide a focus on the importance of oral language abilities for learning. Oral language development deficits, when identified, are particularly responsive to improvement through intervention. Evidence-based interventions for vocabulary development, phonological awareness, sound blending, word segmentation, speed of lexical access, and language expression are included in the WIIIP. Additionally, the WIIIP provides links to the latest evidence-based interventions that have been shown to increase both language competency and academic learning for English language learners (ELLs).

Because Tito's performance was limited on WJ IV OL Test 6: Understanding Directions (*W* DIFF = −13) in the following example, an intervention was triggered to address this area of concern.

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)
Understanding Directions	488	7-11	69/90	–13	83 (78–88)

Oral elaboration is an intervention that may facilitate Tito's encoding ability, storage, and recall of information over time. Elaborative rehearsal should go beyond simple recitation of information to focus on meaning and association of the new information with other knowledge. A deeper processing of information may result when Tito interacts with the material by thinking about it, associating it with prior knowledge, and talking about the association.

Achievement Interventions

The WIIIP links WJ IV ACH (Schrank, Mather, & McGrew, 2014a) results to evidence-based interventions for the key areas of reading, writing, mathematics, and academic knowledge. In the area of reading, interventions for tests and clusters that measure the alphabetic principle (phonics, vocabulary, comprehension, and fluency) are available. Phonemic awareness, a fifth area of effective reading instruction, is covered by the WJ IV OL tests measuring phonetic coding. In writing, interventions are available for the tests and clusters measuring the key areas of spelling, automaticity of writing, written expression, and editing. Interventions for the tests and clusters measuring the key

mathematics areas of computation, automaticity, concepts, and problem solving are included. In the area of academic knowledge, measured by WJ IV ACH Test 18: Science, Test 19: Social Studies, and Test 20: Humanities, various interventions are included to build content knowledge. An example of interventions linked to WJ IV ACH results is presented below.

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)
READING FLUENCY	454	7-4	4/90	–49	71 (66–75)

The phrase-drill error-correction procedure may be helpful for developing Abby's reading fluency. In this procedure, combine immediate corrective feedback with rehearsal of the corrected error. When Abby makes an error on a word, model the correct word immediately. Then ask Abby to reread the phrase (where the error occurred) three times.

The age of the examinee is also considered in the process of triggering an intervention. The first example below for WJ IV ACH Test 3: Spelling illustrates the results for a young child, Chas, who is 6 years, 3 months of age. The second example shows the results for a secondary student, Tara, who is 17 years, 1 month of age.

Example 1: Chas, Age 6-3

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)
Spelling	412	5-8	2/90	–19	89 (84–94)

Multisensory techniques involving repeated tracing and verbalization of letters and words may be especially helpful, particularly when introducing irregular words. Emphasize activities that involve writing or using letter tiles to spell words, rather than oral spelling, as it is important for Chas to construct and then see the correctly printed word.

Example 2: Tara, Age 17-1

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)
Spelling	491	8-9	10/90	–40	67 (62–71)

Direct instruction in the rules that govern spelling is an important way to help Tara improve her spelling. Teaching spelling rules, such as adding endings to words with a silent e (e.g., take, taking), or adding a suffix to closed syllables ending in a single consonant (e.g., fit, fitting), as well as building knowledge about root words and affixes, gives Tara a means to spell words without relying solely on memorizing how words look.

Formative Interventions

In addition to the evidence-based interventions, there are over 400 formative interventions in the WIIIP database. The formative interventions target specific skills that may need to be specifically taught or reviewed with the examinee. Unlike the evidence-based interventions, the formative interventions are simply suggestions for follow-through with one or more mini-skill development lessons that are based on errors observed during the assessment. Specific skill development activities (or formative interventions) are suggested when item-level data are entered for five tests from the standard achievement battery: Test 1: Letter-Word Identification, Test 2: Applied Problems, Test 3: Spelling, Test 5: Calculation, and Test 7: Word Attack. The WIIIP

links a sixth achievement test, Test 8: Oral Reading, to suggestions for oral reading skill development when the examiner enters a tally of error types the student made when reading aloud.

Experienced clinicians have learned to home in on the pattern of correct and incorrect responses to glean insights into needs for specific skill development and program planning. Entry of item-level data allows the WIIIP to determine which items can provide examiners and teachers with cues to individualize skill development. In the probabilistic model underlying the WJ IV batteries, test items that are answered incorrectly *and* are below the individual's age or grade level can be considered "unexpectedly incorrect." An incorrect response to these items may mean that something about the test item was misunderstood or unknown. Other items that are answered incorrectly below the ceiling level can provide cues to the next level of skill development that is within reach for learning if the student is provided with the guidance of a teacher or more capable peer. Vygotsky called this the *zone of proximal development* (Chaiklin, 2003).

When data are entered from the five WJ IV ACH tests mentioned above, a formative intervention is triggered for items an individual missed after the basal was established and before the ceiling was reached. Figure 1 illustrates this concept. The basal was established when the examinee answered Items 30 through 35 correctly. The error on Item 36 was unexpected because Items 37 and 38 were correct. Also, Items 39 and 42 through 45 were incorrect and were followed by correct responses, so these items can be flags for underlying skills that are within reach for learning if the individual is provided with appropriate guidance. The ceiling was reached when Items 48 through 53 were answered incorrectly. None of the incorrect items used to establish the ceiling trigger a formative intervention because they are not unexpected errors and/or may be at a level that is too difficult for the individual at this time.

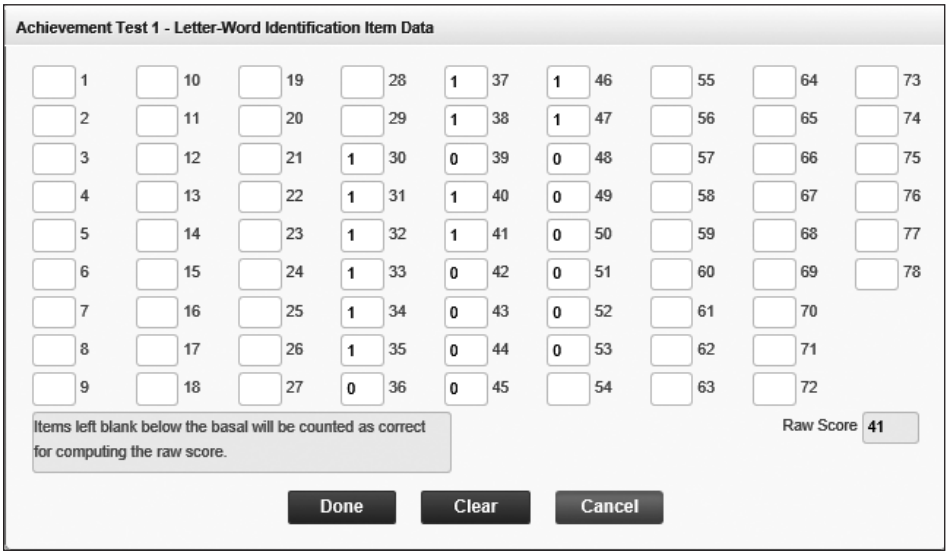

Figure 1.
Item-level data for WJ IV ACH Test 1: Letter-Word Identification used for obtaining formative interventions.

Formative interventions are not designed to teach the actual test items, and they should not be used to try to improve an individual's performance on a subsequent evaluation using the same form of the WJ IV ACH. The formative interventions provide teachers or instructional specialists with guidance to help examinees develop an underlying skill or concept related to the test item that was answered incorrectly. As

shown in Figure 1, Item 36 is an unexpected error and triggers the following formative intervention:

> Samantha will benefit from learning about types of syllables. Review closed and open syllables with Samantha. Explain that a closed syllable ends in a consonant and has a short vowel sound, whereas an open syllable ends in a vowel and has a long vowel sound. Present different two-syllable words, some with closed syllables and some with open syllables. Write each word on the board and ask Samantha to read each word aloud and draw lines or slash marks (/) between the syllables to divide it. Then ask Samantha to underline the first syllable and tell you whether it is closed (ends on a consonant and has a short vowel sound) or open (ends on a long vowel sound).

Example of a Comprehensive Report

Following is an example of the Comprehensive Report generated from the WIIIP. This example report includes information from three completed checklists (Reason for Referral Checklist, Parent's Checklist, and Teacher's Checklist), qualitative observations, interventions selected from the list of suggested interventions, and the appendix, which provides detailed information about all tests and clusters administered. Additionally, the "Interpretive Overview of Scores" and "Table of Scores" sections are automatically included in all Comprehensive Reports. The Comprehensive Report can be edited in a word-processing program, allowing the examiner to maintain control over the content. This example shows the basic interpretive overview, without additional information an examiner might choose to add.

Summary of Features in Example Comprehensive Report

Page 1

- Examinee identification information—This is automatically included from the Test Record information entered.
- "Reason for Referral"—The optional Reason for Referral Checklist was completed.
- "Tests Administered"—Lists the WJ IV batteries that were administered; these are automatically included based on the Test Records entered.
- "Background Information"—The optional Parent's Checklist was completed.

Page 2

- "Background Information"—The optional Teacher's Checklist was completed.
- "Test Session Observations"—This optional information appears because one or more "Test Session Observations Checklists" were completed. It also includes information from the qualitative observations in the WJ IV ACH, as well as information on the tally of errors from WJ IV ACH Test 8: Oral Reading.

Page 3

- "Test Session Observations" (continued)
- "Interpretive Overview of Scores"—This is automatically included. Note the standard score option is selected in this example.

