



COLORADO
Department of Education

Completing a Comprehensive, Full and Individual Special Education Evaluation using a Brain-based Approach

How do teams ensure that an evaluation is sufficiently comprehensive?

Teaching, learning, and brain function are intricately connected and are crucial to a whole-child approach. This fact has been known by educators and scientists for many years. Therefore, it is recommended that multidisciplinary or transdisciplinary school teams¹ use a brain-based approach to assess skills and gather data to accurately identify a student's patterns of strengths and needs. The process includes integrating, interpreting, and synthesizing the comprehensive assessment data, from a variety of normative assessment methods, including indirect and pre-existing sources. It incorporates the student's functional abilities and skills in relation to their ability to progress in educational and vocational settings and considers how these skills impact access to the learning environment and activities.

Collecting a body of evidence that includes data across all areas of educational impact or whole child development is essential when a transdisciplinary team is conducting a "comprehensive, full, and individual" evaluation. The body of evidence includes environmental and physical considerations, in addition to understanding how that student's brain is functioning in the learning environment. Therefore, using a brain-based approach to understanding academic performance, processing speed, memory, attention, sensory, language, behavior, executive function, etc. is warranted. This may or may not include an Intelligence Quotient (IQ) test. The determination of assessments given to a student to identify needs is an IEP team decision. School professionals must consider the appropriate factors for assessment and tools for specialized populations (e.g., students under the age of 6, populations who are Culturally and/or Linguistically Diverse [CLD]).

Gathering evidence, using a brain-based approach in the course of comprehensive evaluation is different from a clinical neuropsychological assessment in many ways. There

¹ *Collaboration and Teaming* (n.d.). American Speech-Language-Hearing Association. Retrieved June 8, 2021, from <https://www.asha.org/Practice-Portal/Clinical-Topics/Intellectual-Disability/Collaboration-and-Teaming>



are many undeniable positives to school-based transdisciplinary teams providing this body of evidence during evaluation, which include²:

- Equitable access to evaluations for students at no cost.
- Student data collected in the school setting is relevant to current functioning and aligned with educational and behavioral areas of concern.
- School evaluations demonstrate educational impact which is necessary for special education qualification. Educational impact is difficult to establish with evaluations conducted in isolation or outside the school setting.
- Parents are an essential part of the team, and a long-term partnership is created.
- Classroom observations, peer interactions, and student response to school-based stimuli are all important aspects of understanding the student's abilities and their deftness for learning and behaving.

Is CDE recommending IQ tests for all special education evaluations?

Cognitive assessment does not equate to an IQ test. CDE is not suggesting IQ tests be completed for all students. The evaluation process is to identify cognitive skill levels in students that is based upon how learning occurs and how the application of this knowledge can improve instructional practices. This process allows for the collection and synthesis of important data to assist in building a body of evidence to support decision making in the special education determination process. Cognitive skills for young children are assessed through authentic measures, such as Transdisciplinary Play-Based Assessment or TPBA. Gaining a thorough understanding of how a student's brain is functioning, their cognitive skills, is important in special education determination and programming.

Why is the analysis and synthesis of data important to a brain-based evaluation?

When we think about the purpose of a comprehensive evaluation, we think about an evaluation that includes varied assessment data from formal (standardized norm-referenced) and informal (records review, observations) tools gathered by a transdisciplinary team representing different perspectives and expertise. It is important to mention that evaluation teams may “not use any single measure or assessment as the sole criterion for determining whether a child is a child with a disability or determining an appropriate educational program for the child” (§300.304).

