**Verbal Comprehension Subtests**

**Similarities** measures verbal concept formation and abstract reasoning. It involves crystallized intelligence, word knowledge, cognitive flexibility, auditory comprehension, long-term memory, associative, and categorical thinking, distinction between nonessential and essential features, and verbal expression.

**Vocabulary** measures word knowledge and verbal concept formation. It also measures crystallized intelligence, fund of knowledge, learning ability, verbal expression, long-term memory and degree of vocabulary development. Other abilities measured may include auditory perception and comprehension, and abstract thinking.

**Information** measures verbal reasoning and conceptualization, verbal comprehension, and expression. It also measures a student’s ability to retain and retrieve knowledge from the environment and/or formal instruction. Other skills used include verbal perception, comprehension, and expression.

**Comprehension** measures verbal reasoning of general principals and social situations. It measures verbal reasoning and conceptualization, verbal comprehension, and expression, the ability to evaluate and use past experiences, and the ability to demonstrate practical knowledge and judgment. It also involves crystallized intelligence, knowledge of conventional standards of behavior, social judgment, long-term memory, and common sense.

**Visual Spatial Subtests**

**Block Design** which includes a time component measures the ability to analyze and synthesize abstract visual stimuli. It also involves nonverbal concept formation and reasoning, broad visual intelligence, visual perception and organization, simultaneous processing, visual-motor coordination, learning, and the ability to separate figure-ground in visual stimuli.

**Visual Puzzles**

Timed test that is designed to measure mental, non-motor construction ability which requires visual and spatial reasoning, mental rotation, visual working memory, understanding part-whole relationships, and the ability to analyze and synthesize abstract visual stimuli.

**Fluid Reasoning Subtests**

**Matrix Reasoning** is designed to measure fluid intelligence, broad visual intelligence, classification and spatial ability, knowledge of part to whole relationships, and simultaneous processing. This test requires attention to visual detail and working memory.

**Figure Weights** is a timed test that measures quantitative fluid reasoning and induction. Quantitative reasoning tasks involve reasoning processes that can be expressed mathematically emphasizing inductive or deductive logic.

**Picture Concepts** measures fluid and inductive reasoning, visual-perceptual recognition and processing, and conceptual thinking. It also requires visual scanning, working memory, and abstract reasoning.

**Arithmetic** involves mental manipulation, concentration, brief focused attention, working memory, short- and long-term memory, numerical reasoning ability, applied computational ability, and mental alertness. It also involves sequential processing, fluid, quantitative, and logical reasoning as well as quantitative knowledge.

**Working Memory Subtests**

**Digit Span** involves cognitive flexibility and mental alertness. It involves brief focused attention, auditory discrimination, and auditory rehearsal. **Digits Forward** involves auditory rehearsal and temporary storage capacity in working memory. **Digit Backwards** involves working memory, transformation of information, mental manipulation, and may involve visuospatial imaging. **Digit Span Sequencing** measures working memory and mental manipulation.

**Picture Span** measures visual working memory and working memory capacity. Similar tasks also involve attention, visual processing, visual immediate memory, and response inhibition.

**Letter-Number Sequencing**

This subtest measures basic cognitive processes, auditory discrimination, brief focused attention, concentration, registration, and auditory rehearsal. Additionally, the task involves sequential processing, the ability to compare stimuli based on quantity or alphabetic principles, working memory capacity, and mental manipulation. It may also involve information processing, cognitive flexibility, and fluid reasoning.

**Processing Speed Subtests**

**Coding** measures processing speed, short-term visual memory, procedural and incidental learning ability, psychomotor speed, visual perception, visual-motor coordination, visual scanning, cognitive flexibility, attention, concentration, and motivation. It may also involve sequential processing and fluid intelligence.

**Symbol Search** involves decision speed, short-term visual memory, visual-motor coordination, inhibitory control, visual discrimination, psychomotor speed, sustained attention, concentration. It may also measure organization, fluid intelligence, and planning and learning ability.

**Cancellation** measures rate of test taking, speed of visual-perceptual processing and decision making, visual scanning ability, and visual-perceptual processing, and decision making. It may also involve attention, concentration, and visual recall.

**Complementary Subtests**

**Naming Speed Literacy (New Subtest)**

Student quickly names objects of various size and colors, letters, and numbers. This subtest uses stimuli that are traditional within rapid naming task paradigms and that have shown sensitivity to reading and written expression skills and to specific learning disorders in reading and written expression.

**Naming Speed Quality (New Subtest)**

Student names the quantity of squares inside a series of boxes as quickly as possible. This subtest is similar to tasks in the experimental literature that show greater sensitivity to mathematics skills and specific learning disorder-mathematics. This rapid naming of stimuli measures naming facility, and storage and retrieval fluency. This subtest is not designed as a measure of intelligence but as a measure of cognitive processes related to learning difficulties.

**Immediate Symbol Translation** **(New Subtest)**

Administration of this subtest requires the student to learn visual-verbal pairs and then translate symbol strings into phrases or sentences. This is a cued memory paradigm where the student recalls information related to a specific visual cue. It measures verbal-visual associative memory or paired associates learning, storage and retrieval fluency and accuracy, and immediate recall.

**Delayed Symbol Translation** **(New Subtest)**

This subtest requires the student to translate symbols into words, phrases, or sentences using recalled visual-verbal pairs from Immediate Symbol Translation. It is a cued memory paradigm which taps into verbal-visual associative memory or paired associates learning, storage and retrieval fluency and accuracy, and delayed recall. It is not a measure of intelligence but a measure of cognitive processes related to learning difficulties.

**Recognition Symbol Translation (New Subtest)**

Using recalled visual verbal pairs from Immediate Symbol Translation, the student views a symbol and selects the correct translation form the response options read aloud by the examiner. It measures verbal-visual associative memory or paired associates learning, storage and retrieval fluency and accuracy, and delayed recognition. Performance on this subtest can give insight to determine the effect of retrieval deficits on memory

Performance. It is not a measure of intelligence, but a measure of cognitive processes related to learning.