Page 4

- "Interpretive Overview of Scores" (continued)

Page 5

- "Interpretive Overview of Scores" (continued)
- "Instructional Recommendations and Interventions"—These were selected from a suggested list of interventions automatically generated based on the examinee's scores.

Pages 6–7

- "Instructional Recommendations and Interventions" (continued)

Pages 8–13

- "Table of Scores"—This is automatically included.

Pages 14–22

- "Appendix A: Detailed Interpretation of Clusters and Tests"—This option was selected for inclusion.

Woodcock Johnson IV

Comprehensive Report

Name: Tanner, Oliver
Date of Birth: 03/17/2005
Age: 10 years, 1 month

Sex: Male
Date of Testing: 04/05/2015 (COG)
04/07/2015 (OL)
04/06/2015 (ACHA)

School:
Teacher:
Grade: 4.7 (COG)
4.7 (ACHA)
ID:
Examiners:

REASON FOR REFERRAL

Mrs. Jessica Tanner, Oliver's mother, referred him for an evaluation of a suspected difficulty in achieving. Specifically, he doesn't understand his homework, has difficulty finishing, and is beginning to dislike school. This evaluation is intended to address the following questions: What cognitive, language, and/or academic strengths and weaknesses exist? Is there evidence of an ability/achievement discrepancy?

TESTS ADMINISTERED

Woodcock-Johnson IV Tests of Cognitive Abilities
Woodcock-Johnson IV Tests of Oral Language
Woodcock-Johnson IV Tests of Achievement Form A

BACKGROUND INFORMATION

PARENT'S REPORT

Mrs. Jessica Tanner, Oliver's mother, provided the following information.

Oliver lives with both of his parents. One other child, aged 7, lives in the same home. There have been no significant changes in his family life recently.

Oliver is usually in good health and is physically fit. Mrs. Tanner reported that he has normal vision and had a recent vision test. Mrs. Tanner reported that Oliver's hearing is normal, but he has not had a recent hearing test. At night, he typically sleeps soundly for 8 or 9 hours. Another member of Oliver's family has recently experienced personal, social, or learning problems (Father had difficulty with reading and spelling).

During pregnancy, Oliver's mother had no significant health problems. Oliver's delivery was normal. Immediately after birth, he was healthy.

Oliver's mother remembers Oliver as being an active but a colicky infant and toddler. His early motor skills, such as sitting up, crawling, and learning to walk, developed normally. His early language skills, such as speaking first words, asking simple questions, and talking in sentences, developed earlier than for most other children.

Oliver did not attend preschool. He seemed to learn things later, or with more difficulty, than other children did. His social skills developed at about the same rate as other children's. No atypical behavior management problems were recalled from Oliver's preschool years.

Mrs. Tanner believes that Oliver might have learning problems and has been concerned about this for about a year.

Comprehensive Report

At the time of this assessment, Oliver's mother described Oliver as unhappy regarding school. His mood is typical of boys his age, with normal variations. His activity level and style of motor activity are similar to other boys his age. Oliver can play quietly when asked to do so. Oliver's social interaction skills are typical; he takes turns appropriately and usually talks about as much as other boys his age. Oliver's mother said that Oliver's level of effort toward schoolwork varies. He dislikes school and does not want to go.

Oliver usually attends to details, concentrates while working, maintains attention during tasks and play activities, listens when spoken to directly, and organizes personal tasks and activities similar to other boys his age. He usually reacts normally to distractions and adapts to them, keeps personal belongings in order, and remembers what he is supposed to do. Some things that Mrs. Tanner reported may be significant. He often does not seem to listen when spoken to directly. Oliver often avoids, dislikes, or is reluctant to engage in difficult tasks.

Mrs. Tanner reported that Oliver demonstrates slightly serious problem behaviors at home. These include uncooperative behavior (related to his homework involving reading) and anxiousness (regarding school and reading).

TEACHER'S REPORT

Mr. Hector Santos, Oliver's teacher, responded to a checklist on 03/20/2015 to provide information based on recent direct observations of, and typical experience with, Oliver.

Mr. Santos described Oliver as intelligent and serious. At school, his mood is typical of others of his age, with normal variations. He needs more one-to-one attention and completes less schoolwork than most boys his age.

Oliver usually attends to details in schoolwork and concentrates while working. He generally persists with difficult tasks. He usually maintains attention during tasks and play activities, listens when spoken to directly, and organizes his tasks and activities. Oliver's oral responses to questions are prompt but careful. He usually keeps assignments and school supplies in order and remembers what he is supposed to do. He reacts normally to distractions and adapts to them. One reported behavior may be inhibiting classroom performance. Oliver often does not follow through on instructions and fails to finish his homework. He usually remains seated when expected to. His activity level and style of motor activity are similar to other boys his age. Oliver's social interaction skills are typical; he takes turns appropriately and usually talks about as much as other boys his age. Mr. Santos is most concerned about the amount of one-to-one attention he requires in the classroom. This behavior interferes with his classroom performance from time to time.

Mr. Santos rated Oliver's levels of oral language ability and academic achievement based on observations of him in the classroom. Mr. Santos rated his levels of oral expression and math reasoning as within the advanced range of others at his grade placement. Oliver's levels of listening comprehension, math calculation skills, and basic writing skills were rated as average. Additionally, his levels of basic reading skills, reading comprehension, reading fluency, and written expression were rated as limited.

Oliver is being instructed at the grade 5 level in oral language and mathematics. His instruction is at the grade 4 level in writing. He is being instructed in reading at the grade 3 level.

TEST SESSION OBSERVATIONS

Observations of Oliver’s behavior were made during the *Tests of Oral Language*. His conversational proficiency seemed very advanced for his age level. He was cooperative throughout the examination; his activity level seemed typical for his age. He appeared confident, self-assured, and unusually absorbed by the tasks throughout the examination. He responded promptly, but carefully, to test questions, generally persisting with difficult tasks.

Further observations of Oliver's behavior were made during the *Tests of Achievement*. His conversational proficiency seemed advanced for his age level. He was cooperative throughout the examination; his activity level seemed typical for his age. During the examination, he seemed attentive to the tasks, but at times he appeared tense or worried. He responded very slowly and hesitantly to test questions, and he gave up easily after attempting difficult tasks.

Oliver's performance on Passage Comprehension tasks appeared to be typical for his age. On word identification tasks, he required increased time and greater attention to phoneme-grapheme relationships to determine the correct response. On a word attack (phonics) test, Oliver appeared to have limited ability to apply phoneme-grapheme relationships.

The examiner listened to Oliver read aloud from a story with sentences of increasing difficulty. When the sentences were at an easy to moderate reading level for him, two reading fluency errors (omission and repetition) were observed. When the reading material was at his frustration level a few errors were observed: mispronunciation(2), hesitation(1), and repetition(2).

On applied mathematics tasks, he solved problems with no observed difficulties. On math calculation tasks, Oliver solved many problems quickly with no observed difficulties.

Oliver appeared to spell words in a manner typical for others of his age. On a writing samples test, Oliver's sentences were observed to be typical (simple, but adequate).

INTERPRETIVE OVERVIEW OF SCORES

The scores derived from this administration can be interpreted at different levels. Interpretation of Oliver's performance can be based upon single tests and/or upon logical-empirical combinations of tests called clusters. Variations within groups of scores are evaluated to determine if any relative strengths and weaknesses exist.

Oliver's overall intellectual ability, as measured by the WJ IV General Intellectual Ability (GIA) standard score (99), is in the average range of others his age. There is a 68% probability that his true GIA score would be included in the range of standard scores from 95 to 102. By comparison, a composite index of Oliver's fluid reasoning and comprehension-knowledge intellectual abilities (118) is in the high average range of standard scores (115 to 122). However, the scores on two of the component tests are significantly different, making it problematic to interpret Oliver's *Gf-Gc* Composite score as a single measure of intellectual level.

Among the WJ IV cognitive measures, Oliver's standard scores are within the very superior range for one test (Oral Vocabulary); within the superior range for three clusters (Comprehension-Knowledge, Comprehension-Knowledge –Extended, and Short-Term Working Memory) and two tests (General Information and Numbers Reversed); and within the high average range for one test (Verbal Attention). His scores are within the average range for four clusters (Fluid Reasoning, Number Facility, Cognitive Efficiency, and Cognitive Efficiency--Extended) and three tests (Number Series, Visualization, and Concept Formation). His scores are within the low average range for two tests (Story Recall and Number-Pattern Matching); within the low range for two clusters (Long-Term Retrieval and Perceptual Speed) and four tests (Letter-Pattern Matching, Phonological Processing, Nonword Repetition, and Visual-Auditory Learning); and within the very low range for one cluster (Auditory Processing).

Comprehensive Report

An analysis of variations among Oliver's cognitive scores (including some cognitive-linguistic scores) suggests that Oral Vocabulary, General Information, Picture Vocabulary, Comprehension-Knowledge, Comprehension-Knowledge–Extended, Oral Language, Vocabulary, Numbers Reversed, and Short-Term Working Memory are relative strengths for him. He demonstrated relative weaknesses in Letter-Pattern Matching, Phonological Processing, Understanding Directions, Rapid Picture Naming, Retrieval Fluency, Perceptual Speed, Speed of Lexical Access, Nonword Repetition, Segmentation, Sound Blending, Auditory Processing, Phonetic Coding, Visual-Auditory Learning, and Long-Term Retrieval.

