

Neurocognitive Evaluation Form

The *Neurocognitive Evaluation Form (NEF)* is a tool created by Peter Thompson, Ph.D. and Nicole Crawford, Ph.D., two school psychologists with brain injury expertise in Colorado. The NEF is not a stand-alone tool and is intended to augment other assessments and resources that are employed during a student evaluation. Unlike standardized assessments, the NEF provides necessary qualitative data that utilizes structured and verifiable observations by staff who work with the student.

The NEF may be used in a variety of ways by school staff that know the student of concern. The following points are common uses for the NEF:

- Information from the NEF can be shared with school staff to increase their knowledge of cognitive areas that are highly sensitive to brain injury and may manifest in the classroom setting.
- To detect specific areas of weakness or dysfunction that may form the basis for further targeted assessment.
- To gather evaluation data and add to the body of evidence on a particular student.
- To provide a way to gauge severity of deficits and prioritize/determine areas for intervention.

Usage and Considerations

There are many external variables, or antecedents, that need to be carefully considered when gathering information about students and their behavior at school. Several factors can influence student cognition, emotions and behaviors within a school day. Due to the myriad of external and situational factors, we must look at multiple data points, across time and settings, to develop an accurate picture of student functioning. The qualitative data gathered are critical to staff about when interventions are most likely to be effective. It is also recommended that staff consider situational and learning environmental factors when assessing student behavior, in general, over a period of days, weeks, or months to assist in a more accurate and appropriate evaluation approach.

Situational examples include:

- Hungry/missed breakfast.
- Upset about a fight between mom and dad that happened recently.
- Anxious about a test that day or getting back a score from a quiz taken earlier.
- Excited about an outing that is planned for that evening or weekend.
- Was smiled at by someone he/she likes.

Learning environment considerations include:

- Consistent routines in place.
- Student desks appropriately spaced.
- Lighting too bright or dim.
- Distractions minimized (noise from outside, a window overlooking the playground, etc.).
- Interactions respectful and supportive.
- Age-appropriate behavioral expectations are posted and followed.
- Environment is organized and orderly (floor space, wall space, etc.).
- Environment is engaging and motivating.

Appendix E: Neurocognitive Evaluation Form

Neurocognitive Evaluation Form (NEF)

Rank the student on several areas of functioning as compared to the student’s peers or classmates of the same age. A ranking of **Green** is considered an ability commonly observed in most (70%) students of similar age and is not an area of primary concern. A ranking of **Yellow** is an observed ability area where the student struggles but can perform the task intermittently. A ranking of **Red** is an ability rarely or never observed and signals a major area of concern. **Areas ranked Red or Yellow are domains that may be targeted for further assessment.**

Date: _____ Rater’s Name/Title: _____

Student Name: _____ Student’s Age and Grade: _____

Class Observed: _____ Time of Day and Day of Week: _____

ATTENTION 3 SUBTYPES	Less Positive			More Positive	
	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
SELECTIVE/FOCUSED					
Focuses on teacher					
Attends to detail of task					
Orients to speaker/staff					
Focuses without daydreaming					
Looks at board					
Responds to questions with on-topic answers					
Resists subtle classroom distractions (noise, lights)					
SUSTAINED					
Focuses for age appropriate periods of time					
Completes in-class assignments					
Loses train of thought when talking or writing					
Loses place when working on tasks or when reading					

Appendix E: Neurocognitive Evaluation Form

ATTENTION (CONTINUED)	Less Positive			More Positive	
SHIFTING/DIVIDED	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Can appropriately attend to more than one task at a time					
Switches from activity to activity appropriately					
OTHER	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Overall attention capacity					
Energy level when performing long academic tasks/tests					
Organized thoughts (analyze writing samples)					
Controls impulses					
Avoids verbal Interruptions					

Other relevant observational notes for Attention:

Appendix E: Neurocognitive Evaluation Form

MEMORY	Less Positive			More Positive	
SHORT TERM MEMORY <small>(When student appears to be paying attention rate the following)</small>	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Can repeat simple information that was just presented					
Can copy from board without frequently looking up					
Asks for statements to be repeated					
Can complete simple 2-step requests or problems					
Follows directions correctly					
Can repeat/explain simple activities previously learned on same day					
WORKING MEMORY	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Completes through process in writing assignments					
Summarizes story/text (names characters, setting, details)					
Multi-tasks with accuracy					
Completes multi-step problems, especially in math/science					
Picks up where left off					
Takes notes while listening to teacher					
Can write down assignments while being told the assignment					
Writes notes from the board while listening to instruction					

