Use of the Woodcock-Johnson® V for Populations With Sensory Impairments

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The Woodcock-Johnson® V (WJ V™; McGrew, Mather, LaForte, & Wendling, 2025) can be used to evaluate the cognitive, language, and academic abilities of a wide variety of people of multiple ages and developmental levels. Results from the WJ V allow recommendations for appropriate educational programs and, where needed, interventions and accommodations in educational, work, and home settings. However, when using an evaluation instrument not specifically developed for or normed on a specific population, some tests will inevitably be inappropriate or impossible to administer. Some tests will require accommodations, and many will require consideration as to whether the resulting scores are valid. This paper presents some considerations that are necessary when using the WJ V with people with hearing and visual impairments. It provides recommendations regarding which tests are appropriate for administration to each of these populations, which tests might require accommodations or modifications to administer, cautions for interpreting derived scores, and the usefulness of qualitative information rather than scores.

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Use of the *Woodcock-Johnson V* for Populations With Sensory Impairments

This paper is a guide for the use of the *Woodcock-Johnson V* (McGrew, Mather, LaForte, & Wendling, 2025) with individuals who have hearing or visual impairments. It is *not* a manual on best practice in comprehensive evaluation for these populations, and it does not provide specific information regarding those areas of impairment. The reader is referred to the References and Resources sections of this paper for more information on these topics.

General Guidelines

This section provides general guidelines for using the WJ V for people with hearing impairments and visual impairments.

Examiner Qualifications

All examiners should be appropriately trained to administer and interpret cognitive, academic, and language tests and should be extremely familiar with the standardized procedures of the WJ V. According to the *Standards for Educational and Psychological Testing* (AERA, 2014), examiners should engage in evaluations that align with the area of expertise in which they were trained.

Few examiners have in-depth knowledge of both hearing impairment, including fluent signing of American Sign Language (ASL), the multiple forms of Manually Coded English (MCE), and how to read and interpret an audiogram, and visual impairment, including the range and extent of the types of visual impairment for people with low vision rather than total blindness. Additionally, few examiners have in-depth knowledge of the ways in which hearing or visual impairments may affect cognitive and language development and the acquisition of experientially based information. Consequently, when preparing to administer an assessment that was not standardized on special populations, the examiner must collaborate with professionals with expertise in those areas.

Setting

The WJ V is intended to be administered in a one-on-one setting that supports the examinee's focus on the test stimuli and tasks. Use of a private location minimizes noise and any other distractions from outside the testing room. Different types of sensory impairment may require different environmental accommodations, such as a direct audio feed, special lighting, or special furniture. These are discussed in the relevant sections that follow.

Records Review

Examiners must thoroughly review an examinee's records when preparing to test any individual, especially one with a sensory impairment. A records review includes the examinee's medical, developmental, and educational history; cultural background; home language; general adaptive behavior; and hobbies and interests. It is important not to make assumptions based on the individual's sensory impairment. The only assumed commonality is the specific sensory impairment. Otherwise, examinees with sensory impairment are as different from each other as are people without sensory impairment.

Set Clear Goals

The reason for referral should guide which WJ V tests the examiner should administer. For example, if an examinee with sensory impairment is experiencing difficulty reading, the examiner will want to administer the WJ V tests that contribute to the reading clusters. The resulting scores will help guide interventions and provide information about the examinee to all stakeholders working with the examinee (e.g., teachers, parents).

Avoid Confusing Primary and Secondary Disabilities

Research indicates that 40% to 50% of people who have hearing or visual impairments have an additional disability (Guardino & Cannon, 2015; Garberoglio, et al., 2019; Schles, 2021). Accordingly, an examiner must have sufficient knowledge of an examinee's sensory impairment to recognize and not misidentify secondary areas of disability. Examiner's must collaborate with specialists to avoid equating an examinee's difficulty on a specific task or lack of access to information caused by the sensory impairment to the examinee's inability or possibly to missing indications of a primary disability (e.g., learning disability, attentional disorder, autism) by attributing poor performance to the sensory impairment. Teaming with specialists in the specific area of sensory impairment and those who know the examinee's background is key.

Advantages and Limitations of the WJ V Digital Platform

Many of the WJ V tests are presented on an iPad®, which can be advantageous in many ways but also can present some important limitations for examinees with sensory impairments. Complications arising from a digital presentation are discussed below. Test-specific limitations are discussed in the tables in the sections specific to each population.

Timing and Time Limits

The WJ V platform allows the examiner to select the tests to be administered and the appropriate administration order. Examinees can take breaks between tests as needed. With the exception of those tests that have time limits, such as those intended to measure processing speed or fluency, examinees can have extended time to complete tasks, if required. Additionally, for timed items and tests, a timer is built into the platform, so the examiner does not need to use a separate timing device. However, some tests (e.g., Concept Formation) have a time limit on each item. At the end of the item time limit, an answer is required or the examiner records "No response," which is scored as incorrect. On these tests and items, time cannot be extended. This may impact examinees with low vision who might need more time to scan the images.

Scoring and Ceilings

The examiner sets the age- or grade-level starting point or relies on the default based on the information entered when creating a new examinee. After that, as the examiner or examinee inputs the item response, the platform takes over the scoring, automatically stopping the test when a ceiling is reached. In the previous editions of the Woodcock-Johnson, if the examiner thought it was likely that the examinee would respond correctly to higher-level questions, testing could continue until a "true ceiling" was reached (i.e., the ceiling above the highest-level correct response). The resulting score was considered valid. Currently, the digital presentation does not allow for this flexibility, and the tests were not normed that way.

Test Presentation

The recorded audio presentation of certain tests helps ensure standardized item presentation and allows the volume to be adjusted. However, most of these tests allow the examiner to present the information orally for examinees who are uncomfortable with or who might be disadvantaged by use of an audio recording, such as individuals with hearing impairments who benefit from speech reading or young children who might attend better to direct communication. The language of the instructions is at a sufficiently simple level of linguistic complexity to minimize language comprehension barriers. The administration instructions also tell examiners whether instructions may be repeated.

Tests have sample items that introduce the concept and help teach the task. Most of the tests that present printed stimuli use a large, clear, sans serif font with ample space between lines.

Visual Presentation

Almost all of the WJ V tests have items that are presented on an iPad. The platform is not configured to allow enlargement or projection of the pictures or videos on a computer or larger monitor, and the colors and color contrast cannot be changed. However, some tests do require a response booklet, which could be copied and enlarged with enhanced contrast prior to testing.

Video Instructions

Some tests or sections of tests are introduced and instructions provided by short video animations with accompanying verbal instructions. These should be played only once and cannot be paused to allow for a slower presentation or for an interpreter to sign the audio instructions along with the associated visual stimuli. For some tests, it is possible to use the first item after each video for this purpose. In this case, although the score will provide information about the examinee's ability on these tasks, changing the instructions invalidates the score because it does not follow the standardized procedures.

Voice Capture

An advantage of the digital format is that the platform records the voices of the examiner and examinee during the test, allowing the examiner to return to the test later for possible reconsideration of the examinee's response.

Accommodations Versus Modifications

The WJ V, like most comprehensive evaluation tools, was developed with the expectation that the examinees have intact hearing and vision, although both can be corrected, if necessary. Consequently, when testing people with sensory impairments, certain accommodations and cautious modifications are necessary. Accordingly, the examiner must be realistic in determining the effect of such changes on the validity of the scores.