Among the WJ IV oral language measures, Oliver's standard scores are within the superior range for one cluster (Vocabulary); and within the high average range for one cluster (Oral Language) and one test (Picture Vocabulary). His scores are within the average range for three clusters (Broad Oral Language, Oral Expression, and Listening Comprehension) and two tests (Oral Comprehension and Sentence Repetition). His scores are within the low range for one cluster (Phonetic Coding) and four tests (Segmentation, Rapid Picture Naming, Understanding Directions, and Sound Blending); and within the very low range for one cluster (Speed of Lexical Access) and one test (Retrieval Fluency).

An analysis of variations among Oliver's oral language scores (including some cognitive-linguistic scores) suggests that Picture Vocabulary, Oral Vocabulary, Oral Expression, and Vocabulary are relative strengths for him. He demonstrated relative weaknesses in Rapid Picture Naming, Sound Blending, Phonological Processing, Nonword Repetition, Phonetic Coding, Auditory Processing, Retrieval Fluency, and Speed of Lexical Access.

Oliver's overall academic achievement, as measured by the WJ IV Broad Achievement standard score, is in the low average range of others his age.

Among the WJ IV achievement measures, Oliver's standard scores are within the high average range for one cluster (Mathematics) and one test (Applied Problems). His scores are within the average range for four clusters (Broad Mathematics, Math Calculation Skills, Written Expression, and Academic Applications) and four tests (Calculation, Writing Samples, Math Facts Fluency, and Sentence Writing Fluency). His scores are within the low average range for three clusters (Written Language, Broad Written Language, and Academic Fluency) and one test (Passage Comprehension); within the low range for four clusters (Reading, Broad Reading, Basic Reading Skills, and Academic Skills) and two tests (Word Attack and Sentence Reading Fluency); and within the very low range for one cluster (Reading Fluency) and three tests (Letter-Word Identification, Spelling, and Oral Reading).

An analysis of variations among Oliver's achievement scores in broad curricular areas suggests that Applied Problems, Calculation, and Math Calculation Skills are relative strengths for him. He demonstrated relative weaknesses in Letter-Word Identification, Spelling, Word Attack, Oral Reading, Basic Reading Skills, Reading Fluency, and Sentence Reading Fluency.

In a cross-domain analysis of variations among Oliver's achievement cluster scores (and including some cognitive cluster scores), Oliver demonstrated a relative strength in Academic Applications. He demonstrated a relative weakness in Academic Skills.

When compared to a measure of intellectual ability comprised solely of fluid reasoning and comprehension-knowledge abilities, Auditory Processing, Long-Term Retrieval, Perceptual Speed, Phonetic Coding, Speed of Lexical Access, Brief Achievement, Broad Achievement, Reading, Broad Reading, Basic Reading Skills, Reading Fluency, Written Language, Broad Written Language, Academic Skills, and Academic Fluency were relative weaknesses (significantly lower than predicted) for Oliver.

Comprehensive Report

Comparisons were made between Oliver's overall intellectual ability and his performance on several achievement and oral language clusters. When compared to his overall intellectual ability, Oliver's performance was significantly lower than predicted in the areas of Brief Achievement, Reading, Broad Reading, Basic Reading Skills, Reading Fluency, and Academic Skills.

Comparisons were also made between a measure of Oliver's English oral language ability and his performance on several achievement and cognitive-linguistic clusters. When compared to his English oral language ability, Oliver's performance was significantly lower than predicted in the areas of Reading, Broad Reading, Basic Reading Skills, Reading Fluency, Academic Skills, Phonetic Coding, and Speed of Lexical Access.

Based on comparisons to measures of scholastic aptitude in specific curricular areas, Oliver's performance was significantly lower than predicted in the areas of Reading, Broad Reading, Reading Fluency, and Basic Reading Skills.

INSTRUCTIONAL RECOMMENDATIONS AND INTERVENTIONS

Oliver may gain the most from reading instruction presented within the late first grade to early second grade range. In addition, Oliver may benefit from a program of supplemental reading interventions. The interventions should be explicit (skills should be taught directly), intensive (a concentrated number of related learning opportunities should be provided), delivered in small groups of 2-7 students when possible, and should employ scaffold learning principles with emotional support.

Audio-recorded books are an effective way to demonstrate and practice fluent reading. Select an appropriate recording and matching text for Oliver. When Oliver first uses the audio recording, it would be best to break the recording into small, manageable passages. Have Oliver listen to the recording while following along in the text. The first time through, suggest that he listen and follow along in the text by moving his finger under each word as it is read. Then, the next time through the text, have Oliver try reading along, keeping pace with the recording. Repeat until the desired level of fluency is achieved.

Use a phrase-cued reading technique to increase Oliver's reading fluency. Demonstrate how to group words together to create meaningful phrases when reading sentences. Give Oliver a copy of the sentences and show him how to draw a scoop under the phrases or put a slash between the phrases as you read. This technique builds a bridge between word-by-word reading and connected reading. It also may enhance Oliver's reading comprehension and expression.

Oliver may benefit from intensive phonics interventions that use an explicit approach to teaching phoneme-grapheme relationships, including (1) matching sounds with letters, (2) blending the sounds to create words, and (3) segmenting words into separate sounds.

Word recognition strategies may help Oliver build automatic sight-word recognition. These strategies include word walls, flow lists, word banks, flash cards, and games. Use high-frequency words when implementing these strategies, because this may enhance Oliver's ability to read independently. For example, a word wall might present five high-frequency words that Oliver needs to learn. Engage him in activities, both planned and unplanned, that use the words on the wall. Word walls help build word recognition, analysis skills, and vocabulary, and they serve as a spelling reference.

Comprehensive Report

Linking new facts to Oliver's prior knowledge about the topic may increase inferential comprehension. Using a series of questions, activate Oliver's prior knowledge and then model how to make predictions using a think-aloud approach. The KWLS strategy uses a chart to help students organize information into four categories: (1) **K**now (what they already know about the topic), (2) **W**ant to know (what they want or need to learn from reading), (3) **L**earned (what they learned from reading), and (4) **S**till need to learn (what additional information they still need to learn about the topic).

Incorporating self-monitoring strategies may help Oliver recognize and resolve his comprehension errors as they arise. Click or Clunk is one example of a self-monitoring strategy that teaches students to monitor their performance while reading. If Oliver understands a word, a point, a sentence, etc., he says, "Click." If he doesn't understand, Oliver says, "Clunk." Students are taught strategies to address clunks, including rereading the passage; using a glossary, dictionary, or reading checklist; or discussion with a peer.

Oliver will benefit from learning about types of syllables. Review closed and open syllables with Oliver. Explain that a **closed syllable** ends in a consonant and has a short vowel sound, whereas an **open syllable** ends in a vowel and has a long vowel sound. Present different, two-syllable words, some with closed syllables and some with open syllables. Examples of words with at least one closed syllable include *catnip*, *pancake*, *little*, *family*, *rabbit*, *picnic*, *ribbon*, and *pumpkin*. Examples of words with at least one open syllable include *before*, *program*, *basic*, *unit*, *label*, *library*, *spider*, *table*, and *paper*. Write each word on the board and ask Oliver to read each word aloud and draw lines or slash marks (/) between the syllables to divide it. Then ask Oliver to underline the first syllable and tell you whether it is closed (ends on a consonant and has a short vowel sound) or open (ends on a long vowel sound).

Help Oliver understand how to pronounce *ci* when he encounters this letter combination in multisyllabic words. Present the word *social* and ask Oliver to read it aloud. Ask him to tell you the sound the *ci* is making in that word. If needed, indicate it is the /sh/ sound. Write the following words on the board: *facial*, *financial*, *efficient*, and *special*. Ask Oliver to underline the *ci* and read each word aloud. Next, write the word *city* on the board and ask Oliver to read it aloud. Then ask whether the *ci* in this word sounds the same as the *ci* in the other words. Remind Oliver about the rule of the soft *c*. The letter *c* sounds like /s/ when followed by *e*, *i*, or *y*. Write several more words, including *cider*, *cinder*, *acid*, and *cinnamon*. Now ask Oliver to try to figure out why the *ci* in the first set of words had the /sh/ sound while it has the /s/ sound in these words. If necessary, point out that when *ci* sounds like /sh/, it is followed by another vowel and when the *ci* sounds like /s/, it is followed by a consonant.

Math instruction presented within the early fifth grade to middle sixth grade range may produce the greatest gains for Oliver.

Writing instruction that is presented within the middle second grade to middle third grade level may be appropriate for Oliver.

Computer technology may make the writing process easier and more motivating for Oliver. For example, word processing eliminates the tedious task of recopying during revision. Other technology tools help with spelling, grammar, outlining, and semantic mapping and facilitate collaboration with peers.

He should be able to understand classroom vocabulary that falls within the late third grade to middle sixth grade range.

Repeated reading may help Oliver develop accuracy and automaticity in retrieval of lexical representations. In this intervention, ask Oliver to orally read a passage multiple times, each time faster than the last time. As Oliver's oral reading becomes more automatic, his word retrieval will require less conscious effort.

Comprehensive Report

Based on noted limitations in Oliver's cognitive performance:

Accommodations that may help compensate for Oliver’s limitations in perceptual speed might include providing extended time, reducing the quantity of work required (breaking large assignments into two or more component assignments), eliminating or limiting copying activities, and increasing wait times after questions are asked as well as after responses are given.

