

How do Sensory Integration and Executive Functioning Skills play a Role in the Preschool Classroom?

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What is Executive Functioning? The ability to

- ▶ Plan
- ▶ Sequence
- ▶ Organize
- ▶ Set and reach goals
- ▶ Maintain attention
- ▶ Display self-control
- ▶ Follow multiple step directions
- ▶ Self regulate
- ▶ Shift and disengage, when necessary
- ▶ Inhibit and predict

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Executive Function used in a Child's pretend play

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Executive Function in play

- ▶ When children self initiate their play and elaborate in their play, they learn to self regulate.
- ▶ Play has rules. It keeps the child in line.
- ▶ Play is self gratifying, so the child's emotional needs are met.
- ▶ During play, the child functions at a higher developmental level. They don't necessarily need a teacher to help with self regulation. They're doing it on their own.
- ▶ The child must inhibit and restrain his behaviors and impulses to stay engaged in the story line of the play.

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Co-Regulation

- ▶ The process of caregivers providing support for kids to develop self-regulation is referred to as co-regulation.
- ▶ Children aren't born to regulate themselves.
- ▶ A child first learns to regulate with others and then is gradually able to use these regulation tools more independently.
- ▶ When teachers and parents are regulated, calm and predictable, then children learn to be regulated.
- ▶ A shift happens between the ages of 5-7.
- ▶ Children begin to have more self regulation, impulse control and empathy.
- ▶ How do we stay self-regulated?

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What do you need to be self-regulated to be your best self in your classroom?

- | | |
|------------------------------------|--------------------------------|
| ▶ Well fed | ▶ Positive feedback |
| ▶ Well rested | ▶ Personal safety |
| ▶ Good physical health | ▶ Feeling valued |
| ▶ Sense of direction | ▶ Connection/community |
| ▶ Support in moments of insecurity | ▶ Secure/healthy relationships |
| ▶ Sense of meaning in work | ▶ Peaceful atmosphere |

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Activities to help with Executive Function and self-regulation

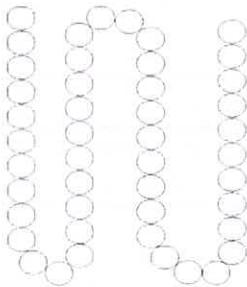
- Visual picture charts for morning and going home routine.
- Create a backpack picture tag and hang it on the zipper of your student's backpack. One should be a "Take home" picture tag and a "Bring to school" picture tag.
- Take a picture of how your child should look when he/she is ready for carpool.
- Board games - Memory, Shopping for Shabbas, Slapzi, Legos, building blocks, sticker puzzles, eye spy
- Card games - Go fish, Crazy Eights
- Guess what's missing on the tray: Have a bunch of items on a tray. Take one away. Children guess which item is missing.

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Activities to help with Executive Function and self-regulation

- Mystery box: Use a pretty box and put something interesting inside that is connected to the lesson. Pass the box around and have the children shake it and try to figure out what's inside the box
- Hot and Cold
- Students sit in a circle or at a table. Hand out a letter card to each student. Give out 2 of the same letter. Teacher says a letter, the students with that letter, change seats.
- Roll a die, whatever number the die lands on, is the number of Aleph Bais cards the child or class reads. If it lands on the number 5, read 5 cards.
- Extension of activity: Put 5 dots either with dot markers or dot stickers on a dot picture. When the picture is filled with dots, the activity is over.
- 5 up

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Activities to help with Executive Function and self-regulation

- Act out a mitzva: Have pictures of mitzvos on different cards. One child acts out a mitzva. The other children guess which one they're acting out.
- Who's missing? All children close their eyes. One child goes out of the room and the children guess who's missing.
- Children sit around a parachute. One child goes out of the room. One child hides under the parachute. The child has to guess who's hiding.
- Create a caring space: Ice packs, band aids, lotion, tissues, cards and crayons to write a card, heart stickers, to give to a hurt child or to comfort a friend
- Zones of regulation

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5		Angry I am not happy. I am not smiling. I am not talking. I am not listening. I am not playing. I am not learning.
4		Overwhelmed I feel like I can't do anything. I feel like I can't stop. I feel like I can't start. I feel like I can't finish.
3		Frustrated I am not happy. I am not smiling. I am not talking. I am not listening. I am not playing. I am not learning.
2		Anxious I am not happy. I am not smiling. I am not talking. I am not listening. I am not playing. I am not learning.
1		Happy I am not happy. I am not smiling. I am not talking. I am not listening. I am not playing. I am not learning.

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Coping Skills Wheel

9 Ways to Handle Big Emotions



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Activities which develop self regulation

Movement based activities

- ▶ Yoga exercise
- ▶ Freeze dance, red light green light 1,2,3
- ▶ Volleyball with a balloon
- ▶ Jump on a trampoline
- ▶ Run up and down the stairs
- ▶ Bounce on an exercise ball
- ▶ Jump on a big pile of pillows

Visual and auditory activities

- ▶ Create a calm jar (water, food coloring, glitter glue), lava lamp
- ▶ Read a book
- ▶ Listen to favorite music

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Activities which develop self regulation

Mouth/oral activities:

- ▶ Breathing strategies: smell the flower, blow the pinwheel, breath in and raise your hands, breath out and slowly let them down, smell the hot chocolate & blow on it
- ▶ Blowing bubbles
- ▶ Frozen dried fruit
- ▶ Drink cold water with a straw

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Activities which develop self regulation

Skin/touch activities

- ▶ Provide sensory tools like stress balls, fidget toys, play dough
- ▶ Weighted blanket
- ▶ Lotion massage
- ▶ Polish each other's nails, finger painting

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What is Sensory Integration?

- ▶ Sensory Integration is the normal neurological process of organizing sensations for our use in everyday life
- ▶ Sensory pertains to our senses - hearing, sight, smell, touch, taste, and perception of motion/movement and gravity
- ▶ Integration is the process of making whole, unifying, allowing the brain to use the information that the senses take in

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What is Dysfunction in Sensory Integration (DSI)?

- ▶ DSI occurs when the brain inefficiently processes sensory messages coming from a person's own body and his/her environment
- ▶ The person has difficulty responding in an adaptive way to everyday sensations that others hardly notice or simply take in stride

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Specific red flags of DSI

- ▶ Is over-sensitive or under-responsive to sensations of touch, movement, sight or sound
- ▶ Has an unusually high or low activity level
- ▶ Is impulsive, fidgety, inattentive, and easily distracted
- ▶ Has a poor sense of body awareness
- ▶ Has immature gross motor skills and fine motor skills
 - ▶ uncoordinated and clumsy

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Specific red flags of DSI

- ▶ Has poor motor planning (organizing one's body to do a complex action)
- ▶ Fatigues easily
- ▶ Has poor oral-motor skills (chewing, speaking)
- ▶ Frequently misjudges distances between herself and other people and objects

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Specific red flags of DSI

- ▶ Responds slowly to verbal instructions or questions, or is overwhelmed by them
- ▶ Prefers the "same old, same old" and resists giving anything new a chance, i.e., foods, clothes, toys, games, babysitters, substitute teachers
- ▶ Has a hard time with transitions
- ▶ Has difficulty revving up or calming down, waking up in the morning, and falling and staying asleep at night

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Sensory Integration Activities - Gross motor activities

- ▶ Deep pressure input - firm, gentle pressure that is applied to the body that relaxes the nervous system
- ▶ Children who exhibit strong physical behavior need deep pressure input
- ▶ Activities with deep pressure input tend to be calming, soothing and organizing

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Sensory Integration Activities - Gross motor activities with deep pressure input include:

- ▶ Sensory breaks
- ▶ Somersaults, jump ropes
- ▶ Wall push ups, sit ups
- ▶ Sit and spin toy
- ▶ Carrying in the groceries
- ▶ Sitting on a therapy ball while engaged in some activity or game
- ▶ Skating, Swimming
- ▶ Mini trampoline with pillows around the edges of the trampoline (heavy work)
- ▶ Parachute play
- ▶ Swings, tire swings, merry go round, slides, rocking horses, tunnels
- ▶ Play without shoes
- ▶ Stamping feet on bubble wrap
- ▶ Wiping off table after lunch with wet sponge

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Sensory Integration - Fine motor activities