Testing accommodations may alter the way the examiner presents a test so that its content is accessible to the examinee. Examples of such accommodations include enlarging text on the response booklet for a person with a visual impairment or using an interpreter to give instructions in American Sign Language (ASL) to a person who is deaf. Modifications may change the content of the test and, accordingly, the construct that is being assessed. If the Verbal Attention test is signed instead of spoken, the ability being tested changes from auditory working memory to visual working memory with no relation to the norms. Adhering to standard administration and scoring procedures allows valid use of the norms to indicate the examinee's level of ability. This is, however, sometimes impossible when testing people with hearing or visual impairments.

As noted in the discussion of examiner qualifications, accommodations should be developed only by an examiner or team with expertise in the specific area of disability.

Documentation of Deviations From Standardized Administration

Any deviation from the standardized administration or concerns regarding interpretation should be documented in the Notes area of the platform within each test and flagged for later consideration. The examiner should also note any prompts provided to the examinee as well as incorrect or questionable responses on individual items for consideration in interpreting the test results. The test report should state how the examinee's hearing or visual impairment or the altered standardized administration procedures may have affected the person's scores, possibly underestimating or overestimating actual achievement levels.

Interpretation of Test Results

The standardization sample did not necessarily include people identified with hearing or visual impairments. Consequently, any administration for people with these sensory impairments will differ, at least minimally, from the way in which the test was standardized. For all tests and all areas of sensory impairment, however, the results should be interpreted with caution and should take into account how deviations from standardized administration might have changed the task and, especially, how the examinee's sensory impairment and life experience might influence their performance on the tests.

Often, just as with people with normal hearing and vision, the most important information does not come from just the scores alone, but from qualitative analysis—an examination of the examinee's responses within and across tests to find specific strengths and difficulties, possibly indicating a need for more advanced education and opportunities.

Use of Derived Scores

Whether the norms are valid for a test administration depends on the extent to which the administration varied from standard conditions (e.g., repeated instructions, signed instructions, typed responses rather than written responses). Derived scores may not be valid for tests in which the administration deviated more than minimally from the standardized administration. The examiner must determine whether the procedures have been altered to the extent that the published norms must be interpreted with caution. In addition to the statement of modified testing conditions, in some cases, the examiner should include a statement indicating that the obtained scores are likely to be too high or too low and should provide the reason why. Alternatively, where the difference is significant or appears to be substantially related to the examinee's sensory impairment, a score should not be reported.

The next section offers guidelines regarding the approach to testing and interpretation of WJ V test results specific to each type of sensory impairment. However, as noted previously, best practice is for examiners to collaborate with professionals who have specific training and expertise working with people who have the same sensory impairment as the examinee regarding the best approach to testing. This will help determine whether the guidelines offered here are appropriate for the examinee.

Hearing Impairment

The following quote, although focused on children with hearing impairments, provides important information regarding adults as well.

> The assessment of deaf and hard-of-hearing children and adolescents is not only a science but also an art because it relies on specific knowledge, insight, judgment, and skills. Psychologists who work with deaf and hard-of-hearing children must have an in-depth understanding of tests and testing procedures, knowledge of current research, knowledge and skill in communication with a variety of deaf and hard-of-hearing children, and knowledge of deafness and Deaf culture. (Miller, et al., 2016, p. 104)

When an examiner is testing an examinee who is deaf or hard of hearing, they should consider the usefulness of the normative scores, the types of accommodations and modifications that must be made when administering the tests, and the factors that may influence interpretation of the results. In these cases, the person's primary mode of communication is more important than the degree or type of hearing impairment. Communication modes range from American Sign Language to Aural/Oral English with multiple gradations between. For discussion purposes, communication modes have been grouped into three categories:

- **American Sign Language (ASL):** A complete, visual-spatial language with its own semantics, syntax, and pragmatics using the hands, body posture, spatial indicators, and facial expressions.
- **Manually Coded English (MCE):** The use of signs, mainly in English word order and sometimes including English parts of speech, that do not exist in ASL. MCE encompasses multiple variations including Signed Exact English.
- **Aural/Oral English (A/O):** The use of spoken English without sign, usually aided by some form of auditory amplification such as hearing aids or cochlear implants.

General Guidelines

This section provides general guidelines for assessing people with hearing impairments.

Background Information

The examiner should gather the following background information prior to testing hearing impaired examinees: (a) medical and developmental history, including language; (b) level and type of hearing impairment; (c) preferred mode of communication and, if sign, the primary language of the home and the parents' use of sign; (d) type of amplification device the examinee uses and the examinee's proficiency in its use; (e) educational history, including access to services from a specialist in Deaf/Hard of Hearing (D/HH) education, and results of a Functional Listening Evaluation,[1] especially for suggesting accommodations in various environments; (f) cultural background; and (g) access to environmental learning and experiences.

[1] The purpose of a Functional Listening Evaluation is to determine how listening abilities are affected by noise, distance, and visual input in an individual's natural listening environment. It is designed to simulate listening ability in situations that are more representative of actual listening conditions than can often be replicated in sound booth assessment. By observing the test administration, the examinee's teachers, parents, and others may see the effects that adverse listening conditions have on the examinee's test performance. The evaluation results are also useful in justifying accommodations, such as assistive listening devices, sign language or oral interpreters, notetakers, captioning, special seating, and room acoustic modifications. https://handsandvoices.org/pdf/func_eval.pdf
Revised 2004 by C. D. Johnson. Based on *Functional Listening Evaluation* by C. D. Johnson & P. Von Almen, 1993.

Testing Environment and Amplification

As with all examinees, individuals who are deaf or hard of hearing should be tested in a room with no background noise and few visual distractions. Often, hearing aids do not filter out background noise, thus making it harder for the examinee to hear the examiner's voice and/or the audio recording. Even people who identify as deaf, who use sign as their primary communication mode, and who do not use amplification often can hear environmental sounds, which are distracting.

General Guidelines: Sign Communicators

The following section discusses general guidelines for working with people with hearing impairment who use sign as a form of communication.

Examiner Qualifications

Ideally, testing and interpretation should be done by a qualified professional who has expertise, communication facility, and experience working with people with a variety of hearing impairments. If this is not possible, the professional should work with a certified interpreter who is fluent in the type of sign language that the examinee uses, be it ASL or some form of MCE, as well as with other hearing impairment and/or deafness specialists.

Primary Communication Mode

All verbal tests and any instructions must be conveyed through the examinee's primary communication mode. To establish the primary communication mode, consult a professional (e.g., teacher, certified interpreter) who is familiar with the examinee and who has expertise in the communication modes used by people who are deaf or hard of hearing.

Use of an Interpreter

The interpreter should be a certified ASL interpreter with sufficient skill and flexibility to adapt to the examinee's primary mode of communication. Further, interpreters must be completely familiar with the instructions and items on each test and must spend the time needed to interpret all the information and *only* the information that the audio recording provides to a hearing person.

In many cases, the signs that should be used to convey test instructions depend more on the intent of the task than on the English sentences being translated. For example, an early instruction in Analysis-Synthesis is: "This is called a key. It will be on every screen to help you do the puzzles." In English, *key* has multiple meanings and, in this case, means "code." In ASL, *code* is fingerspelled. Consequently, to sign the intended concept accurately and to avoid adding a reading component, the interpreter must understand how the key is related to the task. To avoid this type of problem, it is important for the examiner to work with the interpreter prior to the assessment to familiarize them with the test instructions, procedures, items, unfamiliar concepts or terminology, and the skills being assessed.