Tanner, Oliver
April 07, 2015

Comprehensive Report

TABLE OF SCORES

Woodcock-Johnson IV Tests of Cognitive Abilities (Norms based on age 10-1)

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)	Proficiency
GEN INTELLECTUAL ABIL	498	9-11	89/90	-1	99 (95-102)	Average
Gf-Gc COMPOSITE	511	13-4	97/90	13	118 (115-122)	Average to Advanced
COMP-KNOWLEDGE (*Gc*)	521	18-2	99/90	23	127 (123-131)	Advanced
COMP-KNOWLEDGE (Ext)	519	17-6	99/90	21	126 (123-130)	Advanced
FLUID REASONING (*Gf*)	501	10-8	93/90	3	104 (99-108)	Average
S-TERM WORK MEM (*Gwm*)	518	18-2	99/90	21	123 (119-127)	Advanced
AUDITORY PROCESS (*Ga*)	477	6-2	43/90	-23	68 (64-72)	Limited
L-TERM RETRIEVAL (*Glr*)	483	6-6	67/90	-14	75 (71-79)	Limited
NUMBER FACILITY	495	10-0	89/90	-1	100 (93-106)	Average
PERCEPTUAL SPEED	467	7-8	17/90	-34	78 (72-84)	Very Limited
VOCABULARY	519	17-8	99/90	20	128 (123-132)	Advanced
COGNITIVE EFFICIENCY	499	9-7	86/90	-3	97 (91-103)	Average
COG EFFICIENCY (Ext)	492	9-4	81/90	-7	94 (89-99)	Limited to Average
Oral Vocabulary	522	20	99/90	23	133 (127-139)	Advanced
Number Series	501	10-10	94/90	6	105 (100-111)	Average
Verbal Attention	509	13-0	97/90	11	112 (106-119)	Average to Advanced
Letter-Pattern Matching	471	7-3	13/90	-37	77 (70-84)	Very Limited
Phonological Processing	483	6-11	60/90	-16	77 (72-83)	Limited
Story Recall	484	7-2	73/90	-11	82 (76-89)	Limited to Average
Visualization	501	12-1	94/90	4	106 (101-112)	Average
General Information	520	17-2	99/90	22	122 (117-128)	Advanced
Concept Formation	500	10-4	91/90	1	101 (96-107)	Average
Numbers Reversed	528	>30	100/90	30	126 (122-131)	Advanced
Number-Pattern Matching	462	8-0	22/90	-31	83 (75-91)	Very Limited
Nonword Repetition	471	5-1	28/90	-29	71 (67-76)	Limited
Visual-Auditory Learning	482	5-11	60/90	-16	77 (74-80)	Limited

Woodcock-Johnson IV Tests of Oral Language (Norms based on age 10-1)

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)	Proficiency
ORAL LANGUAGE	509	13-6	96/90	10	114 (108-119)	Average to Advanced
BROAD ORAL LANGUAGE	500	10-4	91/90	1	102 (97-106)	Average
ORAL EXPRESSION	509	12-0	96/90	8	109 (104-114)	Average to Advanced
LISTENING COMP	492	8-9	81/90	-7	91 (86-95)	Limited to Average
PHONETIC CODING	473	6-2	36/90	-25	73 (68-77)	Limited
SPEED of LEXICAL ACCESS	473	5-10	28/90	-29	66 (60-72)	Limited
VOCABULARY	519	17-8	99/90	20	128 (123-132)	Advanced
Picture Vocabulary	515	16-0	98/90	17	119 (113-125)	Advanced
Oral Comprehension	503	11-1	93/90	3	104 (98-111)	Average
Segmentation	470	6-7	34/90	-26	79 (75-84)	Limited

Tanner, Oliver
April 07, 2015

Comprehensive Report

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)	Proficiency
Rapid Picture Naming	467	5-10	14/90	-37	72 (66-78)	Very Limited
Sentence Repetition	502	10-2	90/90	1	100 (95-106)	Average
Understanding Directions	482	7-0	59/90	-17	78 (73-83)	Limited
Sound Blending	476	5-9	37/90	-25	75 (69-80)	Limited
Retrieval Fluency	480	5-9	49/90	-20	69 (61-76)	Limited

Woodcock-Johnson IV Tests of Achievement Form A (Norms based on age 10-1)

CLUSTER/Test	W	AE	RPI	WDiff	SS (68% Band)	Proficiency
READING	465	7-6	19/90	-33	75 (72-78)	Very Limited
BROAD READING	450	7-3	4/90	-48	71 (69-74)	Very Limited
BASIC READING SKILLS	458	7-0	11/90	-39	71 (68-74)	Very Limited
READING FLUENCY	439	6-10	1/90	-59	65 (62-69)	Extremely Limited
MATHEMATICS	508	11-7	97/90	12	111 (107-115)	Average to Advanced
BROAD MATHEMATICS	507	11-1	96/90	9	108 (105-112)	Average to Advanced
MATH CALCULATION SKILLS	505	10-9	95/90	7	106 (102-109)	Average to Advanced
WRITTEN LANGUAGE	477	8-0	49/90	-20	84 (81-87)	Limited
BROAD WRITTEN LANGUAGE	483	8-4	64/90	-15	87 (84-89)	Limited
WRITTEN EXPRESSION	498	10-2	90/90	0	101 (96-105)	Average
ACADEMIC SKILLS	469	7-11	27/90	-29	78 (76-80)	Limited
ACADEMIC FLUENCY	473	8-3	35/90	-26	84 (81-87)	Limited
ACADEMIC APPLICATIONS	499	10-4	91/90	1	101 (98-105)	Average
BRIEF ACHIEVEMENT	470	7-10	29/90	-28	79 (77-82)	Limited
BROAD ACHIEVEMENT	480	8-6	56/90	-18	86 (84-87)	Limited
Letter-Word Identification	446	7-0	3/90	-53	69 (66-72)	Extremely Limited
Applied Problems	511	12-6	97/90	13	112 (107-117)	Average to Advanced
Spelling	454	7-0	6/90	-45	69 (65-73)	Very Limited
Passage Comprehension	484	8-3	67/90	-14	88 (84-93)	Limited
Calculation	506	11-2	96/90	10	109 (104-113)	Average to Advanced
Writing Samples	501	11-0	93/90	4	104 (99-109)	Average
Word Attack	470	7-1	34/90	-26	76 (71-81)	Limited
Oral Reading	457	6-8	9/90	-41	66 (62-70)	Very Limited
Sentence Reading Fluency	420	6-11	0/90	-78	70 (65-74)	Extremely Limited
Math Facts Fluency	505	10-6	94/90	5	103 (98-107)	Average
Sentence Writing Fluency	495	9-7	86/90	-3	96 (90-102)	Average

	STANDARD SCORES			DISCREPANCY		Interpretation at
VARIATIONS	Actual	Predicted	Difference	PR	SD	+ or -1.50 SD (SEE)
Intra-Cognitive [Extended] Variations						
COMP-KNOWLEDGE (*Gc*)	127	94	33	99.7	+2.72	Strength
COMP-KNOWLEDGE (Ext)	126	94	32	99.6	+2.69	Strength
FLUID REASONING (*Gf*)	104	98	6	71	+0.56	--
S-TERM WORK MEM (*Gwm*)	123	97	26	99	+2.25	Strength

Tanner, Oliver
April 07, 2015

Comprehensive Report

VARIATIONS	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Intra-Cognitive [Extended] Variations						
AUDITORY PROCESS (*Ga*)	68	103	-35	0.2	-2.94	Weakness
L-TERM RETRIEVAL (*Glr*)	75	101	-26	2	-2.13	Weakness
PERCEPTUAL SPEED	78	102	-24	3	-1.87	Weakness
VOCABULARY	128	94	34	99.8	+2.90	Strength
ORAL LANGUAGE	114	94	20	95	+1.64	Strength
PHONETIC CODING	73	102	-29	1	-2.25	Weakness
SPEED of LEXICAL ACCESS	66	102	-36	0.4	-2.62	Weakness
Oral Vocabulary	133	93	40	>99.9	+3.47	Strength
Number Series	105	98	7	72	+0.60	--
Verbal Attention	112	97	15	88	+1.17	--
Letter-Pattern Matching	77	102	-25	3	-1.87	Weakness
Phonological Processing	77	103	-26	2	-2.12	Weakness
Story Recall	82	101	-19	7	-1.48	--
Visualization	106	98	8	73	+0.60	--
General Information	122	95	27	98	+1.99	Strength
Concept Formation	101	98	3	59	+0.23	--
Numbers Reversed	126	97	29	99	+2.32	Strength
Number-Pattern Matching	83	102	-19	9	-1.37	--
Nonword Repetition	71	102	-31	1	-2.35	Weakness
Visual-Auditory Learning	77	101	-24	4	-1.79	Weakness
Picture Vocabulary	119	95	24	97	+1.86	Strength
Oral Comprehension	104	94	10	79	+0.80	--
Segmentation	79	102	-23	4	-1.76	Weakness
Rapid Picture Naming	72	101	-29	2	-2.12	Weakness
Sentence Repetition	100	98	2	58	+0.20	--
Understanding Directions	78	97	-19	6	-1.54	Weakness
Sound Blending	75	102	-27	2	-1.97	Weakness
Retrieval Fluency	69	102	-33	1	-2.52	Weakness

VARIATIONS	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Intra-Oral Language [Extended] Variations						
ORAL EXPRESSION	109	86	23	97	+1.95	Strength
LISTENING COMP	91	90	1	53	+0.07	--
PHONETIC CODING	73	99	-26	3	-1.87	Weakness
SPEED of LEXICAL ACCESS	66	100	-34	0.5	-2.58	Weakness
VOCABULARY	128	86	42	>99.9	+3.63	Strength
AUDITORY PROCESS (*Ga*)	68	99	-31	1	-2.31	Weakness
Picture Vocabulary	119	87	32	99.6	+2.64	Strength
Oral Comprehension	104	91	13	88	+1.19	--
Segmentation	79	99	-20	7	-1.45	--