It is not enough to gather the data from different team members and include it in the report in an isolated manner. Strategic decisions about disability determination and programming can only be made through an analysis and synthesis of all the data in a body of evidence. When we are talking about the synthesis of data, we are talking about the merging of distinct expertise, interpretation of assessment outcomes, and other quantitative and qualitative information about the whole child and their unique strengths, needs, as well as how the child is accessing and progressing in general education. Teams do this by

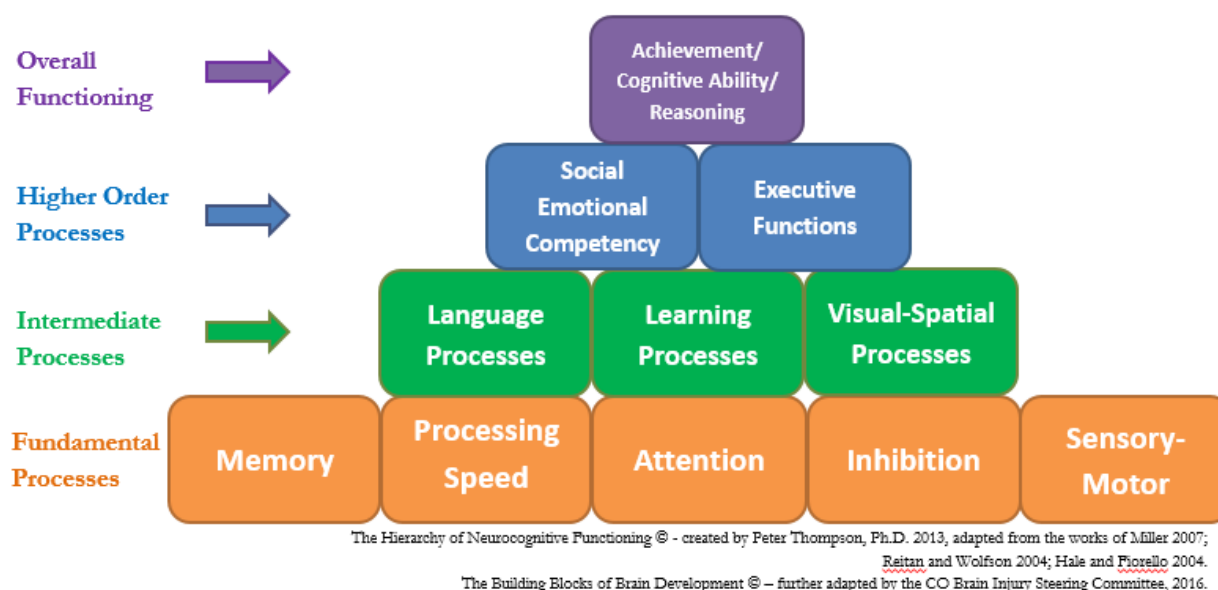
² Crawford, N., Hotchkiss, H., McAvoy, K., (2017). Neuroeducational Evaluations - The School-Based Answer to Pediatric Neuropsychological Assessments., *Brain Injury Professional-Acquired Brain Injury in the Pediatric Population*, Vol. 14(3), 10-14. https://issuu.com/braininjuryprofessional/docs/bip_november_2017?e=1121786/58553366

examining all data points in relation to each member's area of expertise, to better identify the root cause of the student's learning challenges and what targeted interventions or supports are needed to address the root cause.

How does understanding the brain assist in conducting a comprehensive evaluation?

Understanding the brain is essential in understanding how a student learns and their social emotional functioning. The Building Blocks of Brain Development® framework³ can be used by parents and school based transdisciplinary teams, to identify, understand, and address learning and social emotional functioning across all types of learners.

Building Blocks of Brain Development®



The framework was first developed specifically for students who sustain a brain injury; however, it is very useful for all students who have learning or social emotional functioning challenges and for young children, due to the integrated nature of learning. After all, it is about understanding the brain. It provides common language and understanding for communicating about a student's cognitive level of functioning within the school, home, and community environments. Educators can apply the framework to identify strengths, skill deficits or gaps, and to address those gaps with aligned educational interventions and support.