Although using an interpreter for testing is necessary in many cases, problems can arise. For example, young children may not have learned how to use an interpreter yet. Or the presence of another person in the room may alter the child's performance and affect the validity of the test results. To minimize this possibility, use an interpreter with whom the examinee is already familiar or allow time for the child to become familiar with the interpreter before beginning the evaluation. Adults are likely to be familiar with the use of an interpreter.

Scoring

Instructions given in ASL will almost always deviate from standardization instructions due to the linguistic differences between ASL and spoken English, although this will not necessarily invalidate the usefulness of the test or scores. This must be considered on a test-by-test basis.

Interpretation of Results

When interpreting test responses and results, the examiner should consult with a speech-language pathologist or other hearing impairment professional who is familiar with the examinee. Knowledge of the differences between spoken English and signed communication and the life experiences of people with hearing impairments (e.g., daily activities, limitations on incidental learning) may influence interpretation of the scores. A person who has grown up in a house in which everybody signs fluently and has normal language interaction is likely to have better-developed vocabulary and linguistic concepts than someone whose family has limited signing ability and use. However, approximately 96% of deaf children are born to hearing parents (Mitchell & Karchmer, 2004), which limits a child's access to information that is transmitted verbally.

General Guidelines: Aural/Oral Communicators

The following section discusses general guidelines for working with people with hearing impairment who are aural/oral communicators.

Preparatory Information

In preparing to evaluate a person who is hard of hearing rather than deaf, the examiner should review information regarding the examinee's severity and type of hearing loss, the type of amplification device the person uses, the sounds that might be most difficult for the examinee to hear based on their audiogram, and the intelligibility of the examinee's speech. For hearing impaired children in school, the examiner should meet with a teacher or speech-language pathologist who knows the child. If testing an adult, the examiner should schedule a meeting with the person prior to the date of testing to get this information directly.

Audio Recording Versus Live Voice

If an examinee uses speech, the examiner should explore the most effective modality for communicating instructions and verbal items to the individual. If the examinee benefits from speech reading or prefers an oral administration, the examiner may administer most audio-recorded tests orally. The examiner should position the examinee so that they can see the examiner's face easily. The examiner should articulate the instructions and items clearly but without exaggeration.

If using the audio recording, special amplification systems are available that allow the sound to be fed directly into the individual's hearing aids or cochlear implants. Prior to testing, the examiner must determine whether the examinee's amplification device can receive direct audio and what the procedure for doing so is. Examiners should check the examinee's devices immediately before testing to ensure that they are working correctly, turned on, and positioned properly.

If the examiner is unclear about which mode would be best, they should use the "Check Audio Settings" link under the microphone icon in the top right of the computer screen. Examiners should play the recorded sound check and then repeat the information with their voice and let the examinee decide which is easier to understand.

Speech Intelligibility

Before administering tests that require a verbal response, examiners should confirm that the examinee's speech is intelligible. Examiners should listen to the person's speech beforehand to ascertain what sounds are not pronounced correctly and how they are pronounced. Examiners should consult with a speech-language pathologist who knows the examinee or who evaluates the examinee prior to testing to help with this evaluation. If an oral response is unintelligible, the examiner should ask the examinee to explain further to determine whether the response given is the *intended* response.

Examiners should not penalize examinees for articulation errors, dialect variations, or regional or unusual speech patterns, but instead should note them in the Notes section of the platform for later analysis. An advantage of the audio capture tool is that if the examiner is unsure of the examinee's response due to a problem with speech intelligibility, they can listen to the recording of those items later and change the score if necessary. Also, the recording can be used later for consultation with a professional (e.g., speech-language pathologist, teacher of students with hearing impairments) who is familiar with the examinee's speech patterns.

Scoring

Examiners should consider the examinee's audiogram when scoring responses. Apparent errors might be related to the accuracy of an examinee's speech discrimination or to the frequencies that are impaired. For example, an individual with a hearing loss in the high frequencies may omit certain word endings (e.g., /s/ or *-ed* voiced as /t/) because they do not hear them.

Generally, examinees whose amplified hearing and speech discrimination is normal should be able to take all the tests following the standardized procedures, and the scores should be valid. However, in each situation, examiners should use judgment concerning the validity of the scores based on the extent and type of the individual's hearing impairment.

Interpretation of Results

Examiners should interpret the results of any verbal test carefully, based on the extent of the examinee's hearing impairment and the examinee's access to spoken language and associated incidental learning. Examiners should consider the age at which the examinee's hearing loss was diagnosed and the amplification used as indicators of the number of years the person has had an opportunity to gain undistorted information through hearing. Although the score might validly reflect the examinee's ability in the target construct, the reason might be different. For example, a low score in Oral Vocabulary might be related to an examinee's limited opportunity to learn words incidentally due to their hearing impairment rather than a cognitively based language impairment.

Recommendations and Cautions Specific to the WJ V ACH, COG, and VTL for People With Hearing Impairment

Tables 1, 2, and 3 indicate which tests might be useful when testing an individual with hearing impairment. These tables and the text in the following sections provide recommendations and cautions regarding test administration and results interpretation for each category of hearing impairment. The numbers in parentheses in each table refer to the notes shown in each WJ V battery section that provide specific additional information about each test that is not included in the General Guidelines section. The letter codes used in each table represent the following recommendations:

- OK This test is useful and allows the use of scores.
- CA This test may be useful but requires caution in administration.
- CI This test may be useful but requires caution in interpreting the scores.
- QI This test should be used for qualitative information only.
- DNA Do not administer. It is not possible to administer this test in a way that allows the examinee valid access to the test items and/or the ability to respond.

WJ V Tests of Achievement (WJ V ACH)

Table 1.
WJ V Tests of Achievement for People With Hearing Impairment

	American Sign Language (ASL)	Manually Coded English (MCE)	Aural/Oral English (A/O)
Standard Tests			
Applied Problems	QI (1)	QI (1)	OK
Calculation	OK	OK	OK
Oral Language Samples	DNA	DNA	OK
Letter-Word Identification	DNA	DNA	OK (2)
Math Facts Fluency	OK	OK	OK
Math Problem Identification	QI (3)	QI (3)	OK
Oral Comprehension	DNA	DNA	OK (4)
Paragraph Reading Comprehension	QI (5)	QI (5)	OK (6)
Passage Comprehension	QI (5)	QI (5)	CI (6)
Picture Vocabulary	DNA	DNA	OK
Sentence Reading Fluency	QI (7)	QI (7)	CI
Sentence Writing Accuracy	DNA	DNA	OK
Sentence Writing Fluency	DNA	DNA	OK
Spelling	DNA (8)	DNA (8)	OK
Story Comprehension	DNA (9)	DNA (9)	CI (9)
Word Attack	DNA	DNA	OK (10)
Word Reading Fluency	CI (11)	CI (11)	OK (11)
Written Language Samples	QI (12)	QI (12)	OK