Tanner, Oliver
April 07, 2015

Comprehensive Report

VARIATIONS	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Intra-Oral Language [Extended] Variations						
Rapid Picture Naming	72	100	-28	2	-2.09	Weakness
Sentence Repetition	100	89	11	81	+0.89	--
Understanding Directions	78	92	-14	14	-1.06	--
Sound Blending	75	99	-24	4	-1.71	Weakness
Retrieval Fluency	69	100	-31	1	-2.39	Weakness
Oral Vocabulary	133	87	46	>99.9	+3.89	Strength
Phonological Processing	77	99	-22	5	-1.61	Weakness
Nonword Repetition	71	99	-28	2	-2.01	Weakness

VARIATIONS	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Intra-Achievement [Extended] Variations						
BASIC READING SKILLS	71	96	-25	0.1	-3.02	Weakness
READING FLUENCY	65	97	-32	<0.1	-3.24	Weakness
MATH CALCULATION SKILLS	106	90	16	94	+1.57	Strength
WRITTEN EXPRESSION	101	91	10	83	+0.95	--
Letter-Word Identification	69	96	-27	<0.1	-3.29	Weakness
Applied Problems	112	89	23	98	+2.12	Strength
Spelling	69	97	-28	0.2	-2.88	Weakness
Passage Comprehension	88	93	-5	33	-0.43	--
Calculation	109	89	20	97	+1.88	Strength
Writing Samples	104	92	12	85	+1.04	--
Word Attack	76	97	-21	3	-1.82	Weakness
Oral Reading	66	97	-31	0.5	-2.58	Weakness
Sentence Reading Fluency	70	94	-24	1	-2.25	Weakness
Math Facts Fluency	103	92	11	83	+0.94	--
Sentence Writing Fluency	96	91	5	67	+0.44	--

VARIATIONS	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Academic Skills/Academic Fluency/Academic Applications [Extended] Variations						
ACADEMIC SKILLS	78	93	-15	2	-2.09	Weakness
ACADEMIC FLUENCY	84	91	-7	21	-0.82	--
ACADEMIC APPLICATIONS	101	83	18	98	+2.02	Strength
PERCEPTUAL SPEED	78	93	-15	11	-1.22	--

COMPARISONS	STANDARD SCORES Actual	Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Gf-Gc Composite/Other Ability Comparisons						
S-TERM WORK MEM (*Gwm*)	123	110	13	85	+1.04	--
PERCEPTUAL SPEED	78	108	-30	1	-2.18	Weakness

Tanner, Oliver
April 07, 2015

Comprehensive Report

COMPARISONS	Actual	STANDARD SCORES Predicted	Difference	DISCREPANCY PR	SD	Interpretation at + or -1.50 SD (SEE)
Gf-Gc Composite/Other Ability Comparisons						
SPEED of LEXICAL ACCESS	66	107	-41	0.2	-2.95	Weakness
AUDITORY PROCESS (*Ga*)	68	110	-42	<0.1	-3.45	Weakness
PHONETIC CODING	73	109	-36	0.3	-2.75	Weakness
L-TERM RETRIEVAL (*Glr*)	75	110	-35	0.3	-2.72	Weakness
NUMBER FACILITY	100	109	-9	23	-0.75	--
COGNITIVE EFFICIENCY	97	110	-13	16	-0.98	--
COG EFFICIENCY (Ext)	94	110	-16	9	-1.31	--
BRIEF ACHIEVEMENT	79	114	-35	<0.1	-3.54	Weakness
BROAD ACHIEVEMENT	86	113	-27	0.3	-2.73	Weakness
READING	75	114	-39	<0.1	-3.62	Weakness
BROAD READING	71	113	-42	<0.1	-3.83	Weakness
BASIC READING SKILLS	71	111	-40	<0.1	-3.55	Weakness
READING FLUENCY	65	110	-45	<0.1	-3.82	Weakness
MATHEMATICS	111	113	-2	41	-0.23	--
BROAD MATHEMATICS	108	113	-5	33	-0.45	--
MATH CALCULATION SKILLS	106	111	-5	31	-0.48	--
WRITTEN LANGUAGE	84	111	-27	1	-2.38	Weakness
BROAD WRITTEN LANGUAGE	87	111	-24	2	-2.03	Weakness
WRITTEN EXPRESSION	101	109	-8	26	-0.65	--
ACADEMIC SKILLS	78	113	-35	<0.1	-3.31	Weakness
ACADEMIC FLUENCY	84	110	-26	1	-2.20	Weakness
ACADEMIC APPLICATIONS	101	114	-13	10	-1.27	--

COMPARISONS	Actual	STANDARD SCORES Predicted	Difference	DISCREPANCY PR	SD	Significant at + or -1.50 SD (SEE)
GIA/Achievement Discrepancy Procedure						
BRIEF ACHIEVEMENT	79	99	-20	2	-2.07	Yes (-)
BROAD ACHIEVEMENT	86	99	-13	7	-1.45	No
READING	75	99	-24	1	-2.26	Yes (-)
BROAD READING	71	99	-28	0.3	-2.72	Yes (-)
BASIC READING SKILLS	71	99	-28	0.4	-2.68	Yes (-)
READING FLUENCY	65	99	-34	0.1	-3.00	Yes (-)
MATHEMATICS	111	99	12	90	+1.28	No
BROAD MATHEMATICS	108	99	9	84	+1.01	No
MATH CALCULATION SKILLS	106	99	7	74	+0.65	No
WRITTEN LANGUAGE	84	99	-15	7	-1.45	No
BROAD WRITTEN LANGUAGE	87	99	-12	11	-1.22	No
WRITTEN EXPRESSION	101	99	2	55	+0.12	No

Comprehensive Report

COMPARISONS	Actual	STANDARD SCORES Predicted	Difference	DISCREPANCY PR	SD	Significant at + or -1.50 SD (SEE)
GIA/Achievement Discrepancy Procedure						
ACADEMIC SKILLS	78	99	-21	1	-2.18	Yes (-)
ACADEMIC FLUENCY	84	99	-15	8	-1.43	No
ACADEMIC APPLICATIONS	101	99	2	60	+0.26	No
ORAL LANGUAGE	114	99	15	89	+1.22	No
BROAD ORAL LANGUAGE	102	99	3	60	+0.25	No
ORAL EXPRESSION	109	99	10	80	+0.84	No
LISTENING COMP	91	99	-8	23	-0.74	No

COMPARISONS	Actual	STANDARD SCORES Predicted	Difference	DISCREPANCY PR	SD	Significant at + or -1.50 SD (SEE)
Oral Language/Achievement Comparisons						
READING	75	101	-26	2	-2.16	Yes (-)
BROAD READING	71	101	-30	1	-2.33	Yes (-)
BASIC READING SKILLS	71	101	-30	1	-2.49	Yes (-)
READING FLUENCY	65	101	-36	0.4	-2.65	Yes (-)
MATHEMATICS	111	101	10	79	+0.80	No
BROAD MATHEMATICS	108	101	7	71	+0.55	No
MATH CALCULATION SKILLS	106	101	5	63	+0.34	No
WRITTEN LANGUAGE	84	101	-17	9	-1.32	No
BROAD WRITTEN LANGUAGE	87	101	-14	15	-1.05	No
WRITTEN EXPRESSION	101	101	0	49	-0.02	No
ACADEMIC SKILLS	78	101	-23	4	-1.81	Yes (-)
ACADEMIC FLUENCY	84	101	-17	10	-1.26	No
ACADEMIC APPLICATIONS	101	101	0	51	+0.03	No
PHONETIC CODING	73	101	-28	2	-2.02	Yes (-)
SPEED of LEXICAL ACCESS	66	101	-35	0.3	-2.74	Yes (-)

COMPARISONS	Actual	STANDARD SCORES SAPT	Predicted	Difference	DISCREPANCY PR	SD	Significant at + or -1.50 SD (SEE)
Scholastic Aptitude/Achievement Comparisons							
READING	75	93	95	-20	5	-1.67	Yes (-)
BROAD READING	71	93	95	-24	1	-2.33	Yes (-)
BASIC READING SKILLS	71	96	97	-26	1	-2.31	Yes (-)
READING FLUENCY	65	93	95	-30	0.3	-2.76	Yes (-)
WRITTEN LANGUAGE	84	88	90	-6	28	-0.59	No
BROAD WRITTEN LANGUAGE	87	88	90	-3	38	-0.31	No
WRITTEN EXPRESSION	101	88	91	10	80	+0.83	No

Comprehensive Report

Appendix A: Detailed Interpretation of Clusters and Tests

This appendix provides information about each ability measure, including a description of Oliver's developmental level, a comparison to age peers using a standard score range classification, and a description of his proficiency level.

WJ IV Tests of Cognitive Abilities

Intellectual Ability

General Intellectual Ability represents a measure of Oliver's overall intelligence. Oliver's performance on General Intellectual Ability is comparable to that of the average individual at age 9-11. His General Intellectual Ability standard score is in the average range (percentile rank of 47; standard score of 99). His overall intellectual ability is average (RPI of 89/90).

The *Gf-Gc* Composite is a combined measure of Oliver's lexical (word) knowledge; general cultural knowledge; and quantitative, deductive, and inductive reasoning. Although Oliver's composite standard score is within the high average range, his performance varied on two different types of tasks requiring fluid and crystallized cognitive abilities. Oliver's performance is advanced on oral vocabulary tasks. His performance is average on inductive reasoning tasks.

