

1 **The Mystery of GATE kids:
How to help them succeed**

Through:

- Nervous system principles
- Executive functioning

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3 **Objectives for Tonight**

- As a parent, there were things I saw that made life hard for my child
 - We see the struggle that many teachers don't
 - We don't want to change "who" our child is...we want to help them be able to use their enthusiasm and unique qualities in real life
 - I knew my child was smart, but the work production didn't show this
- Background knowledge on regulation: Lots out there! My focus is on sensory processing, nervous system and brain development (EF)
 - Critical for your perspective
 - Important tool to help your child come up with strategies
 - Preserves self-esteem- our child is perfect
- Strategy for specific behavior that makes parenting and school hard
 - There seem to be pretty consistent issues parents see among their kids

4 **What can parents do?**

1. The biggest gift you can give your child is awareness and understanding for WHO they are
 - I don't want to change your kids, or make them fit into a mold that was created for "typical" kids
 - I don't want to make excuses for behavior
 - Explanations for behavior are critical if you are to understand their behavior
 - I don't want to deny that behavior or performance isn't important....because it is, in school and in life after school
2. Strategies are the next step to finding success and happiness in life

5 **Parenting today**

6 **The Brain**

- The brain drives all our behavior
 - Behavior Issues?
 - Homework issues?

- Self esteem?
- Neuro-typical brains – what school is designed for
 - Society shows us what is “normal”
- Gifted brains- very unique and can present challenges despite how smart and capable they can be

7 **Christopher Taibbi describes distinctions between bright and gifted:**

- A bright child knows the answer; the gifted learner asks the questions.
- A bright child works hard to achieve; the gifted learner knows without working hard.
- A bright child enjoys school; the gifted learner enjoys self-directed learning.
- A bright child has a fine imagination; the gifted learner uses that imagination to experiment with ideas and hunches.
- Instead of being taught what to think, gifted kids need help being taught how to think

8 **The Gifted Brain**

- Asynchronous development- the intellectual, physical, and emotional developmental windows are all over... The higher a child's IQ, the more out of sync their development is likely to be.
- Potential vs. Performance
 - 3+5=8 today and yes, tomorrow too
- Over-excitability: cognitive and sensory
- Characteristics of the gifted brain:
 - Sensitive
 - Intense

9 **Over-excitability (OE)**

- Inborn
- Heightened ability to respond to stimuli= hyper-sensitive, emotional
- The quality of an experience is different – may see things differently
- Reality is stronger and different
 - They may have trouble with ethical issues; rules matter more than play
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10 **Different areas of over-excitability that drive the behaviors we see:**

- Intellectual- incredibly active minds, intensely curious, keen observers, moral thinking
- Psychomotor- active, energetic, lots of talking, enthusiastic, need for action, compulsive, competitive, can misbehave
- Imaginational- inventors, fantasy, dreamers, hard to focus in class because of tangents
- Emotional-somatic symptoms, strong emotional attachments, compassionate
- Sensual-sight, touch, smell, hearing, taste. Aesthetics, music, language and art

11 **Over-excitabilities are seen with sensory processing issues too!**

- Our nervous system is where information gets processed & integrated
- Over-excitabilities can create issues with regulation because they affect

1. Focused attention
2. Behavioral regulation
3. Social skills
4. Study habits and other school-based requirements

• People (society) view our child based on all these things- these things should not define who our child is, but they DO change the perspective of those working with our children

12 **Similarities of Sensory and Gifted**

Both can have sensory systems in over-drive and hyper-aware of everything

- Need for success and fear of failure
- Brain is processing and using more pathways and connections than the neuro-typical brain (which can mean overload)
- Heightened awareness of sensory input
- Difficulty with emotional and self-regulation (limbic system)
- Difficulty with social interactions, lagging emotional development
- Rigid or narrow interests
- Can become preoccupied with specific things
- Difficulty with change

13 **Nervous system Responses**

Parasympathetic Nervous system (PNS)-
rest and digest.....AND LEARN!