Table 1. *(cont.)*
WJ V Tests of Achievement for People With Hearing Impairment

	American Sign Language (ASL)	Manually Coded English (MCE)	Aural/Oral English (A/O)
Extended Tests			
Academic Facts	DNA (13)	DNA (13)	OK (13)
Academic Vocabulary	QI	QI	OK
Letter Writing Fluency	OK	OK	OK
Magnitude Comparison	OK	OK	OK
Number Sense	DNA (14)	DNA (14)	OK
Oral Reading	QI (15)	QI (15)	OK (15)
Reading Recall	QI (16)	QI (16)	OK
Spelling of Sounds	DNA	DNA	CA, CI, QA (17)

(1) Applied Problems

ASL & MCE: In some of the earlier items, the question incorporates a sign that gives the answer (e.g., "two fingers" is signed with two fingers). In some later items, signing the problem depicts the method of solution (e.g., which operation is needed). Fewer of these problems occur after Item 25. At this point, the items are more complex, the examiner cannot assume that the examinee will be able to read them, and the interpreter's accuracy is critical. Consequently, prior to the test session, it is essential that the interpreter has ample time to read all the items the examinee is likely to take to develop a well-reasoned and researched pretesting plan on how to sign the words in each item. When deciding whether to use the scores, the examiner should take into account the level of the items administered, the extent to which the signing provided clues to the answer, and, for later items, whether or not the examinee appeared to understand the signed interpretation.

(2) Letter-Word Identification

A/O: An examinee's pronunciation will indicate how well they are able to apply phonics skills and knowledge of English orthography; however, the examinee's internal pronunciation may be more accurate than the voiced pronunciation. Additionally, pronunciation errors may be secondary to the hearing impairment (articulation) rather than indications of limited word attack skills. Articulation and dialect differences are not counted as errors.

(3) Math Problem Identification

ASL & MCE: Signs for some of the problems are iconic and provide information about the solution to the problem. For example, *plus* is signed with the fingers making a plus sign, circles and squares are signed by outlining their shapes, and *half* is signed as 1 becoming 2. The more advanced items depend less on iconic signs. The test may be useful to ascertain what the examinee knows about math problems and concepts, but the use of signs will invalidate the scores.

(4) Oral Comprehension

A/O: The examiner must determine whether the examinee understands speech more clearly when speech reading, when the auditory input is fed directly into the examinee's amplification device, or when the audio recording is sufficient without direct feed and use whichever input is best.

(5) Paragraph Reading Comprehension, Passage Comprehension

ASL: These tests may provide some indication of the deaf examinee's comprehension of written English, regardless of the norms. The examiner should consider whether the examinee might have difficulty with word recognition due to their inability to use phonics to decode unknown words. Further, the examinee is reading a foreign language with a different syntax and grammar.

MCE: People who use MCE might be more familiar with the syntax of English, possibly increasing their comprehension to some extent.

(6) Paragraph Reading Comprehension, Passage Comprehension

A/O: People who are hard of hearing often have a more limited oral vocabulary than their hearing peers because they do not have the same access to spoken language. Instead of having difficulty with reading comprehension or recall, the examinee may not know the meaning of some of the words or concepts.

(7) Sentence Reading Fluency

ASL & MCE: The examiner should analyze the responses to see if the examinee was slow reading or responding or if incorrect responses indicated limited understanding of the sentences. The examiner should consider that English is a second (foreign) language for most people who are deaf and who use ASL as their primary mode of communication. The examiner should use the test for qualitative information only.

(8) Spelling

ASL & MCE: The sentences do not supply enough context to distinguish between words that share signs, such as *cup* and *glass* or *my* and *mine*. Other words on the list do not exist in ASL (e.g., *is*, *she*).

(9) Story Comprehension

ASL & MCE: Accurate presentation of the stories in ASL or MCE relies on the interpreter's skill, the examinee's comprehension of the interpreter's sign, and the specificity of the examinee's response regarding the required details; all of these factors create significant variability. Further, the escalating difficulty of the items may be different in sign than in spoken English. For users of Aural/Oral English, examiners should consider that poor performance may be due to limited vocabulary and concepts secondary to the examinee's limited hearing.

(10) Word Attack

A/O: Examiners should ensure that the examinee repeats the word correctly.

(11) Word Reading Fluency

ASL & MCE: The examiner should be aware that the examinee may not know the meaning of some of the words, so this is also a test of English comprehension.

A/O: The examiner should take into account the examinee's vocabulary knowledge as well as their speed.

(12) Written Language Samples

ASL & MCE: The instructions can be signed. The responses provide information regarding the examinee's ability to write sentences in English and at different levels of the task. Examiners should use this test for qualitative information only.

(13) Academic Facts

ASL & MCE: When signed, many of the items in this test or the responses would be so modified that they would disallow use of the norms. These include: (a) items that require fingerspelling in either the question or the response and thus introduce an unintended reading/spelling component; (b) signs in the question that give the answer (e.g., What is the abbreviation for ounces?); and (c) items that ask for a rhyming word.

A/O: For these examinees and those who use Aural/Oral English, the examiner should consider the impact of the examinee's hearing loss on incidental learning.

(14) Number Sense

ASL & MCE: Signing the lower items with pictures gives the answer (e.g., Tap the tallest tree, the lowest building, the middle house). From Item 10 on, this is not a problem.

(15) Oral Reading

ASL & MCE: Because a person must know the meaning of a word to sign it, for sign communicators, this test assesses English reading vocabulary and comprehension instead of oral reading. Examiners should use this test for qualitative information only.

A/O: For examinees who use speech, examiners should consider that errors in pronunciation may be secondary to the hearing impairment (articulation) rather than indications of weak decoding skills.

(16) Reading Recall

ASL & MCE: Because the examinee's responses will be signed, the examiner will have to give some latitude in scoring the responses. The information regarding the examinee's comprehension of printed English might be useful, but the norms are irrelevant.

(17) Spelling of Sounds

A/O: The examiner should listen to the way the examinee repeats the target word and check to see how closely the spelling matches the pronunciation. Accuracy will partially depend on how closely the examinee can reproduce the sounds.

WJ V Tests of Cognitive Abilities (WJ V COG)

Table 2.
WJ V Tests of Cognitive Abilities for People With Hearing Impairment

	American Sign Language (ASL)	Manually Coded English (MCE)	Aural/Oral English (A/O)
Standard Tests			
Analysis-Synthesis	DNA (1)	DNA (1)	CA-CI (1)
Matrices	QI (2)	QI (2)	CA (2)
Number-Pattern Matching	OK (3)	OK (3)	OK
Oral Vocabulary	DNA	DNA	OK (4)
Semantic Word Retrieval	DNA	DNA	OK
Spatial Relations	OK (5)	OK (5)	OK
Story Recall	DNA	DNA	OK
Verbal Analogies	DNA	DNA	CI (4)
Verbal Attention	DNA	DNA	OK
Block Rotation	CI (2)	CI (2)	OK
Letter-Pattern Matching	CI (7)	CI (7)	OK

Table 2. *(cont.)*
WJ V Tests of Cognitive Abilities for People With Hearing Impairment

	American Sign Language (ASL)	Manually Coded English (MCE)	Aural/Oral English (A/O)
Numbers Reversed	DNA	DNA	OK
Phonemic Word Retrieval	DNA	DNA	CA-CI (8)
Story Comprehension	DNA (9)	DNA (9)	CI (4)
Extended Tests			
Concept Formation	DNA (1)	DNA (1)	OK (1)
General Information	DNA (6)	DNA (6)	OK
Number Series	OK	OK	OK
Symbol Inhibition	OK	OK	OK
Visual-Auditory Learning	DNA	DNA	CA-CI (10)
Visual Working Memory	OK	OK	OK (11)

(1) Analysis-Synthesis, Concept Formation

A/O: The introductory information and instructions are on video. The video cannot be paused to allow for an explanation in ASL or orally if the examinee depends on speech reading. The examiner should use the sound check to ensure that the A/O examinee can hear the instructions on the video clearly. It is not possible to use the first sample item to teach the task due to a time limit that forces the examiner to enter "No response."

(2) Matrices, Block Rotation

ASL & MCE: Because the task instructions are presented on a video that cannot be paused, the examinee will not receive the instructions along with the visual information before the next screen is shown. It is possible to use the first item after each video for the examiner or interpreter to sign the instructions. Although the score will provide information about the examinee's reasoning ability on this task, changing the instructions invalidates the norms.

A/O: The instructions are given using a video. The examiner should use the sound check to allow the examinee to adjust their amplification device to a level that allows them to hear the audio instructions. When the video is completed, the examiner should check to make sure that the examinee was able to hear everything clearly. If not, the examiner may use the initial items to explain the task but should consider how this changes the use of the norms.

(3) Number-Pattern Matching

ASL & MCE: The instructions for this test can be signed before starting the test.

(4) Oral Vocabulary, Verbal Analogies, Story Comprehension

A/O: The examiner should consider that poor performance may be due to limited vocabulary and concepts secondary to the examinee's limited hearing.

(5) Spatial Relations

ASL & MCE: The examiner should ensure that the interpreter fully understands the task and instructions and can sign them properly.

(6) General Information

ASL & MCE: The signs used for administering many of the items in this test incorporate clues to the answers. For example, the sign for *broom* is the same as the sign for *sweep*—one hand making a sweeping motion on the other. Moreover, people

who are deaf have less opportunity to learn the information this test requires, much of which is typically learned incidentally.

(7) Letter-Pattern Matching

ASL & MCE: This task requires rapid recognition of "legal" letter combinations as well as discrimination between letter patterns that do or do not follow English orthography. People who are deaf typically do not acquire reading and spelling skills at a rate commensurate with their normally hearing age or grade peers. Consequently, a lower examinee performance may be related to limited familiarity with common letter patterns. It should not be interpreted as difficulty with perceptual speed.

(8) Phonemic Word Retrieval

A/O: Even if this test is given with live voice, the examiner should consider whether the examinee can clearly discriminate all of the target sounds. Comparing the incorrect items and nonresponses to the examinee's audiogram may indicate whether errors were due to poor auditory discrimination rather than weak phonemic access. Before starting each subtest, the examiner should have the examinee repeat the target sound.

(9) Story Comprehension

ASL & MCE: Presentation of the stories in ASL or MCE relies on the interpreter's skill, the examinee's comprehension of the interpreter's sign, and the specificity of the examinee's response regarding the required details, all of which create significant variability. Further, the escalating difficulty of the items may be different in sign than in spoken English.

(10) Visual-Auditory Learning

A/O: Speech reading is not possible on this test because the examinee must look at the figures on the tablet while the examiner names them. In addition, the examinee may have difficulty distinguishing the phonemes /s/ and /z/ for creating plurals.

(11) Visual Working Memory

A/O: Speech reading is not possible because the examinee must look at the tablet and listen to the instructions simultaneously.

WJ V Virtual Test Library (WJ V VTL)

Limitations

Sign communicators will not be able to take any of the tests in the WJ V Virtual Test Library because they all require hearing, speech, or both. When administering these tests to aural/oral communicators, the examiner should use Voice Capture to record the responses. It may be necessary to listen to the recording later to differentiate misarticulations from errors on many items.

Auditory Input

The examiner should determine whether the examinee understands speech more clearly when speech reading, when hearing the recording from the tablet, or when the auditory input is fed directly into the examinee's amplification device. The examiner should use whichever input is clearest.

Table 3.
WJ V Virtual Test Library for People With Hearing Impairment

	American Sign Language (ASL)	Manually Coded English (MCE)	Aural/Oral English (A/O)
Animal-Number Sequencing	DNA	DNA	OK
Memory for Words	DNA	DNA	OK (1)
Nonsense Word Repetition	DNA	DNA	OK (2)
Rapid Letter Naming	DNA	DNA	OK
Rapid Number Naming	DNA	DNA	OK
Rapid Quantity Naming	DNA	DNA	OK
Rapid Phoneme Naming	DNA	DNA	OK
Rapid Picture Naming	DNA	DNA	OK
Segmentation	DNA	DNA	OK (3)
Sentence Repetition	DNA	DNA	OK
Sound Blending	DNA	DNA	OK
Sound Deletion	DNA	DNA	OK
Sound Reversal	DNA	DNA	OK
Sound Substitution	DNA	DNA	OK (4)
Understanding Directions	DNA	DNA	OK (5)

(1) Memory for Words

A/O: The examiner should present this test orally or using the audio recording. If a word in the examinee's response is similar to the target word, it should be considered correct, even if it is not the same.

(2) Nonsense Word Repetition

A/O: If necessary for speech reading, the examiner can present Items 1–14 orally; however, Items 15–33 must be presented using the audio recording.

(3) Segmentation

A/O: The examiner should check with the examinee to determine whether they hear speech reading or the audio recording more clearly. The examinee must hear the target words accurately. The examiner should be particularly careful to differentiate examinee misarticulations from errors.

(4) Sound Substitution

A/O: Even if the test is given with live voice and the examinee is speech reading the examiner, many of the sounds in this test are auditorily confusable and are not obvious on the lips of the speaker.

(5) Understanding Directions

A/O: This test requires looking at the picture while listening to the instructions, which eliminates the possibility of speech reading. The examiner should set up the audio for the best possible sound.

Visual Impairment

The types of visual impairment and the extent of visual functioning (i.e., the ability to use available vision to complete activities) experienced by individuals with visual impairments are extremely varied and person specific; thus, the combination of cautions and accommodations necessary for administering any particular test requires case-by-case consideration.

When planning an evaluation of a person with a visual impairment, the examiner is strongly encouraged to read the article "Comprehensive Evaluations of Individuals With Visual Impairments" (Engle, et al., 2024), included in the References section of this document.

For discussion purposes, individuals with visual impairments have been grouped into two categories:

- **Low Vision:** Low vision is the loss of sight that is not correctible with eyeglasses, contact lenses, or surgery and that interferes with an individual's functioning in daily activities. It is the category that contains the greatest variation in visual impairment. The types of low vision that might impact the use of the tests in the WJ V include loss of central vision, loss of peripheral vision, blurred vision, hazy vision, and color blindness. Sometimes visual information can be made more accessible on a computer or tablet by changing various aspects (e.g., font, print or stimulus size, color contrast). However, although these attributes cannot be altered on the tablet, the examinee may use an optical device, such as a magnifier, or hold the tablet in a position that provides increased visual access.
- **Blind:** A person with sufficiently limited vision so as to need braille and/or auditory materials for learning.

General Guidelines

Preparation for Testing

When preparing to test any individual with low vision or blindness, the examiner should consider the findings of the most recent reports regarding the examinee's visual impairment, including (a) the effect it has on their functional use of vision in a variety of activities, including reading print, watching a video, scanning a page, and navigating around a strange room; (b) the most useful modes for reading, writing, math computation, and responding; (c) optical devices used; (d) usual adaptations to print materials and graphic materials; (e) recommended environmental accommodations, including lighting; and (f) the results of the examinee's hearing assessment. This information must be based on the integrated findings of a functional vision assessment (FVA) as well as an ophthalmologic or optometric examination and a recent audiological exam. Visual impairment places more importance on intact hearing.

A review of records should include the level and frequency of specialized instruction the examinee has with teachers of students with visual impairments (TSVI) and orientation and mobility instruction (O&M) as well as the examinee's access to adaptive technology (e.g., braille and braillewriters, electronic note takers, screen readers, display enlargers, magnifiers).

Work as a Team

For all visual tests, the examiner must ensure that the examinee with low vision has the visual acuity, adequate visual fields, ability to scan across a line of print or symbols, and color vision sufficient to see the entire set of stimuli clearly. No prechecks are available on the tablet so the examiner must ascertain this information beforehand. If possible, the examiner should consider making mock-ups of rows of symbols or designs to present to the examinee as a precheck to determine what tests might or might not be useful.

Accordingly, well in advance of testing, the examiner should consult a vision impairment specialist who is familiar with both the examinee and the results of their most recent FVA. "Although visual impairment specialists are not typically trained in standardized testing methods or interpretation, their input is essential to understanding the impact of visual impairments on the individual's development, test administration, and test interpretation" (Engle, et al., 2024, p.3). Decisions as to the appropriateness of any of the cautions, accommodations, and suggestions regarding interpretation provided here will depend to a large extent on the type and severity of the individual's visual condition and history. Therefore, collaboration among the examiner, the vision specialist, or (if the examinee is a student) the TSVI is critical to minimize the effect of the examinee's visual impairment on test performance and to interpret test results accurately.

When presenting visually based tasks, the examiner should watch for behaviors that may indicate that the examinee is having difficulty seeing the stimuli, including such movements as holding their face close to the screen, turning their head to one side, or using a finger to help keep their place. Some tests disallow touching the tablet and others require touching the tablet to mark a response.

Orienting the Examinee to the Testing Environment

The examiner should verbally greet the examinee when they arrive for testing and then, according to the extent of the examinee's visual limitations, help them become familiar with the testing environment. For example, if a person is blind, has extremely poor acuity, or has a very restricted visual field, the examiner should describe the layout of the room. The examiner should guide the examinee around to explore the work area—the physical arrangement of the testing area, the seating arrangement, the testing table, and any materials on the table, including the tablet.

For a person using a cane, the examiner should choose a location where the examinee can place their cane and retrieve it easily when needed. A folding cane may be placed under the chair. Before touching the examinee, such as for guidance around the room or to the seat, the examiner should ask permission (e.g., say, "May I take your arm?").

Devices and Equipment

If the examinee uses an optical device (e.g., glasses, hand magnifier, telescopic device, video magnifier), the examiner should check to make sure that the device is clean and in good condition. If the person is blind or has very limited vision, the examiner should alert them before using any equipment (e.g., say, "I'm starting the recording now.") and before handing them any objects (e.g., say, "Here are the headphones. Please put them on.").

Technology innovations for people who are blind include computer programs that speak what the person types. If a computer equipped with a screen reader such as JAWS is used to administer the WJ V Tests of Achievement, an examinee who touch types can take tests that require writing without visual stimuli (e.g., Sentence Writing Accuracy, Spelling, and Spelling of Sounds). If an examinee who uses braille is given a braillewriter, they can braille their responses, which could then be transcribed into print. The use of either of

these modalities should yield valid scores. However, the only modification being made here is in the examinee's method of response. It is *not* recommended that the method of administration be modified, such as brailling items that are intended to be read.

Instructions

During testing, the examiner should give guidance as needed to supplement verbal instructions. This may include indicating the position of the tablet if it has been moved or pointing to a specific picture or row of pictures to help the examinee focus on or scan the target.

Environment

The examiner should check with the examinee to ensure that the environmental conditions are optimal. This may include providing an appropriate light source (e.g., incandescent, fluorescent, and/or natural), moving the table in relationship to windows or other light sources, adjusting light intensity or focus on the test materials, and/or providing a darkened room.

Materials

The WJ V Response Booklet contains 10 tests from the WJ V Achievement Standard and Extended. No tests from the WJ V COG or VTL require a response booklet. Depending on the type and severity of the examinee's visual impairment, the Response Booklet may need to be adapted somewhat. The examiner might use a black felt tip marker to trace over the lines for writing or might provide the examinee with their preferred writing utensil instead of a pencil. As the Response Booklet is printed, it may be able to be enlarged. All other tests are administered on the tablet.

Physical Considerations

Seating should be arranged so that the examinee can move easily to position their head at a comfortable distance from the tablet to achieve the most stable visual focus, the widest visual field, or the least interference from blind spots. The examiner should allow the examinee to hold the tablet if needed if that will not interfere with the examinee tapping it while responding. The examiner should also allow the examinee to place the Response Booklet wherever it is most comfortable for use. The use of a slant board might facilitate the examinee seeing the print and pictures in the Response Booklet more easily.

Altered Test Conditions

An examinee with low vision may need shorter test sessions to avoid visual fatigue and/or may need to use the optical devices they normally use in the classroom and/or in daily living situations.

Interpreting Test Performance and Results

Examiner's should use the digital platform to administer all tests other than those requiring writing limits, accommodations, or modifications. Still, examiners should keep in mind that, in many instances, the purpose of an evaluation is to determine an individual's unique pattern of strengths and weaknesses and then to use this assessment data to suggest appropriate classroom or workplace accommodations and to recommend possible teaching strategies and interventions. Even without scores, qualitative analysis of the person's responses often provides useful information.

The validity and usefulness of test interpretation for examinees with visual impairments may be increased by adhering to the following guidelines and suggestions.

1. Timed tests: Low vision may interfere with speed of symbol recognition. A low score may have useful implications regarding extra time needed for visual work in the classroom or workplace, but it may have limited implications regarding ease of doing the task or perceptual speed.
2. Similarly, for any visually based test, a person with low vision might need more time to completely survey the visual stimuli. On those tests that indicate elapsed time but do not have a timed cutoff, the examinee should be allowed the time they need to complete the test.
3. Examiners should interpret test findings and their educational relevance in consultation with a vision specialist or, if the examinee is in school, the TSVI who is familiar with the examinee's visual functioning and the most recent FVA.
4. If an examinee performs poorly relative to age or grade peers on tests of oral language or reading comprehension, the examiner should consider the limiting effect of a visual impairment on life experiences and related language development, including vocabulary and concept development. Individuals with visual impairments may have little or no experience with certain information and concepts that typically are learned primarily through vision (e.g., strawberry fields, where you would find a monogram). The examiner should focus on instructional implications rather than assuming the examinee has cognitive or language weaknesses.
5. The examiner should look for the possible relationship between the examinee's specific visual impairment and the type of errors they made. It may be more appropriate for the examiner to make recommendations regarding visual functioning (e.g., more efficient visual scanning, a change in the position of the eyes relative to the stimulus, or a different use of the optical device) than to derive implications regarding the examinee's level of academic skills, cognitive abilities, or language abilities.
6. As for any examinee, for all academic tests, the examiner should analyze the person's responses to determine specific strengths and weaknesses that may call for interventions or opportunities for advanced work.
7. For the WJ V Tests of Cognitive Abilities, the examiner should consider the effect of a severe visual impairment on memory strategies, especially regarding tasks in which sighted people often revisualize what they hear or are trying to recall (e.g., reversing a series of numbers).

Recommendations and Cautions Specific to the WJ V ACH, COG, and VTL for People With Visual Impairments

Tables 4, 5, and 6 indicate which tests might be useful when testing an individual with low vision or blindness. These tables and the text in the following sections provide recommendations and cautions regarding test administration and results interpretation for each category of visual impairment. The numbers in parentheses in each table refer to the notes shown in each WJ V battery section that provide specific additional information about each test that is not included in the General Guidelines section.

The notations in the Low Vision column assume that, with all of the needed accommodations provided, the examinee has near-normal vision. Based on the type and severity of the examinee's visual impairment, the examiner will have to decide if it is feasible to administer a particular test and if it will yield useful information, regardless of the notations in the table.

The letter codes used in each table represent the following recommendations:

- OK This test is useful and allows the use of scores.
- CA This test may be useful but requires caution in administration.
- CI This test may be useful but requires caution in interpreting the scores.
- QI This test should be used for qualitative information only.
- DNA Do not administer. It is not possible to administer this test in a way that allows the examinee valid access to the test items and/or the ability to respond.

WJ V Tests of Achievement (WJ V ACH)

Table 4.
WJ V Tests of Achievement for People With Visual Impairment

	Blind (8/20)	Low Vision (20/20)
Standard Tests		
Applied Problems	DNA	OK
Calculation	DNA	OK
Oral Language Samples	CA (1)	CA (1)
Letter-Word Identification	DNA	OK (2)
Math Facts Fluency	DNA	CI (3)
Math Problem Identification	DNA	OK
Oral Comprehension	CI (4)	CI (4)
Paragraph Reading Comprehension	DNA	OK
Passage Comprehension	DNA	CI (4)
Picture Vocabulary	DNA	QI (5)
Sentence Reading Fluency	DNA	CI (6)
Sentence Writing Accuracy	CA (7)	OK
Sentence Writing Fluency	DNA	OK
Spelling	DNA (7)	OK
Story Comprehension	CI	CI
Word Attack	DNA	OK
Word Reading Fluency	DNA	CI (6)
Written Language Samples	DNA	OK

Table 4. *(cont.)*
WJ V Tests of Achievement for People With Visual Impairment

	Blind (8/20)	Low Vision (20/20)
Extended Tests		
Academic Facts	CI (4)	CI (4)
Academic Vocabulary	CA-CI (8)	CI
Letter Writing Fluency	DNA	OK
Magnitude Comparison	DNA	OK (9)
Number Sense	DNA	OK
Oral Reading	DNA	OK
Reading Recall	DNA	OK
Spelling of Sounds	DNA (7)	OK

(1) Oral Language Samples

Blind: The examiner must not administer this test if the examinee is starting with Blocks A or B because those blocks are based on pictures. Block C items are presented orally.

Low Vision: If the examiner is not sure whether the examinee can see a picture clearly, the examiner should ask the person to describe the picture before they read the item.

(2) Letter-Word Identification

Low Vision: The examiner should ignore the platform's automatic 10-second prompt for a response and allow the examinee to take whatever time they need. As with any other examinee, the examiner should make a note if the response to many words is exceedingly slow or if the examinee has particular difficulties with word recognition.

(3) Math Facts Fluency

Low Vision: The examiner should consider that the examinee needs to discriminate individual numbers and math signs, scan a row of number combinations, and quickly find the beginning of the next row. Accurate but slow responses paired with a low score may be due to the visual impairment. Repeating the test later with an oral administration might help to separate the effects of the visual impairment from factual knowledge.

(4) Oral Comprehension, Passage Comprehension, Academic Facts

Blind & Low Vision: The examiner should take into account that the examinee's world knowledge and vocabulary might be limited by their lack of access to vision-based incidental learning.

(5) Picture Vocabulary

Low Vision: The examiner should consider that the examinee's limited visual access to many objects in the world also limits their ability to name those objects.

(6) Sentence Reading Fluency, Word Reading Fluency

Low Vision: The examiner should analyze the items to see if the examinee's responses were accurate but slow. If this is the case, the examinee's slow reading speed may indicate slower recognition of letters and words due to visual impairment instead of poor fluency. The examiner should use this information to make recommendations regarding the need for accommodations in the classroom or workplace.

(7) Sentence Writing Accuracy, Spelling, Spelling of Sounds

Blind: The examiner should only administer these tests if the examinee who is blind responds using a braillewriter or a computer equipped with a JAWS screen reader. The normative scores should be valid.

(8) Academic Vocabulary

Blind: For the examinee who is blind, the examiner should only administer this test if the examinee starts after Item 7 because Items 1–7 are picture based. Other modifications that will permit the examiner to administer the test but that require cautious interpretation of the score include:

- Item 15: The examiner should say: "I'm going to say a number that has a dot in the middle. It is a two, then a dot, then seven five. We usually say it orally as 'two point seven five.' What is the name for the dot in this number?"
- Item 30: The examiner should have available a raised circle with a raised line across it.

(9) Magnitude Comparison

Low Vision: Due to the 2-minute time limit on this test, a low score with accurate responses is more likely to indicate the effects of the visual impairment than the slow recognition of magnitude.

Tests of Cognitive Abilities (WJ V COG)

Table 5.
WJ V Tests of Cognitive Abilities for People With Visual Impairment

	Blind (8/20)	Low Vision (20/20)
Standard Tests		
Analysis-Synthesis	DNA	CA-CI (1)
Matrices	DNA	CA-CI (2)
Number-Pattern Matching	DNA	OK-CI (3)
Oral Vocabulary	OK-CI (4, 5)	OK-CI (4, 5)
Semantic Word Retrieval	OK-CI (6)	OK-CI (6)
Spatial Relations	DNA	CA-CI (7)
Story Recall	OK-CI (8)	OK-CI (8)
Verbal Analogies	CI (5)	CI (5)
Verbal Attention	CI (9)	OK (9)
Block Rotation	DNA	CA-CI (10)
Phonemic Word Retrieval	OK	OK
Story Comprehension	OK (5)	OK (5)
Numbers Reversed	OK (12)	OK (12)
Letter-Pattern Matching	DNA	CI (3)
Extended Tests		
Concept Formation	DNA	CI (11)
General Information	CI (5)	CI (5)
Number Series	DNA	OK
Symbol Inhibition	DNA	CA-CI (13)
Visual-Auditory Learning	DNA	OK
Visual Working Memory	DNA	CA-CI (14)

(1) Analysis-Synthesis

Low Vision: During the color check, the examiner should ensure that the examinee has the visual acuity and color vision necessary to see all of the puzzles clearly and follow the change in visual targets while the video moves back and forth between the key and the puzzles. The 30-second time limit for Items 1–25 and the 1-minute time limit for Items 26–35 does not allow the examiner to provide further explanation.