Cognitive Clusters

Comprehension-Knowledge (*Gc*) is a language-based measure of Oliver's declarative knowledge. It includes semantic memory and the ability to communicate his knowledge and understanding verbally. Oliver's verbal knowledge and comprehension are comparable to those of the average individual at age 18-2. His Comprehension-Knowledge standard score is in the superior range (percentile rank of 96; standard score of 127). His verbal ability is advanced (RPI of 99/90); he will probably find it very easy to succeed on age-level verbal knowledge and comprehension tasks.

Comprehension-Knowledge–Extended is a broad, language-based measure of Oliver's declarative knowledge. It includes semantic memory and the ability to communicate his knowledge and understanding verbally. Oliver's verbal knowledge and comprehension is comparable to that of the average individual at age 17-6. His Comprehension-Knowledge–Extended standard score is in the superior range (percentile rank of 96; standard score of 126). His broad verbal ability is advanced (RPI of 99/90); he will probably find it very easy to succeed on age-level verbal knowledge and comprehension tasks.

Fluid Reasoning (*Gf*) is a measure of Oliver's ability to use inductive, deductive, and quantitative reasoning to form concepts and solve problems. Oliver's fluid reasoning ability is comparable to that of the average individual at age 10-8. His Fluid Reasoning standard score is in the average range (percentile rank of 60; standard score of 104).

Short-Term Working Memory (*Gwm*) measured Oliver's ability to attend to, hold, and manipulate information in working memory. Oliver's working memory capacity is comparable to that of the average individual at age 18-2. His Short-Term Working Memory standard score is in the superior range (percentile rank of 94; standard score of 123). His short-term working memory capacity is advanced (RPI of 99/90); he will probably find it very easy to succeed on age-level tasks such as attending to and manipulating information in working memory.

Auditory Processing (*Ga*) includes the ability to encode, synthesize, and discriminate auditory stimuli, including the ability to employ phonological processes in task performance. Oliver's auditory processing ability is comparable to that of the average individual at age 6-2. His Auditory Processing standard score is in the very low range (percentile rank of 2; standard score of 68). His ability to effectively employ phonological processes is limited (RPI of 43/90); he will probably find it very difficult to succeed on age-level tasks requiring auditory processing.

Long-Term Retrieval (*Glr*) is the ability to encode and retrieve (reconstruct) information. Oliver's long-term storage and retrieval abilities are comparable to those of the average individual at age 6-6. His Long-Term Retrieval standard score is in the low range (percentile rank of 5; standard score of 75). His ability to store and fluently retrieve information is limited (RPI of 67/90); he will probably find it very difficult to succeed on age-level tasks involving storage and retrieval of information.

Number Facility represents fluency with numbers, including number-pattern comparisons and the ability to manipulate numbers in working memory. Although Oliver's Number Facility standard score is within the average range, his performance varied on two different types of number facility tasks. Oliver's performance is advanced on working memory capacity tasks. His performance is very limited on numeric pattern recognition tasks.

Perceptual Speed measured Oliver’s ability to recognize and match orthographic and numeric patterns quickly and accurately under time constraints. Oliver's perceptual speed is comparable to that of the average individual at age 7-8. His Perceptual Speed standard score is in the low range (percentile rank of 7; standard score of 78). His ability to rapidly compare visual patterns that use alpha or numeric symbols is very limited (RPI of 17/90); he will probably find it extremely difficult to succeed on age-level tasks requiring visual perceptual speed.

Cognitive Efficiency is a combined index of Oliver’s ability to perform visual-perceptual matching tasks rapidly and accurately and his level of working memory capacity, both of which are foundational for complex cognitive functioning. Although Oliver's Cognitive Efficiency–Extended standard score is within the average range, his performance varied on two different types of cognitive efficiency tasks. Oliver's performance is advanced on working memory capacity tasks. His performance is very limited on orthographic pattern recognition tasks.

Cognitive Efficiency–Extended is a broad, combined index of Oliver’s ability to perform visual-perceptual matching tasks rapidly and accurately and his level of working memory capacity, both of which are foundational for complex cognitive functioning. Although Oliver's Cognitive Efficiency standard score is within the average range, his performance varied on two different types of cognitive efficiency tasks. Oliver's performance is advanced on working memory capacity tasks. His performance is very limited on orthographic pattern recognition tasks.

Cognitive Tests

Oral Vocabulary is a measure of Oliver’s comprehension of words. This test had two parts, requiring him to listen to a word and provide an accurate antonym and then listen to a word and provide an accurate synonym. Oliver's oral vocabulary ability is comparable to that of the average individual at age 20. His Oral Vocabulary standard score is in the very superior range (percentile rank of 99; standard score of 133). His knowledge of words and their meanings is advanced (RPI of 99/90); he will probably find it very easy to succeed on age-level oral vocabulary tasks.

Number Series is a test of quantitative, deductive, and inductive reasoning. This test required Oliver to supply the missing number from a sequence of numbers following a mathematical pattern. Oliver's performance on Number Series is comparable to that of the average individual at age 10-10. His Number Series standard score is in the average range (percentile rank of 64; standard score of 105).

Comprehensive Report

Verbal Attention is a test of short-term working memory that required Oliver to listen to a list of animals and numbers and then answer a question based on the sequence of information. Oliver's verbal working memory is comparable to that of the average individual at age 13-0. His Verbal Attention standard score is in the high average range (percentile rank of 79; standard score of 112). His ability to retain information in working memory and then answer questions based on the information is average to advanced (RPI of 97/90); he will probably find it easy to succeed on age-level verbal working memory tasks.

Letter-Pattern Matching measured the speed at which Oliver was able to make visual symbol discriminations among a series of letter patterns. Oliver's orthographic processing speed is comparable to that of the average individual at age 7-3. His Letter-Pattern Matching standard score is in the low range (percentile rank of 6; standard score of 77). His speed of orthographic processing is very limited (RPI of 13/90); he will probably find it extremely difficult to succeed on age-level tasks requiring rapid discrimination among letter patterns.

Phonological Processing assessed Oliver’s word retrieval abilities using phonological cues. Oliver's ability to access words based on phonology is comparable to that of the average individual at age 6-11. His Phonological Processing standard score is in the low range (percentile rank of 7; standard score of 77). His ability to access words based on phonology is limited (RPI of 60/90); he will probably find it very difficult to succeed on age-level phonologically-mediated word access tasks.

Story Recall measured Oliver’s listening ability and reconstructive memory. The task required him to recall details of increasingly complex stories. Oliver's performance on Story Recall is comparable to that of the average individual at age 7-2. His Story Recall standard score is in the low average range (percentile rank of 12; standard score of 82). His ability to recall details of complex stories is limited to average (RPI of 73/90); he will probably find it difficult to succeed on age-level story listening and retelling tasks.

Visualization measured two aspects of visual-spatial processing involving visual feature detection and mental rotation of objects. One part of the test required Oliver to identify the two or three pieces that form a completed target shape. The other part required him to identify rotated block configurations that correspond to a target configuration. Oliver's ability to visualize is comparable to that of the average individual at age 12-1. His Visualization standard score is in the average range (percentile rank of 66; standard score of 106). His ability to employ visual-spatial manipulation in working memory is average (RPI of 94/90).

General Information measured Oliver’s general verbal knowledge. This test required Oliver to tell where specific objects might be found, and to tell what might be the purpose of other specific objects. Oliver's performance on General Information is comparable to that of the average individual at age 17-2. His General Information standard score is in the superior range (percentile rank of 93; standard score of 122). His general verbal knowledge is advanced (RPI of 99/90); he will probably find it very easy to succeed on age-level tasks requiring verbal expression of general knowledge.

Concept Formation is a test of fluid reasoning. This test required Oliver to use inductive reasoning in categorical thinking. Oliver's performance on Concept Formation is comparable to that of the average individual at age 10-4. His Concept Formation standard score is in the average range (percentile rank of 53; standard score of 101).

Numbers Reversed is a test of working memory capacity. This test required Oliver to hold a sequence of numbers in immediate awareness and then reverse the sequence. Oliver’s performance on Numbers Reversed is above that of the average individual at age 30. His Numbers Reversed standard score is in the superior range (percentile rank of 96; standard score of 126). His span of apprehension and recoding in working memory is advanced (RPI of 100/90); he will probably find it very easy to succeed on age-level working memory capacity tasks.

Number-Pattern Matching is a test of perceptual speed. This test measured the speed at which Oliver was able to make visual discriminations among groups of numbers. Oliver's performance on Number-Pattern Matching is comparable to that of the average individual at age 8-0. His Number-Pattern Matching standard score is in the low average range (percentile rank of 13; standard score of 83). His perceptual speed with number patterns is very limited (RPI of 22/90); he will probably find it extremely difficult to succeed on similar age-level tasks requiring speeded discrimination among number patterns.

Nonword Repetition measured Oliver's phonological short-term memory. Oliver's performance on Nonword Repetition is comparable to that of the average individual at age 5-1. His Nonword Repetition standard score is in the low range (percentile rank of 3; standard score of 71). His ability to remember and repeat increasingly complex nonwords is limited (RPI of 28/90); he will probably find it very difficult to succeed on similar age-level phonological short-term storage tasks.