Sympathetic Nervous system (SNS)-
fight or flight (PROTECT)

14 **Fight or Flight:**

Our Sympathetic nervous system at work

- Our most primitive system- easy to fall back to when stressed
- ***parking lot example and math problem***
- Affects learning, social skills, behavior and overall performance
- Blood flow is preserved for limbs to fight or run, it's not in the brain for learning
- Fight can be the behavioral response we see
- Flight can look like avoidance, tuning out, laziness, behavioral outbursts or anything that will essentially allow them to avoid the given circumstance or activity (which can look like defiance)

15 **Toxic Stress and Over-excitability**

Increased stress reactions

- Repeated stress affects all the systems of the body
- Cortisol is released when we are stressed

- Affects how food is digested because it changes the acid in the gut which affects how the food protein is digested
- This affects the B12 which affects the nervous system, energy, mood, and vision
- Health issues like diabetes, heart conditions and decreased life expectancy have been linked to toxic stress
- ****toxic stress can come from expectations that are never adjusted so they never find success****

16 **Regulation**

- Regulation is simply the ability to function even when things aren't perfect
- Regulation is tricky and completely irrelevant of age or ability to communicate.
- Regulation is completely dependent on the ability to self-monitor

17 **Self Monitoring**

- The ability to stop, reflect, then problem solve
- There are times this simply doesn't work:
 - We can't figure out what is wrong
 - We may know what is wrong, but have no idea what to do about it
 - We may not be reading cues, feeling input or able to effectively respond to all the alarms going off that are supposed to help us regulate

18 **Behavior and regulation**

Any behaviors that are disruptive have meaning

- Some are based on behavioral NEEDS- needing attention, a response to something from the past or habit
- Many behaviors are based on SENSORY NEEDS

Telling a child to "STOP" does not allow them to fulfill their NEED

WE NEED A TOOL BOX OF STRATEGIES FOR SELF-REGULATION
WE NEED TO REPLACE BEHAVIORS

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19 **Our kids are not broken**

They are just different
 Different is awesome

Different can be very hard
 Playing school can be hard

20 **SENSORY PROCESSING**

21 **Sensory Processing:**
Is the information even going in?

- Our nervous system is like a bunch of wires with connectors and lights at each end telling the

brain to "read and respond"

- --Now imagine multiple lights turn on--What if NO light comes on?
- --What should the brain focus on?
- --System clogs or nothing registers--no clear picture of what is happening-- no idea of what to do next or how to start, continue or even when to finish
- --This kid looks disorganized, frustrated at the littlest things, constantly moving or talking

22 **Why some kids can't sit still and listen**

- Different thresholds affect how kids can attend to class work and actually learn.
- Adults have thresholds too- socially appropriate
- If kids can't sit still not necessarily because they have too much energy.
 - Think about this threshold: are they reaching threshold?? Could they be beyond threshold??
 - Have we set them up to fail?
 - Do they have the strategies and coping mechanisms built into their environment or are they constantly told to "sit still", "sit down", "look at me", "don't fidget"

23

How do you support your child in school when "playing school" isn't designed for movers or when it's too noisy or intense to support learning for how they're wired?

24 **One of the most effective tools is movement...for everyone!!**

- When you move your body, endorphins are released that make you feel energetic, motivated and happy
- The more signals our brain sends and receives, the more efficient the synapses within the brain are for later learning
- You can actually prepare your brain to learn with movement
- The more senses used during play/learning, the easier it is for our brain to store and retrieve information for later and more efficient use

25 **A "sensory toolbox" isn't just for sensory processing challenges...all kids benefit**

- Teach children how to get the kind of input they need
- Strategies **MUST** include the sensory system
- When they get the kind of sensory experience their nervous system is "craving" they can attend, perform tasks, interact with others appropriately and demonstrate self-control.
- Teaching children **HOW** to learn will empower them to be independent and confident for higher levels of learning.