(2) Matrices

Low Vision: Instructions are provided by video and the information is presented quickly. The visual target is indicated by highlighting the design or empty square. The platform indicates when 30 seconds have elapsed for Items 1–25 and when 1-minute has elapsed for Items 26–35. However, the examiner should allow the examinee to continue working if they are actively engaged.

(3) Number-Pattern Matching, Letter-Pattern Matching

Low Vision: The examiner should analyze responses to see if the examinee was accurate but slow or made errors. Accurate responses with a low score may indicate that the person needs extra time for visual tasks; it does not necessarily indicate low perceptual speed.

(4) Oral Vocabulary

Blind & Low Vision: The examiner should make sure to articulate the stimulus words clearly because the examinee with low vision may not see the target words on the tablet clearly, and the examinee who is blind will depend on the oral input.

(5) Oral Vocabulary, Verbal Analogies, General Information, Story Comprehension

Blind & Low Vision: Poor performance may be due, in part, to limited vocabulary and concepts secondary to the examinee's limited access to visually based incidental learning and experiences.

(6) Semantic Word Retrieval

Blind & Low Vision: The examiner should rule out limited vocabulary as an explanation for poor performance before considering a problem with retrieval.

(7) Spatial Relations

Low Vision: The examiner should consider that as the items become more complex, the examinee may not be able to see the delineations between the cubes in the target design or the subtle differences between the possible matches.

(8) Story Recall

Blind & Low Vision: When interpreting the examinee's performance, the examiner should consider the prior knowledge assumed in the stories. Many of the story elements are learned or best understood through visual and/or experiential learning (e.g., glow-in-the-dark stars, cars on a busy street).

(9) Verbal Attention

Blind & Low Vision: When interpreting test results, the examiner should consider the possible effect that the inability to visualize has on memory.

(10) Block Rotation

Low Vision: The examiner should check with the examinee to make sure that they can see the black delineations against the blue shapes. An examinee with low vision is likely to take extra time to solve these puzzles and should be afforded additional time as needed.

(11) Concept Formation

Low Vision: The introductory information and instructions are presented using a video and go by fairly quickly. Between items, the examiner should check with the examinee to make sure that they are able to scan the entire set of stimuli before the automatic time limit is up.

(12) Numbers Reversed

Blind & Low Vision: Examinees who are blind may not be able to visualize the reversed sequence of numbers, possibly creating a strategic disadvantage compared to examinees with vision.

(13) Symbol Inhibition

Low Vision: This timed test requires visual acuity, color vision, and the ability to quickly scan and compare small pictures. If it is administered, the examiner should use caution when interpreting a low score.

(14) Visual Working Memory

Low Vision: When interpreting the score, the examiner should consider the examinee's visual acuity and ability to scan quickly from one visual target to another.

WJ V Virtual Test Library (WJ V VTL)

The notations in the Low Vision column for the rapid naming tests indicate that the examiner should use caution in deciding whether to administer the test and caution in interpreting the results. Use of the scores assumes that the examinee can see the visual stimuli clearly; can scan across lines of print, numbers, and figures; and can identify pictures from fine-line drawings. With knowledge of the type and severity of the examinee's visual impairment, the examiner will have to make a judgment regarding the usefulness of the test and use of the scores.

If using an oral presentation for any of the tests, the examiner should pay attention to the specific, and sometimes varying, instructions in the Administration Overview regarding how this should be done.

Table 6.
WJ V Virtual Test Library for People With Visual Impairment

	Blind (8/20)	Low Vision (20/20)
Animal-Number Sequencing	OK	OK
Nonsense Word Repetition	OK (1)	OK (1)
Memory for Words	OK	OK
Rapid Letter Naming	DNA	CA-CI
Rapid Number Naming	DNA	CA-CI
Rapid Quantity Naming	DNA	CA-CI
Rapid Phoneme Naming	DNA	CA-CI
Rapid Picture Naming	DNA	CA-CI (2)
Segmentation	OK	OK
Sentence Repetition	OK	OK
Sound Blending	OK (3)	OK (3)
Sound Deletion	OK	OK
Sound Reversal	OK	OK
Sound Substitution	OK	OK
Understanding Directions	DNA	CA-CI (4)

(1) Nonsense Word Repetition

Blind & Low Vision: Only Items 1–14 may be presented orally. Items 15–33 must be presented using the audio recording.

(2) Rapid Picture Naming

Low Vision: The pictures are small, light, fine-line drawings without color. Once the examinee has completed the test, the examiner should ask the examinee how easy or difficult it was to see the pictures. Examiners should also remember that a person with low vision will not be aware of any details they did not see.

(3) Sound Blending

Blind & Low Vision: Items 1–16 may be given orally. The rest of the items must be administered using the audio recording.

(4) Understanding Directions

Low Vision: Understanding Directions must be administered using the audio recording. The examinee must be able to scan the entire picture and discriminate all of the details.

References

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. AERA.

Engle, J. A., Nguyen, M. T., Goodman, S. A., Evans, C., & Loftin, M. (2024). *Comprehensive evaluations of individuals with visual impairments*. American Printing House.

Garberoglio, C. L., Palmer, J. L., Cawthon, S., & Sales, A. (2019). Deaf people and employment in the United States: 2019. U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes.

Guardino, C., & Cannon, J. E. (2015). Theory, research, and practice for students who are deaf and hard of hearing with disabilities: Addressing the challenges from birth to postsecondary education. *American Annals of the Deaf, 160*(4), 347–355.

Johnson, C. D. (2004). *Functional Listening Evaluation*. Based on *Functional Listening Evaluation* by C. D. Johnson & P. Von Almen (1993).

McGrew, K. S., Mather, N., LaForte, E. M., & Wendling, B. J. (2025). *Woodcock-Johnson V*. Riverside Assessments, LLC.

Miller, M. S., Thomas-Presswood, T. N., Metz, K., & Lukonski, J. (2016). *Psychological and psychoeducational assessment of deaf and hard of hearing children and adolescents*. Gallaudet University Press.

Mitchell R. E., Karchmer, M. (2004). Chasing the mythical ten percent: Parental hearing status of deaf and hard of hearing students in the United States. *Sign Language Studies, 4*, 138–163.

Schles, R. A. (2021). Population data for students with visual impairments in the United States. *Journal of Visual Impairment & Blindness, 115*(3), 177–189.

Resources

Hearing Impairment

Guidelines for the Assessment and Educational Evaluation of Students Who Are Deaf or Hard of Hearing.(June 30, 2017). Based on Ohio Operating Standards for the Education of Students with Disabilities, 3301-51-01-11, 21. The Outreach Center for Deafness and Blindness.

Visual Impairment

Engle, J. A., Nguyen, M. T., Goodman, S. A., Evans, C., & Loftin, M. (2024). *Comprehensive Evaluations of Individuals With Visual Impairments*. American Printing House. https://sites.aph.org/accessible-tests/laws-guidelines/intelligence-testing/

Loftin, M. (2022). *Making Evaluation Meaningful: Determining Additional Eligibilities and Appropriate Instructional Strategies and Visual Impairment* (2nd ed.). Texas School for the Blind and Visually Impaired.

Accommodations Toolkit: Explanations and Research Findings Regarding a Variety of Accommodations for Students with Visual Impairments. Institute on Community Integration, University of Minnesota.

Suggestions for Involving Students in Selecting and Implementing Accommodations. National Center on Educational Outcomes.

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