Visual-Auditory Learning is a measure of the ability to learn, store, and retrieve a series of visual-auditory associations. In this test, Oliver was required to learn and recall the names of rebuses (pictographic representations of words). Oliver's performance on Visual-Auditory Learning is comparable to that of the average individual at age 5-11. His Visual-Auditory Learning standard score is in the low range (percentile rank of 6; standard score of 77). His visual-auditory learning and retrieval ability are limited (RPI of 60/90); he will probably find it very difficult to succeed on age-level tasks requiring paired-associate learning, storage, and retrieval.

WJ IV Tests of Oral Language

Oral Language Clusters

Oral Language is a measure of Oliver's English language development and comprehension, including lexical (word knowledge) and listening ability. Oliver's oral language skills are comparable to those of the average individual at age 13-6. His Oral Language standard score is in the high average range (percentile rank of 82; standard score of 114). His verbal ability is average to advanced (RPI of 96/90); he will probably find it easy to succeed on age-level tasks requiring listening skills and vocabulary.

Broad Oral Language is a measure of Oliver's receptive and expressive oral language abilities in English, including listening ability, verbal comprehension, verbal working memory capacity, and lexical (word) knowledge. Although Oliver's Broad Oral Language standard score is within the average range, his performance varied on two different types of tasks requiring oral language ability. Oliver's performance is advanced on tasks involving identifying names for pictured objects. His performance is limited on verbal working memory tasks.

Oral Expression measured Oliver's expressive English language competency, including lexical (word) knowledge and sentence repetition ability. Oliver's oral expression ability is comparable to that of the average individual at age 12-0. His Oral Expression standard score is near the higher end of the average range (percentile rank of 73; standard score of 109). His ability to express verbal information is average to advanced (RPI of 96/90); he will probably find it easy to succeed on age-level tasks requiring expression of words and sentences.

Listening Comprehension is a measure of Oliver's receptive language competency in English, including listening ability, verbal comprehension, and verbal working memory capacity. Although Oliver's Listening Comprehension standard score is within the average range, his performance varied on two different types of tasks requiring listening and oral comprehension abilities. Oliver's performance is average on tasks requiring comprehension of oral discourse. His performance is limited on verbal working memory tasks.

Comprehensive Report

Phonetic Coding is a measure of phonology, including the ability to blend speech sounds into words and break words into component segments. Oliver's word segmentation and sound blending skills are comparable to those of the average individual at age 6-2. His Phonetic Coding standard score is in the low range (percentile rank of 3; standard score of 73). His ability to blend and segment sounds in words is limited (RPI of 36/90); he will probably find it very difficult to succeed on age-level phonological coding tasks.

Speed of Lexical Access is a measure of Oliver's speed and fluency in retrieving words and names from semantic memory. Oliver's speed of word access is comparable to that of the average individual at age 5-10. His Speed of Lexical Access standard score is in the very low range (percentile rank of 1; standard score of 66). His efficiency and quickness of word retrieval are limited (RPI of 28/90); he will probably find it very difficult to succeed on age-level speeded word retrieval tasks.

Vocabulary is a measure of Oliver's lexical (word) knowledge, including picture naming vocabulary and knowledge of words and their meanings. Oliver's vocabulary knowledge is comparable to that of the average individual at age 17-8. His Vocabulary standard score is in the superior range (percentile rank of 97; standard score of 128). His lexical knowledge is advanced (RPI of 99/90); he will probably find it very easy to succeed on age-level tasks requiring vocabulary knowledge.

Oral Language Tests

Picture Vocabulary is a test of Oliver's expressive vocabulary that required him to provide names of objects. Oliver's performance on Picture Vocabulary is comparable to that of the average individual at age 16-0. His Picture Vocabulary standard score is in the high average range (percentile rank of 90; standard score of 119). His ability to demonstrate lexical knowledge by identifying pictured objects is advanced (RPI of 98/90); he will probably find it very easy to succeed on age-level tasks involving identifying names for pictured objects.

Oral Comprehension measured Oliver's ability to comprehend a short passage and then supply the missing word using syntactic and semantic cues. Oliver's performance on Oral Comprehension is comparable to that of the average individual at age 11-1. His Oral Comprehension standard score is in the average range (percentile rank of 61; standard score of 104).

Segmentation measured Oliver's skill in breaking apart the speech sounds in words. Oliver's word segmentation skill is comparable to that of the average individual at age 6-7. His Segmentation standard score is in the low range (percentile rank of 8; standard score of 79). His skill in segmenting words into parts or sounds is limited (RPI of 34/90); he will probably find it very difficult to succeed on age-level tasks involving breaking words into parts.

Rapid Picture Naming measured Oliver's fluency of word access or speed of direct recall of object names from acquired knowledge. Oliver's performance on Rapid Picture Naming is comparable to that of the average individual at age 5-10. His Rapid Picture Naming standard score is in the low range (percentile rank of 3; standard score of 72). His speed of direct recall of simple vocabulary is very limited (RPI of 14/90); he will probably find it extremely difficult to succeed on age-level tasks involving rapid naming of objects.

Sentence Repetition is a test of short-term memory span. This test required Oliver to remember and repeat sentences presented orally. Oliver's performance on Sentence Repetition is comparable to that of the average individual at age 10-2. His Sentence Repetition standard score is in the average range (percentile rank of 51; standard score of 100).

Understanding Directions is a measure of verbal working memory. This test required Oliver to listen to a sequence of instructions and then follow the directions by pointing to various objects in a picture. Oliver's performance on Understanding Directions is comparable to that of the average individual at age 7-0. His Understanding Directions standard score is in the low range (percentile rank of 7; standard score of 78). His ability to listen to and follow instructions is limited (RPI of 59/90); he will probably find it very difficult to succeed on age-level verbal working memory tasks.

Sound Blending is a test of phonological processing. This test measured Oliver's skill in blending phonemes or syllables into words. Oliver's performance on Sound Blending is comparable to that of the average individual at age 5-9. His Sound Blending standard score is in the low range (percentile rank of 5; standard score of 75). His skill in synthesizing language sounds into words is limited (RPI of 37/90); he will probably find it very difficult to succeed on age-level tasks involving blending sounds into words.

Retrieval Fluency is a word access test that required Oliver to name as many examples as possible from a given category within a short time limit. Oliver's performance on Retrieval Fluency is comparable to that of the average individual at age 5-9. His Retrieval Fluency standard score is in the very low range (percentile rank of 2; standard score of 69). His fluency of word retrieval is limited (RPI of 49/90); he will probably find it very difficult to succeed on age-level tasks involving fluent production of words or names.

WJ IV Tests of Achievement

Overall Achievement

Broad Achievement represents Oliver's overall performance across reading, mathematics, and written language. Oliver's general achievement is comparable to that of the average individual at age 8-6. His Broad Achievement standard score is in the low average range (percentile rank of 17; standard score of 86). His overall achievement is limited (RPI of 56/90).

Brief Achievement is sample of Oliver's academic skills in reading, writing, and math. Although Oliver's Brief Achievement standard score is within the low range, his performance varied on two different types of academic tasks. Oliver's performance is average to advanced on tasks requiring the ability to analyze and solve applied mathematics problems. His performance is extremely limited on tasks requiring reading decoding and the ability to identify words.

Achievement Clusters

Reading measured Oliver's reading decoding skills and his ability to comprehend text while reading. Although Oliver's Reading standard score is within the low range, his performance varied on two different types of reading tasks. Oliver's performance is limited on tasks requiring the ability to use syntactic and semantic cues in comprehending written discourse. His performance is extremely limited on tasks requiring reading decoding and the ability to identify words.

Broad Reading is a combined measure of reading decoding, reading speed, and the ability to comprehend connected text while reading. Although Oliver's Broad Reading standard score is within the low range, his performance varied on two different types of reading tasks. Oliver's performance is limited on tasks requiring the ability to use syntactic and semantic cues in comprehending written discourse. His performance is extremely limited on tasks requiring reading decoding and the ability to identify words.

Comprehensive Report

Basic Reading Skills measured Oliver's word reading and phonics skills. Oliver's basic reading skills are comparable to those of the average individual at age 7-0. His Basic Reading Skills standard score is in the low range (percentile rank of 3; standard score of 71). His sight word reading ability and skill in applying phonic and structural analysis skills in reading are very limited (RPI of 11/90); tasks requiring reading skills above the age 7-6 level will be quite difficult for him.

Reading Fluency assessed how quickly, accurately, and expressively Oliver reads. Oliver's oral and silent reading fluency are comparable to those of the average individual at age 6-10. His Reading Fluency standard score is in the very low range (percentile rank of 1; standard score of 65). His oral and silent sentence reading fluency are extremely limited (RPI of 1/90); reading fluency above the age 7-2 level will be quite difficult for him.

Mathematics is a measure of calculation skills and math problem solving ability. Oliver's mathematics ability is comparable to that of the average individual at age 11-7. His Mathematics standard score is in the high average range (percentile rank of 77; standard score of 111). His calculation skills and ability to solve practical problems in mathematics are average to advanced (RPI of 97/90); math tasks below the age 10-3 level will be quite easy for him.

Broad Mathematics is a measure of calculation skills, mathematics problem solving ability, number facility, and fluency with math facts. Oliver's overall mathematics ability is comparable to that of the average individual at age 11-1. His Broad Mathematics standard score is near the higher end of the average range (percentile rank of 71; standard score of 108. His calculation skills, math facts fluency, and ability to solve practical problems in mathematics are average to advanced (RPI of 96/90); he will probably find it easy to succeed on age-level tasks requiring problem solving, number facility, automaticity, and reasoning.