³ Colorado Department of Education-Exceptional Student Services Unit, Brain Injury Steering Committee. (Revised 2018). *Brain Injury in Children and Youth – A Manual for Educators*. http://www.cde.state.co.us/cdesped/tbi_manual_braininjury

It is imperative to gather data to understand how the student functions across both the academic and social emotional sectors. Knowing whether the student has and can employ the multitude of social-emotional competencies is just as important as knowing whether the student has and can employ the multitude of academic skills, such as math computation skills. Social-emotional competence is a higher order thinking skill and includes an array of skills and brain processes working in unison. For example, the awareness of social issues, the employment of or ability to appropriately respond, the ability to emotionally regulate, and self-monitor, are a few of the higher order thinking skills. The fundamental brain processes need to be solidly in place for the higher order skills to be accessed and engaged.

This supportive teaching standpoint also lends itself to a positive relationship with the student by establishing trust and rapport.⁴ Once specific skill gaps are determined, the appropriate intervention can be applied with fidelity, can be progress monitored, and adjusted until the student can produce the desired result.

How can the Building Blocks of Brain Development® be used in the evaluation process?

The Building Blocks of Brain Development® has three components to build understanding of how a student is functioning.

- 1) the Building Blocks, which represent the cognitive processes,
- 2) assessment tools that may be used by school professionals in the school setting to identify functioning levels, and
- 3) aligned strategies and interventions to address identified areas of need.

The assessments are commonly available in the school setting and/or are frequently part of training programs for the various professional members of the transdisciplinary team. In preschool settings, the Transdisciplinary Play-Based Assessment (TPBA) is a commonly used assessment process that gathers authentic information in an interdisciplinary manner. It is applicable beyond the intended age range (birth to 72 months) for use in gathering a body of evidence across domains, that include the building blocks.

The assessment collection is not an exhaustive list and is always changing with revised editions and new tools. In an attempt to maintain this ever-changing collection, the CDE and the Colorado MINDSOURCE Brain Injury Network have teamed up to develop a website that provides a dynamic and user friendly way to access this list of assessments at: <https://cokidswithbraininjury.com/educators-and-professionals/brain-injury-matrix-guide>

⁴ Greene, R.W. (2018) Transforming school discipline: Shifting from power and control to collaboration and problem solving, *Childhood Education*, 94:4, 22-27. Frank M. Gresham, Ph.D., Stephen N. Elliott, Ph.D.

How can the Building Blocks of Brain Development® assist transdisciplinary teams?

By using the Building Blocks of Brain Development® within the comprehensive evaluation process, the transdisciplinary team can:

- conduct evaluations that focus on brain-based functioning and the unique needs of a student,
- develop a thorough body of evidence essential for determining special education eligibility,
- accurately identify the academic, communicative, social-emotional, and behavioral needs of students,
- identify supports, services, and programming that are aligned with the student's area of need, essential to improve outcomes, and
- create specially designed programs that are reasonably calculated to enable a child to make progress.

Ultimately, educators, families, and students benefit from the increased awareness gained from this simple framework about the interaction between brain processes, learning, and behavior to understand the whole child.

The CDE-ESSU provides training on comprehensive evaluation and the alignment of programming to assure the provision of FAPE. If you have questions or would like to learn more about training opportunities, please contact the ESSU at ESSU@cde.state.co.us.

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Additional Information & Resources:

- The Building Blocks of Brain Development® –
 - www.cde.state.co.us/cdesped/sd-tbi_buildingblocks
 - <https://cokidswithbraininjury.com/educators-and-professionals/brain-injury-matrix-guide>
- Disability Categories Guidance - www.cde.state.co.us/cdesped/sd-main
 - Disability categories with specific guidance in brain-based evaluation:
 - Traumatic Brain Injury – www.cde.state.co.us/cdesped/sd-tbi
 - Specific Learning Disability – www.cde.state.co.us/cdesped/sd-sld_resources_eligibility_guidance
 - Other Health Impairment - www.cde.state.co.us/cdesped/sd-other
- Guidelines for Identifying Young Children with Special Needs
 - <http://www.cde.state.co.us/early/childidguidelines>
- Learners who are Culturally and/or Linguistically Diverse
 - www.cde.state.co.us/cdesped/cld

The contents of this handout were developed under a grant from the U.S. Department of Education. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. The assessments identified within the Building Blocks of Brain Development® are suggestions and you should not assume endorsement by the Colorado Department of Education.