26 **Executive functioning**

- The air traffic control center of our brain
- They allow for flexibility because we can determine the significance of a situation and make an alternative plan
- Socially they are critical because they allow us to inhibit inappropriate behaviors
- Someone with good executive skills can function even when there are interruptions or no immediate reinforcement

- All “teenagers” and children have weak executive skills
- Executive skills mature around age 25

27 **The Importance of DOING**

- Execution means “to do”
- When we do things that our children can do, we perfect OUR executive skills, but we don’t give their brain any practice
- Encourage the plan AND execution with only guidance- it WILL take longer at first but it is part of brain development
 - Talk out loud to model our future thinking
 - Discuss “how” and “when”
 - WAIT time
 - If they struggle, let them instruct you in the execution
 - Make it fun!

28 **Self-Regulation IS Executive Functioning**

Internal regulation is more complex as kids age (temporal-spatial window)

Resist distractions and inhibit (stop) responses that are fun vs. the goal

29 **Executive skill weakness symptoms:**

- Can’t start work, trouble finishing work, distractions, or everything takes WAY too long
- May do homework, but doesn’t hand in homework
- Poor planning: always late, never have supplies, seem lost, forget instructions
- Low tolerance for frustration
- Doesn’t notice impact of their behavior on others
- Chooses fun over homework
- Meltdowns because work isn’t done, AGAIN. Difficulty remembering last time this happened (yesterday!)
- Disorganized writing, and spaces they inhabit
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31 **Working memory is one of the core functions of executive functioning**

-AND many times the reason kids are late, inefficient, forgetful, or “lazy” ...they aren’t DOING anything, even after instruction

1. Non-verbal working memory is a mental image (developmental)

2. Verbal working memory is the stated intention that comes later

32 **Declarative language helps kids "see" and "know" how to plan and execute**

- Talk out loud when you work through a problem or a plan- talk your kids through your mental image through time and space...make predictions, ponder opportunities, consider possibilities and reflect on past experiences
- Invite child to notice information and develop a plan vs. following a direction (receptive language skill) "get your planner, pencils and calculator" vs. "what do you need for this homework"

33 **Coaching**

Time management

- Understand the sweep of time and how it is robbing them of all their fun
 - Use a calendar- see procrastination
 - Estimating how long tasks take: including non-school things

Planning and organization

- Including school work but also the flow of their day
- Materials, bedroom, locker, BINDER
- Plan in one space and time execute in another
 - (90% of planning happens in a different space than where the execution occurs)
 - CRITICAL FOR MIDDLE SCHOOL WITH TRANSITIONS, DIFFERENT CLASSES, LOCKERS

Review self-monitoring and hold them accountable for the "doing"

***Coaching is done out of the moment ** (fight or flight)

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- Non-verbal working memory
 - DRIVES "IF, THEN" THINKING and SELF-TALK
 - Takes us through space and time (temporal-spatial window)
- Verbal working memory
 - TO CARRY OUT A GOAL, YOU HAVE TO STATE *HOW YOU WILL DO IT*

35 **Working Memory and the "Mind Mime"**

Sarah Ward and Kristen Jacobsen

A mind mime is a way to see into the future for "if...then" thinking

M- Make an image

I- Imagine how I look in this future situation

M- Mental time travel or "how am I Moving"

E- Emotions I feel in the future after I'm done.

36 **Common issues we deal with at home**

...and how to support our kids through them.

37

"I GOT IN TROUBLE FOR TALKING"

"I DON'T HAVE ANY PENCILS"

"I DON'T HAVE ANY FRIENDS"

38 **Help Child Learn Situational Awareness...Read the Room-**

Teach them to S.T.O.P

Space- Where am I? What's going on? What is expected? Where am I going next?

Time- What is happening at this moment? What pace is required? What is next?

Objects-What is needed to do task? How are things organized? What will I need?

People- Read the person..Who is in this space that can help, distract etc., What is their mood? Are there peers who distract me? How should I adjust my behavior because of this person or what I am reading from my space?

39 **"I FORGOT MY HOMEWORK"**

"I DID MY HOMEWORK BUT THE TEACHER DOESN'T HAVE IT"

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"THIS HOMEWORK TAKES FOREVER"

"I NEVER HAVE TIME TO PLAY"

42 **Time management- critical for executive skill development**

- If you don't have a concept of time, you can't execute
- There are very few time markers today because of technology, instant messaging, DVR's etc...no one has to wait
- Kids don't understand the "sweep of time"
- Play is different today and executive skills aren't forming
- Instant gratification with technology is also changing the way brains develop and work

43 **Changing how we SEE time**

- Seeing how much time is dedicated to work, school and eating or sports helps them to see where the holes are
- These holes are affected by focused attention
- When they see the "fun time" slot, it is motivating (like our mental image of being done with the dishes"

44 **360 thinking app**
by Cognitive Connections

45 **Managing the "Time Robber"**
Where did our time go?