Math Calculation Skills measured Oliver's computational skills and automaticity with basic math facts. Oliver's mathematics calculation skills are comparable to those of the average individual at age 10-9. His Mathematics Calculation Skills standard score is near the higher end of the average range (percentile rank of 65; standard score of 106). His computational skills and automaticity with basic math facts are average to advanced (RPI of 95/90); he will probably find it easy to succeed on age-level tasks requiring computational skills and fluency with basic math facts.

Written Language measured Oliver's spelling and quality of written expression. Although Oliver's Written Language standard score is within the low average range, his performance varied on two different types of writing tasks. Oliver's performance is average on tasks requiring the ability to convey ideas in writing. His performance is very limited on spelling tasks.

Broad Written Language assessed Oliver's production of written text, including his spelling ability, writing fluency, and quality of written expression. Although Oliver's Broad Written Language standard score is within the low average range, his performance varied on two different types of writing tasks. Oliver's performance is average on tasks requiring the ability to convey ideas in writing. His performance is very limited on spelling tasks.

Written Expression measured Oliver's fluency of production and quality of expression in writing. Oliver's written expression ability is comparable to that of the average individual at age 10-2. His Written Expression standard score is in the average range (percentile rank of 51; standard score of 101).

Academic Skills is an aggregate measure of basic achievement skills in sight-word reading, math calculation, and spelling. Although Oliver's Academic Skills standard score is within the low range, his performance varied on two different types of tasks requiring Academic Skills. Oliver's performance is average to advanced on tasks requiring knowledge of how to perform mathematical computations (when there are no time limits). His performance is extremely limited on tasks requiring reading decoding and the ability to identify words.

Comprehensive Report

Academic Applications is an aggregate measure of reading, writing, and math tasks that requires application of academic skills to typical academic problems. Although Oliver's Academic Applications standard score is within the average range, his performance varied on two different types of tasks requiring academic applications. Oliver's performance is average to advanced on tasks requiring the ability to analyze and solve applied mathematics problems. His performance is limited on tasks requiring the ability to use syntactic and semantic cues in comprehending written discourse.

Academic Fluency is an overall index of academic fluency with reading, math, and writing tasks. Although Oliver's Academic Fluency standard score is within the low average range, his performance varied on two different types of tasks requiring academic fluency. Oliver's performance is average on tasks requiring speed and accuracy when performing basic arithmetic operations. His performance is extremely limited on tasks requiring sentence reading speed and comprehension.

Achievement Tests

Letter-Word Identification measured Oliver’s ability to read isolated words aloud. Oliver's performance on Letter-Word Identification is comparable to that of the average individual at age 7-0. His Letter-Word Identification standard score is in the very low range (percentile rank of 2; standard score of 69). His ability to recognize or decode words in isolation is extremely limited (RPI of 3/90); word identification skills above the age 7-4 level will be quite difficult for him.

Applied Problems is a test of mathematics achievement that required Oliver to analyze and solve practical problems in mathematics. Oliver's performance on Applied Problems is comparable to that of the average individual at age 12-6. His Applied Problems standard score is in the high average range (percentile rank of 79; standard score of 112). His ability to solve applied mathematics problems is average to advanced (RPI of 97/90); tasks requiring finding solutions to practical math problems below the age 10-6 level will be quite easy for him.

Spelling measured Oliver’s ability to write orally-presented words correctly. Oliver's performance on Spelling is comparable to that of the average individual at age 7-0. His Spelling standard score is in the very low range (percentile rank of 2; standard score of 69). His spelling ability is very limited (RPI of 6/90); spelling tasks above the age 7-6 level will be quite difficult for him.

Passage Comprehension measured Oliver’s ability to understand written discourse. The items required Oliver to read a short passage and identify a missing key word that made sense in the context of the passage. Oliver's performance on Passage Comprehension is comparable to that of the average individual at age 8-3. His Passage Comprehension standard score is in the low average range (percentile rank of 22; standard score of 88). His ability to understand written discourse is limited (RPI of 67/90); tasks requiring comprehension when reading above the age 9-6 level will be quite difficult for him.

Calculation measured Oliver’s ability to perform mathematical computations. Oliver's performance on Calculation is comparable to that of the average individual at age 11-2. His Calculation standard score is near the higher end of the average range (percentile rank of 72; standard score of 109). His computational skill is average to advanced (RPI of 96/90); he will probably find it easy to succeed on age-level math calculation tasks.

Writing Samples provided a rating of Oliver’s quality of written expression in sentence construction. Oliver's performance on Writing Samples is comparable to that of the average individual at age 11-0. His Writing Samples standard score is in the average range (percentile rank of 60; standard score of 104).

Comprehensive Report

Word Attack measured Oliver's skill in applying phonic and structural analysis skills to the pronunciation of unfamiliar nonwords. Oliver's performance on Word Attack is comparable to that of the average individual at age 7-1. His Word Attack standard score is in the low range (percentile rank of 6; standard score of 76). His ability to read phonically regular nonwords is limited (RPI of 34/90); tasks requiring accurate pronunciation of unknown words above the age 7-9 level will be quite difficult for him.

Oral Reading is a measure of oral sentence reading fluency. Oliver's oral reading skills are comparable to those of the average individual at age 6-8. His Oral Reading standard score is in the very low range (percentile rank of 1; standard score of 66). His ability to read connected text orally is very limited (RPI of 9/90); tasks requiring reading connected text aloud above the age 7-0 level will be quite difficult for him.

Sentence Reading Fluency measured Oliver's ability to quickly read and comprehend sentences. In this timed test, Oliver was required to indicate whether each sentence was true or false. Oliver's performance on Sentence Reading Fluency is comparable to that of the average individual at age 6-11. His Sentence Reading Fluency standard score is in the low range (percentile rank of 2; standard score of 70). His ability to quickly read and comprehend sentences is extremely limited (RPI of 0/90); tasks requiring sentence reading speed and comprehension above the age 7-3 level will be quite difficult for him.

Math Facts Fluency measured Oliver's ability to quickly solve simple addition, subtraction, and multiplication problems. Oliver's performance on Math Facts Fluency is comparable to that of the average individual at age 10-6. His Math Facts Fluency standard score is in the average range (percentile rank of 58; standard score of 103).

Sentence Writing Fluency measured Oliver's fluency for quickly formulating and writing simple sentences. Oliver's performance on Sentence Writing Fluency is comparable to that of the average individual at age 9-7. His Sentence Writing Fluency standard score is in the average range (percentile rank of 40; standard score of 96).

Summary

The *WJ IV Interpretation and Instructional Interventions Program* (WIIIP™) is a comprehensive web-based system designed to assist examiners with interpreting WJ IV results, identifying appropriate instructional interventions and accommodations, and integrating important information from completed checklists and qualitative observations. The WIIIP provides a best-practice approach for linking WJ IV assessment results to interventions: Each examinee's test results are used to generate a customized list of appropriate interventions and recommendations drawn from a database of hundreds of interventions. Six reproducible checklists are included in the WIIIP, providing a framework for collecting and organizing important background information about the examinee.

Assessment professionals strive to make their evaluations more instructionally relevant. They want to make a real difference in the learning outcomes of the individuals they evaluate. The WIIIP facilitates this process by providing an expert system that links WJ IV test results to instructional interventions.

References

Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. In A. Kozulin, B. Gindis, V. Ageyev, & S. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 39–64). Cambridge: Cambridge University Press.

Mather, N., & Wendling, B. J. (2014a). Examiner's Manual. *Woodcock-Johnson IV Tests of Achievement.* Rolling Meadows, IL: Riverside.

Mather, N., & Wendling, B. J. (2014b). Examiner's Manual. *Woodcock-Johnson IV Tests of Cognitive Abilities.* Rolling Meadows, IL: Riverside.

Mather, N., & Wendling, B. J. (2014c). Examiner's Manual. *Woodcock-Johnson IV Tests of Oral Language.* Rolling Meadows, IL: Riverside.

McGrew, K. S., LaForte, E. M., & Schrank, F. A. (2014). Technical Manual. *Woodcock-Johnson IV.* Rolling Meadows, IL: Riverside.

Schneider, W. J., & McGrew, K. S. (2012). The Cattell-Horn-Carroll model of intelligence. In D. P. Flanagan & P. L. Harrison (Eds.), *Contemporary intellectual assessment: Theories, tests, and issues* (3rd ed.; pp. 99–144). New York, NY: Guilford Press.

Schrank, F. A., Mather, N., & McGrew, K. S. (2014a). *Woodcock-Johnson IV Tests of Achievement.* Rolling Meadows, IL: Riverside.

Schrank, F. A., Mather, N., & McGrew, K. S. (2014b). *Woodcock-Johnson IV Tests of Oral Language.* Rolling Meadows, IL: Riverside.

Schrank, F. A., McGrew, K. S., & Mather, N. (2014a). *Woodcock-Johnson IV.* Rolling Meadows, IL: Riverside.

Schrank, F. A., McGrew, K. S., & Mather, N. (2014b). *Woodcock-Johnson IV Tests of Cognitive Abilities.* Rolling Meadows, IL: Riverside.

Schrank, F. A., & Wendling, B. J. (2015a). Manual and Checklists. *WJ IV Interpretation and Instructional Interventions Program.* Rolling Meadows, IL: Riverside.

Schrank, F. A., & Wendling, B. J. (2015b). *WJ IV Interpretation and Instructional Interventions Program.* Rolling Meadows, IL: Riverside.

Houghton
Mifflin
Harcourt™

3800 Golf Road, Suite 200
Rolling Meadows, IL 60008

800.323.9540
www.wj-iv.com