Appendix E: Neurocognitive Evaluation Form

MEMORY (CONTINUED)	Less Positive			More Positive	
LONG TERM MEMORY	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Explains previously learned material/facts 30 minutes or more after instruction					
Recalls school events from previous week					
Remembers where classroom materials are stored					
Remembers school routines					
Remembers most vocabulary words learned a week earlier					
Draws/ recognizes previously learned pictures or diagrams					
OTHER	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Auditory Sequential Memory: short term memory-repeats back 4 words in order (>8 years old)					
Working Memory: repeats back 3 given numbers and words in reverse order (> 8 years old)					
Visual: student can name 3 pictures / objects that are exposed for 5 to 6 seconds (>8 years old)					

Other relevant observational notes for Memory:

Appendix E: Neurocognitive Evaluation Form

PROCESSING SPEED	Less Positive			More Positive	
PROCESSING SPEED	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Responds to verbal directions/questions quickly					
Keeps pace with most of class					
Slow reading (control for comprehension)					
Completes tests/tasks on time					
Quickly finishes timed tasks accurately					
Recalls simple information quickly					
Writing or drawing speed					
Speech rate					
Speed of physical movement					
Sometimes seems confused after simple information is provided not due to attention or memory					

Other relevant observational notes for Processing Speed:

Appendix E: Neurocognitive Evaluation Form

EXECUTIVE FUNCTIONS	Less Positive			More Positive	
PLANNING, ORGANIZATION, COMPREHENSION, FLEXIBILITY	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Organization of materials					
Organization of thoughts in writing/speech					
Shifts appropriately from subject to subject					
Is able to keep and utilize planner or schedule					
Transitions well to different activities					
Breaks down steps into smaller tasks					
Ease at which learns new concepts (Comprehension)					
Ease at which understands simple stories or concepts (Comprehension)					
Explains plans to meet an assignment, task, deadline, or activity					
After a short assigned problem, can explain logic used in problem solving					
When engaged in problem solving task, uses feedback to help in the process (monitors progress)					
Can quickly adjust to changes in routine (Degree of Flexibility)					
Keeps track of place when working on task or reading					
Moves beyond concrete or rigid approach to task					

Appendix E: Neurocognitive Evaluation Form

EXECUTIVE FUNCTIONS (CONTINUED)	Less Positive			More Positive	
EXECUTIVE FUNCTIONS RELATED BEHAVIOR	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Motivation					
Controls Impulsivity					
Common sense/judgement					
Perspective taking/empathy (consider age appropriateness)					
Follows rules					
Overall attention					
Emotional/behavioral regulation					
Concept formation/idea generation					
On-topic reciprocal dialog					
Able to predict consequences of behaviors					
Can self-monitor and self- correct					
Initiates tasks without prompts					
Time management (e.g. keeps schedules/dates)					

Other relevant observational notes for Executive Function:

Appendix E: Neurocognitive Evaluation Form

SENSORY/TACTILE/ VISUAL/MOTOR	Less Positive			More Positive	
SENSORIMOTOR	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Posture					
Walking/running					
Fine motor (pencil grip/writing) Picking up small pieces					
Gross motor					
Balance/muscle tone					
Touches each finger separately					
Mimics simple body movements (hand gestures, knock and taps)					
Traces or copies figures					
Identifies simple objects placed in hand with eyes closed					
Identifies simple objects placed in hand with eyes closed					
Clumsy, awkward, unusual movements					
VISUAL-SPATIAL / PERCEPTUAL	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Skills puzzles/blocks					
Understands Right vs. Left and Up vs. Down					
Ignores one side of paper while writing or drawing/ coloring					
Grossly distorted drawings that are directly copied					
Difficulty using graphs, maps, charts and illustrations					
Lots of scratch outs/white outs					

Appendix E: Neurocognitive Evaluation Form

SENSORY/TACTILE/ VISUAL/MOTOR	Less Positive			More Positive	
TACTILE/AUDITORY/VISUAL	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Light Sensitivity					
Noise Sensitivity					
Touch Sensitivity					
Color Blindness					
Hearing (e.g. responds to names)					
Sees details/writing on board from back of room					
Sensitive to temperature					
Complains of numbness or odd sensations					

Other relevant observational notes for Sensory:

Appendix E: Neurocognitive Evaluation Form

COGNITIVE FATIGUE	Less Positive			More Positive	
COGNITIVE FATIGUE	Significantly Below Average	Slightly Below Average	Average	Slightly Above Average	Significantly Above Average
Can complete all tasks throughout the school day					
Word retrieval and speech consistent throughout day					
Controls attention capacity throughout day					
Controls energy level throughout day					
Controls behavior and emotions after moderately difficult test/task					
Physical stamina after long tasks					
Mark the following areas YES or NO	Yes (Problem area)	No (Not a problem area)			
States feeling a “fog” or feeling “sluggish”					
Sensitive to lights/noise after moderate exposure					
Stares blankly at times					
Consistently states feeling tired/sleepy					
Energy level is consistent throughout day as compared to peers					

Other relevant observational notes for Cognitive Fatigue:
