



BBBD Supports and Interventions



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

Peter Thompson, Ed.S., Ph.D.





Module 2.4

BBBD: Supports and Interventions

Supporting Attention 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 *attention* and its impact on learning
- Learn about effective interventions for attention problems
- Learn about various classroom accommodations for attention



Presentation Organization

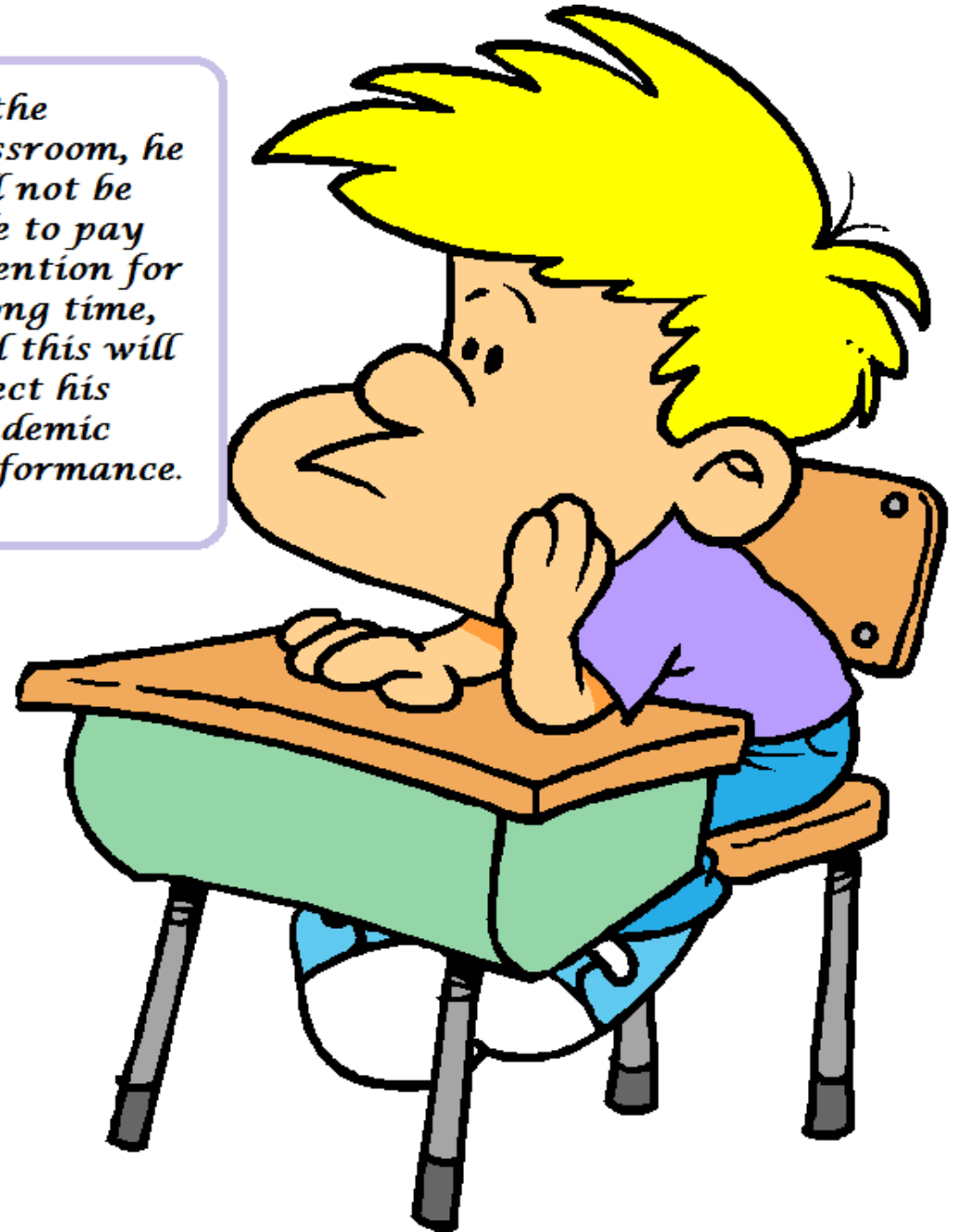
- I. Attention Key Concepts
- II. Attention Supports and Interventions
 - A. Expert Guidance
 - B. Interventions
 - C. Accommodations



