



BBBD Supports and Interventions



Using the *Building Blocks of Brain Development* to Support Students with Learning Disabilities

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Module 2.6

BBBD: Supports and Interventions

Supporting Sensory Motor Issues in the Classroom



Important Note

The information, concepts, and models provided in this presentation are intended to give practitioners a framework when conducting special education evaluations and employing interventions. It is emphasized that nothing in this presentation is meant to be directive or prescriptive.

Professionals are free to use some, or all of the information presented, but they are not required to do so in their practice. **Always consult with your special education director for clarity around district policies and expectations for special education evaluations.**



IMPORTANT 

Learning Outcomes

- Understand the nature of *sensory and motor*(S/M) functions and its impact on learning
- Learn effective interventions for *sensory and motor* problems
- Learn about effective classroom accommodations for sensory and motor issues



Presentation Organization

I. Sensory / Motor Key Concepts

II. Sensory / Motor Supports and Interventions

- A. Expert Guidance
- B. Interventions
- C. Accommodations



I. Sensory-Motor Key Concepts



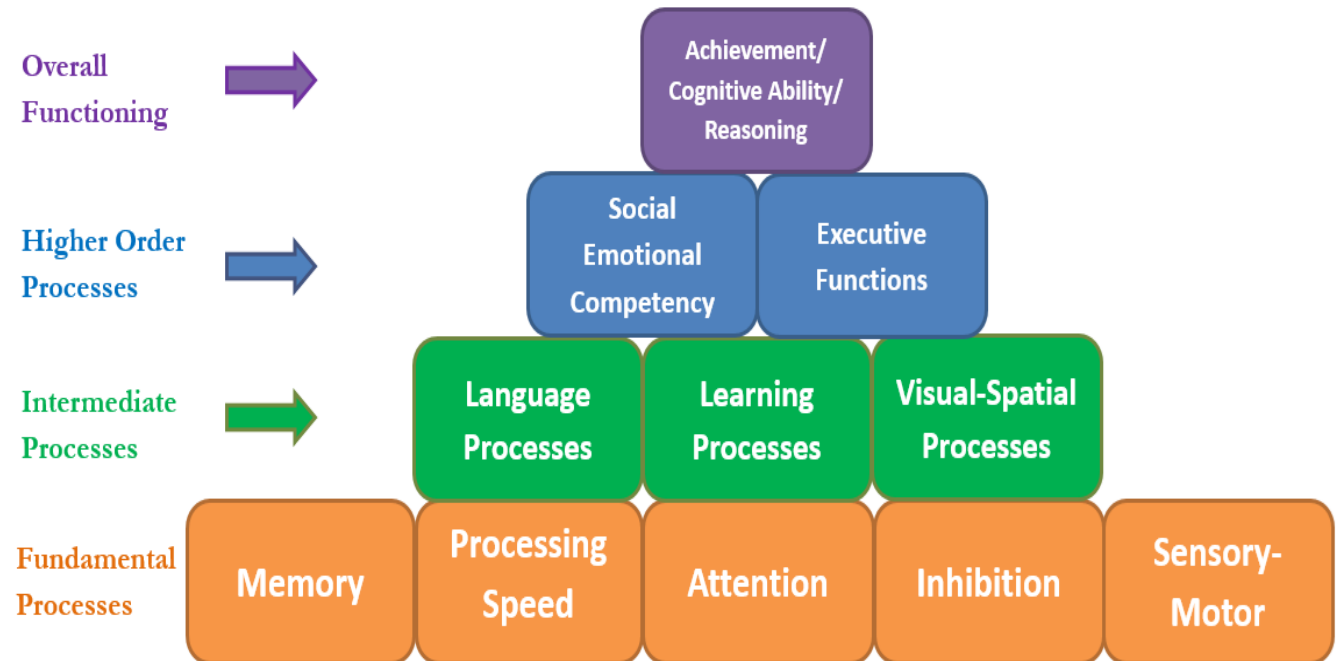
1. Sensory / Motor and BBBD
2. Important Considerations
 - Two functions and two aspects
 - Over and Under Sensory Issues
 - Consult with OT/PT for expert guidance
 - Parietal lobe, cerebellum, motor strip brain areas



Key Points: Sensory- Motor's Impact on Learning

- Two distinct but integrated functions.
- “Sensory” entails information that is processed and used from our senses.
- Motor skills entail movement, muscle tone, balance, posture, visual tracking.
- Humans must regulate senses and motor functions to engage in their learning environment. S/M functions support our perceptions.