- ▶ Playdough - use scissors, plastic knife, fork and spoon, kitchen gadgets, egg slicer, potato masher, cookie cutters, clips, buttons, shells
- ▶ Calming scents for playdough: almond extract, cinnamon, hand lotion, vanilla extract, coconut
- ▶ Use tongs to pick up small porcupine balls, cotton balls, pom poms
- ▶ Push poker chips through a thin slot made on the top of a container
- ▶ Screw and unscrew lids of baby jars, shampoo bottles
- ▶ Wooden boards with nails and rubber bands - motor planning
- ▶ Work on a class puzzle

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Sensory Integration - Fine Motor activities

- ▶ Velcro vegetables - pinching
- ▶ Soap grater
- ▶ Buttoning
- ▶ Shaving cream
- ▶ Hand lotion
- ▶ Bean bag games
- ▶ Clothes pins
- ▶ Spray the snow with spray bottles
- ▶ Sand play
- ▶ Tee pegs, hammer, burlap covered Styrofoam squares
- ▶ Bingo markers
- ▶ Stickers

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Executive Functioning Skills Survey

For each item, insert the number that corresponds to your answer:

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

- **Planning and Organization**

- I can set clear, realistic goals for myself.
- I can develop a step-by-step plan to reach my goals.
- I keep my workspace or materials organized.
- I can manage multiple tasks at once without becoming overwhelmed.
- I can adjust my plan when unexpected events occur.

- **Time Management**

- I can estimate how long tasks will take and plan accordingly.
- I make sure to complete tasks before their deadlines.
- I can prioritize tasks based on urgency and importance.
- I avoid procrastination and start tasks promptly.
- I regularly review and adjust my schedule as needed.

- **Working Memory**

- I can remember instructions or information long enough to apply it.
- I can mentally track multiple pieces of information while completing a task.
- I can recall important details without needing to be reminded.
- I can follow through on tasks without forgetting steps or details.
- I can use past experiences or learned information to solve new problems.

- **Cognitive Flexibility**

- I can easily switch between tasks or ideas without difficulty.
- I can adjust my approach if something isn't working or if new information arises.
- I can shift my focus when priorities change.
- I am open to changing my mind or adapting to new perspectives.
- I can handle unexpected changes to my schedule or plans without stress.

- **Self-Monitoring and Regulation**

- I can recognize when I'm making a mistake and try to correct it.
- I reflect on my performance and look for ways to improve.
- I can keep my behavior in check, especially in challenging situations.
- I can manage my impulses and avoid acting impulsively.
- I can stay calm and focused when I feel frustrated or upset.

- **Problem Solving**

- I can break down complex problems into manageable parts.
- I can consider multiple solutions to a problem and weigh their pros and cons.
- I can think critically to solve problems creatively.
- I can analyze a problem and identify its root causes.
- I can follow through with a solution and adjust it if necessary.

- **Decision Making**

- I gather enough information before making important decisions.
- I consider the consequences of my actions before deciding.
- I can make quick decisions, when necessary, without being paralyzed by uncertainty.
- I trust my judgment and feel confident in the decisions I make.
- I seek advice when I need help making a difficult decision.

- **Emotional Regulation**

- I am able to stay calm when faced with a stressful situation.
- I can control my emotional reactions to frustrating or upsetting events.
- I can refocus quickly if I become distracted by emotions.
- I am able to express my feelings appropriately in different situations.
- I can manage stress and keep it from interfering with my tasks.

- **Task Initiation**

- I can begin tasks without needing someone to remind me.
- I feel confident starting new projects or tasks.
- I don't procrastinate when there's a task to complete.
- I can overcome the feeling of being stuck and get started on tasks.
- I have a clear idea of how to start tasks and not waste time figuring it out.

- **Attention and Focus**

- I am able to stay focused on a task for long periods without becoming distracted.
- I can block out distractions in my environment to stay on track.
- I can refocus quickly if I get sidetracked while working.
- I have good concentration even in environments with lots of noise or activity.
- I can maintain attention to detail throughout a task, even if it's lengthy or repetitive.

Total Score Range: 5-250

Interpretation:

200-250: Excellent EF – skills are well developed.

150-199: Average EF – strengths in some areas, but room for improvement in others.

100-149: Below Average EF – multiple areas needing attention and development.

50-99: Significant challenges: considerable support and intervention may be needed to develop EF skills.