I. Attention Key Concepts

1. BBBD and Attention
2. What Causes Attention Problems
3. Important Considerations
 - Learning cannot take place
 - Impacts not just school, but life

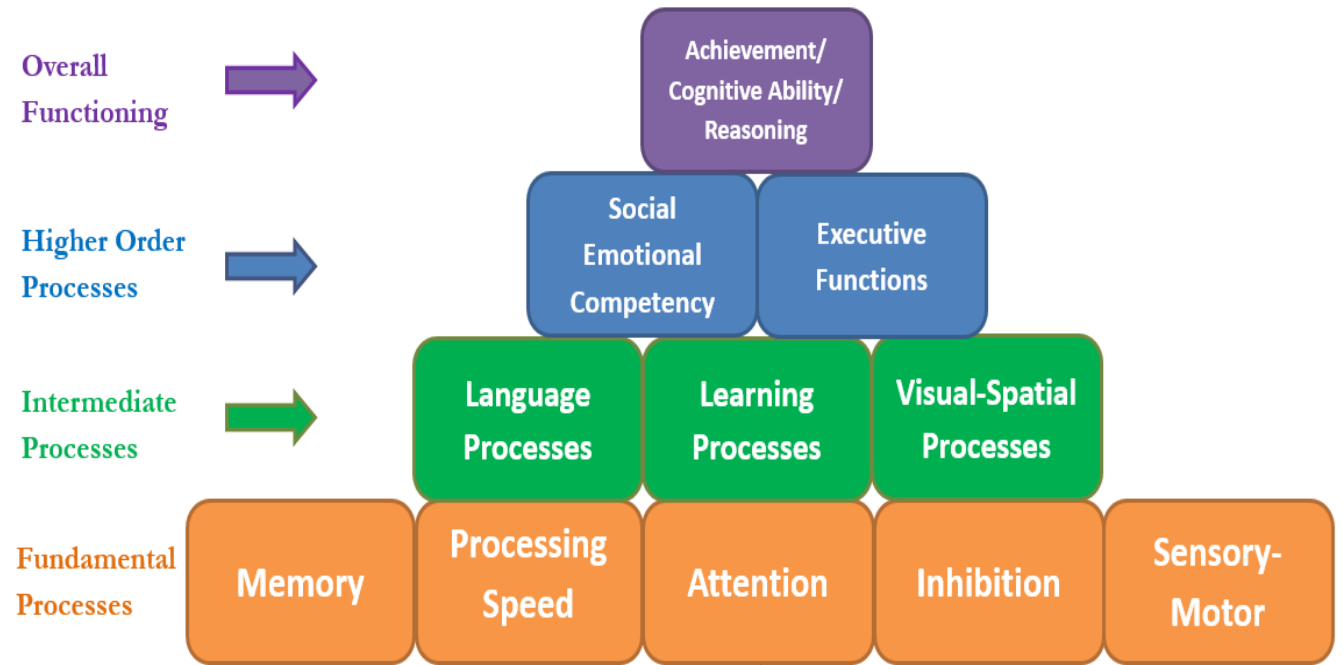
In the classroom, he will not be able to pay attention for a long time, and this will affect his academic performance.



Key Points: Attention

- Is a key fundamental block and considered a “Super-Block”
- Activates other blocks-creates “ready to learn” by orienting to information
- EF-- matures with age

Building Blocks of Brain Development ©



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

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



Attention: An Important View



Although the neurocognitive function of attention can be characterized as the core of ADHD, it can also be part of a SLD evaluation. Attention should be accounted for in evaluations.



ADHD is statistically correlated with SPS, behavior difficulties, and SED issues.