Building Blocks of Brain Development ©



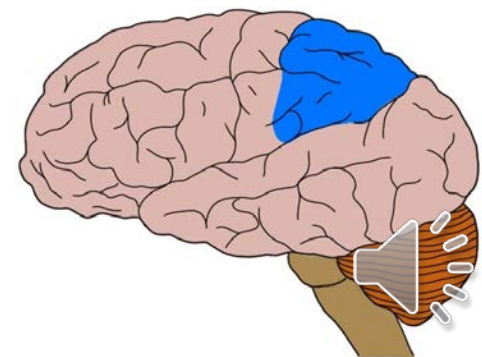
The Hierarchy of Neurocognitive Functioning © - created by Peter Thompson, Ph.D. 2013, adapted from the works of Miller 2007; Reitan and Wolfson 2004; Hale and Bell 2004.

The Building Blocks of Brain Development © – further adapted by the CO Brain Injury Steering Committee, 2016.

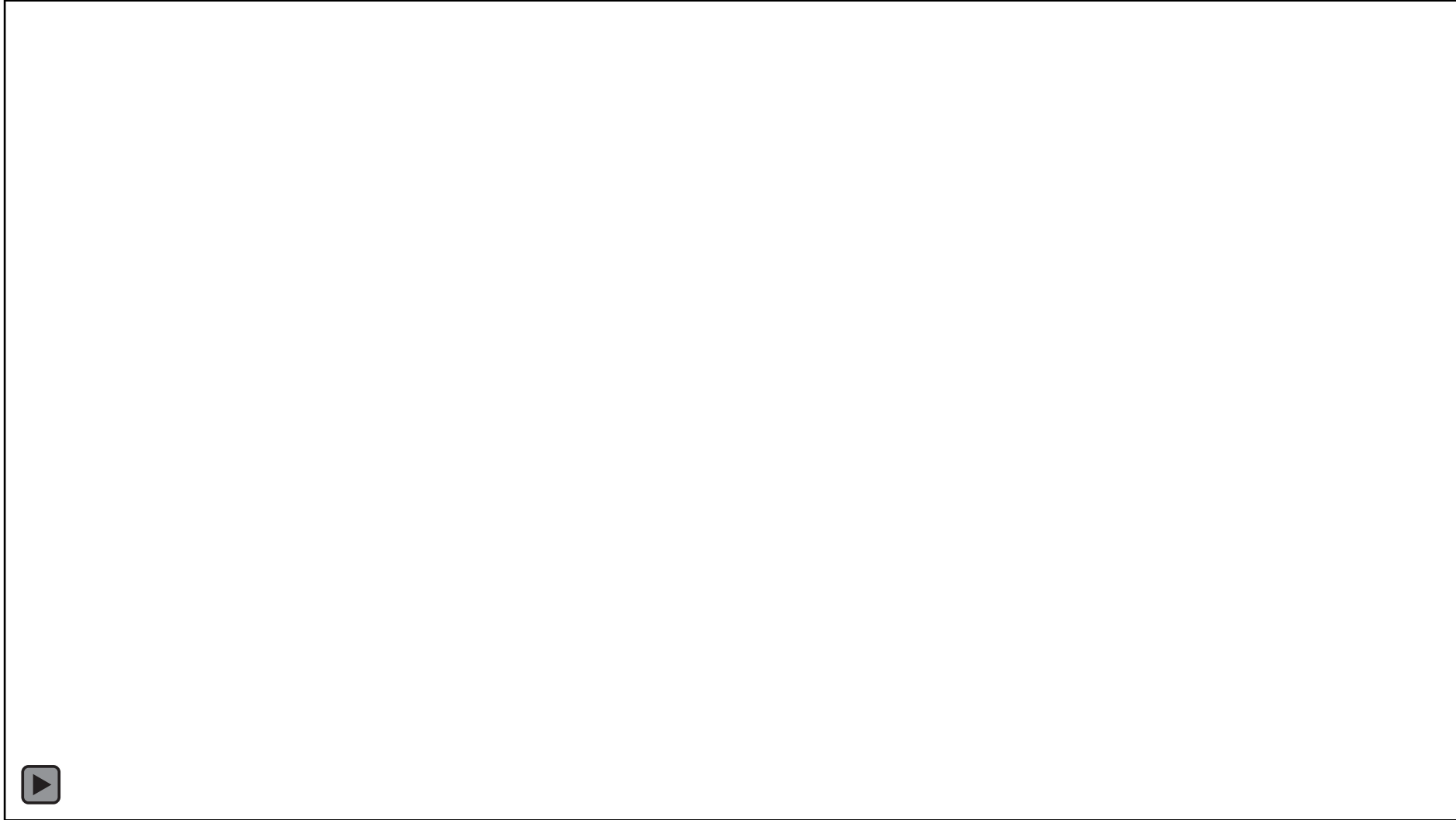


Sensory / Motor: An Important View

- Sensory and motor development is the process whereby a child gains use and coordination of his/her muscles of the trunk, arms, legs and hands (motor development), and begins to experience, through sensory input, the environment by sight, sounds, smell, taste and hearing. (Nicklaus Children's Hospital, 2020).
- Sensory / motor functions and processes can be complex and multifaceted. Includes, balance, fine motor, gross motor, proprioception and other issues related to the senses.
- Video: of Sensory Processing Disorder (SPD)
https://www.youtube.com/watch?v=O_FXaskYJAK



Overview of Sensory Processing Disorder



Sensory Motor (S/M) and Its Impact on Learning

- S/M difficulties distract from learning situations by interfering with attention, sustained focus, and ability to efficiently process information (encoding information)
- Sensory dysregulation can impact social / emotional development and the opportunities to form social relationships.
- Motor issues can impact handwriting, visual-perceptual issues, balance, eye-tracking, and navigating one's environment.



II. S/M Supports and Interventions

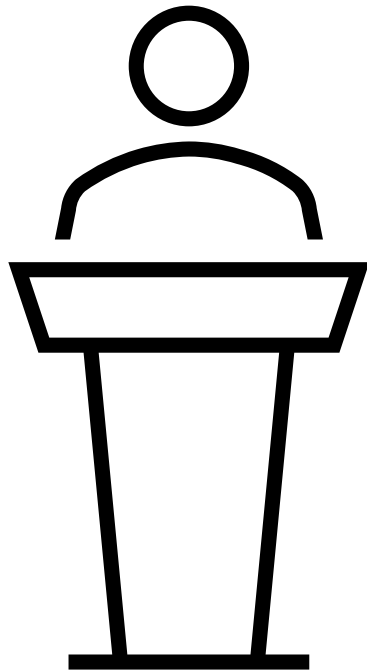
1. Expert Guidance
2. Interventions
3. Accommodations



1. Expert Guidance



1. Expert Guidance



- ✓ S/M issues respond well to interventions, and some can be remediated to a degree (e.g. fine / gross motor).
- ✓ Most team members will consult with OT/PT and not engage in direct interventions like the OT/PT.
- ✓ Team members typically engage in monitoring accommodations and skills taught by OT/PT.



2. Intervention

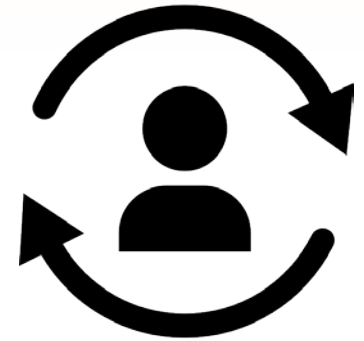


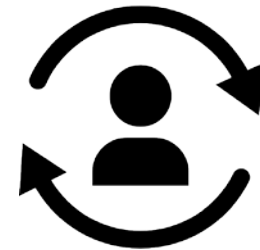
2. Interventions

- Skill building and remediation of S/M will largely take place with the OT/PT. Follow OT/PT recommendations.
- Staff should be mindful of student's needs-over or under- stimulation issues. Support by maintaining environmental needs.
- Classroom Resource: <https://harkla.co/blogs/special-needs/sensory-tools-school>



3. Accommodations





3. Accommodations

- Very wide and varied needs.
 - Only a few general strategies can be provided.
 - Must be OT/PT supervised and approved.
- Environmental Strategies:
 - Set up environment for success based on student's sensory needs-more or less inputs.
 - Develop an individualized sensory diet menu with ideas from the student and OT/PT.



3. S/M Accommodations

- Provide metacognitive strategies
 - “Why” a student may need specific accommodations-
Teach benefits
- Teach self-advocacy related to environmental accommodations (lights / sounds/ movement)
- Material presentation needs (oral presentation)
- Motor-issue needs that impact writing
 - Voice to text



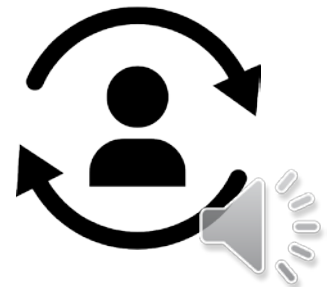
3. Accommodations For Under-Stimulation

- Be mindful that students may need more sounds, light, background noise, fidgets, tactile stimulation.
- Need for movement
 - May be a moderate amount but also can be significant
 - Build a routine / schedule of movement breaks
 - Examples: Set route around school, jump rope
 - Routines and well-structured environments work for all students.



Accommodations: For Over-Stimulated

- Low lights, noise, movements, visuals
- Test presentation-mindful of too much information on page—limit visual inputs
- Planned quiet breaks / sensory room - Time limited de-stimulation (Routine)
- Mediation-emerging research and acceptance in expert community



Summary

- S/M is a fundamental block of the BBBD. S/M functions are complex and comprise two types of functions with two considerations-over and under sensory issues.
- S/M functions impact learning as it is responsible for one's ability to regulate sensory inputs to stay in a learning environment as well as process information effectively. Motor functions are necessary for writing, visual-perceptual tasks, balance, and movements.
- S/M deficits are varied and numerous. Interventions and accommodation will be employed with the help of specialized staff (OT/PT.)





Thank You For Listening End of Module 2.6



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