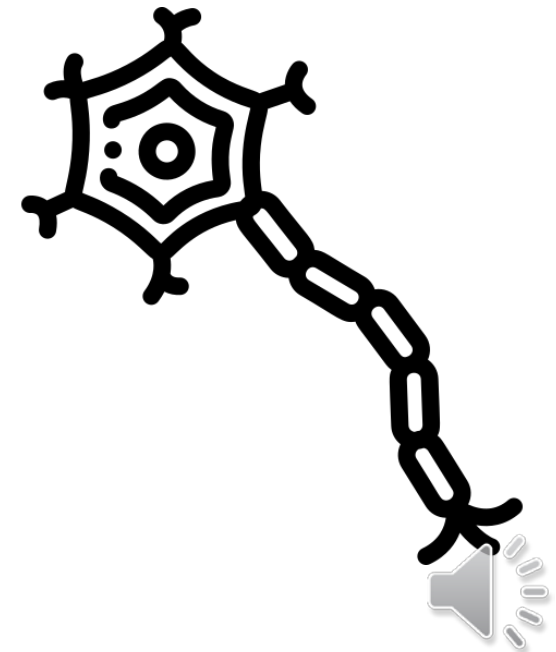
Attention and Its Impact on Learning

- Neurocognitive Perspective: No learning can take place without a person first “attending” to a task that is to be learned. Attention is the essential first step.
- Information cannot “enter” the brain to be stored in memory if there is an attention problem.



Attention Deficits: What Causes It?

- Genetics and multiple neural circuitry are possible causes. Not definitive. Primarily a frontal lobe issue.
- Low dopamine and norepinephrine in PFC as well as white matter tracts, but not in all cases
- Typically, Low PS and WM Cog Scores



II. Attention: Supports and Interventions

1. Expert Guidance
2. Interventions
3. Accommodations

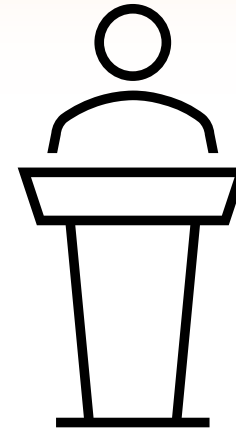
Video On ADHD from Understood.org
<https://youtu.be/vVZ2qbMgMPs>



ADHD: Not Just Attention



1. Expert Guidance





1. Attention Difficulties: Expert Guidance

Attention problems (ADHD) are one of the most widely studied neurodevelopmental disorder.

- ✓ Student Motivation—use metacognitive strategies- Provide the “Why”
- ✓ Don’t change the student, change the environment- “good fit”
- ✓ Behavioral techniques are effective, especially when combined with other evidenced based practices.



2. Intervention



2. Attention Interventions

- Behavioral techniques are effective:
 - ✓ Reinforcement (reward, positive feedback)
 - ✓ Supervision-simple and effective (consistent feedback)
 - ✓ Self-monitoring skills



Intervention: Self-Monitoring

- Self Monitoring is an intervention because it is a skill development that directly addresses a deficit area.
- Increases on-task behavior-especially if rewards are employed (combination of rewards + self-monitoring).
- Doesn't "cure" but helps increase a skill that spans school to other life domains.
- Focus not only on "on-task" awareness, but also task performance awareness (work quality).

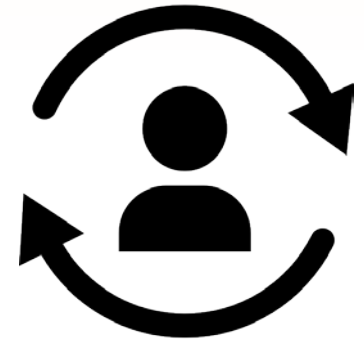


Intervention: Self-monitoring

- Supporting by meta-analytic research: (Alsalamah, 2017)
- Can use a variety of cues to elicit self-monitoring
 - Visual timers
 - Colored cards
 - Checklist-when / then strategy
 - Tactile cues
 - Technology-mobile device-reminder to focus



3. Accommodations





3. Accommodations

1. Environmental—highly effective with supervision
2. Provide opportunities for real physical movement
3. Routine, set reminders, and supervision (true checks)
4. Help simplify information so it does not overwhelm; organize information for efficient learning
5. Use contingency strategies- “if-then”





Accommodations

- Keep new learning lessons and tasks concise, in short sessions; (i.e.: frequent sessions vs. long lectures and projects.)
- Improve “checks” by priming: Say, “*I will say three important points, when I’m done you will say them back to me. Ready....*”



Summary



- Attention is a “super-block” neuro-cognitive function of the BBBD. Without attention, learning cannot take place. Attention deficits sometimes associated with PS and WM difficulties.
- Combined behavioral techniques, environmental structures / information presentation
- Common accommodations are creating routines that include prompts, supervision, reducing workload to manageable parts, frequent movement breaks, use of technology, and quiet spaces for learning sessions.





Thank You For Listening End of Module 2.4



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