46 **"I DON'T WANT TO DO MY HOMEWORK"**

47

- 1. "What will DONE look like?" Make a picture in your head of the finished product or what you get to do when you are done.
- 2. "GET READY"- Mentally go through the activity- the where and when and then go get the items, prepare for the activity (this is critical for ADHD kids because of the distractions found when they get up to leave their workspace for materials)
- 3. "DO"- You need to understand concepts of time for this step!

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49 **"THIS ASSIGNMENT IS DUE TOMORROW"**

"There's no way I can get this done by tomorrow...why would my teacher expect this much work to be done by tomorrow?...I just can't do all this by tomorrow!"

50 **What does procrastination look like?**

- Help them see a visual effect of procrastination- use a calendar and the future picture parts cut up and placed on a calendar...move as they put off one part of task to see how they stack up the night before they are due
- Help them break up the parts, and attend to how much time they have and will need to accomplish the task

51 **"I CAN'T WRITE"**

"I CAN'T THINK OF ANYTHING MORE TO WRITE"

52 **Writing Issues**

- Of all academic tasks, writing requires the most executive skills!
- **this is why alternative learning methods besides paper and pencil help these kids to truly retain!
- The area of the brain that affects writing and word processing (graphomotor) is the same as for executive skills
- Dictation
- Pictures vs. words in organizers

53 **Writing and organization in pictures**

54 **Problems we see and strategies to try from a sensory perspective:**

55 **Frustration**

- Allow extra time to process
- Show and Tell
- Teach deep breathing
- Make sure it is the "just right challenge"
- Do parts of the project
- Use technology to aide in work
- Break up activities that are difficult or multi-stepped
- Cover part of the work or use colors to indicate how much work to do

56 **Times of frustration or outbursts**

- Refrain from talking the child through the moment
- Allow for a break or change in scenery before talking
- Picture prompts and simple "first/then" commands
- Try to create environments that are organized, clutter free, dim lights with calming/quiet music

57 **Trouble with changes in routine**

Kids who depend on structure and predictability for self-regulation melt with change.

- Preparing them through picture schedules then WAIT
- Take time to talk about possible problems that could arise
- Incorporate heavy work
- Visual timers help kids see how long they have until their next transition
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58 **Anxiety**

- Picture (or word) schedule- show major events of the day or task
 - quick, easy clue that doesn't require the brain to work
- Structure: If your child knows the general sequence of the events in their day, they can better anticipate and prepare for it
- NEVER demand eye contact or a verbal response

59 **Limiting Screen Time**

- Brain and nervous system needs neck extension for self-regulation
 - Activates the brainstem
- Visual system needs stimulation which is through full range of motion for visual tracking
- Brain needs sensory input of tactile, proprioceptive and vestibular
- No more than 2 hours
- Screens have changed the way our children PLAY

60 **A note on anxiety and depression**

- Although there is still much to be learned about anxiety and depression, new research is emerging that indicates sensory diet strategies can be useful in the treatment of these difficult diagnoses.
- Movement/exercise increases the level of serotonin in the brain, which is the “feel-good” neuro-chemical that is increased by most anti-anxiety and anti-depression medications
- 20 minutes of actual “sweating” 3 times a week can have similar effects to a therapeutic dose of anti-depressants
- This alone shows how powerful movement is for the nervous system, brain and emotions

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- Behavioral issues can be just that and natural consequences are a vital learning tool to help mold behavior
- Kids need boundaries and structure...even if they have sensory based issues, natural consequences can help them learn the process of their reality
- Natural consequences keep kids from blaming an adult
- Give breaks or change the space- may change the attitude
- Help kids examine if their “system” prevented them from making good choices- they still need guidance but we must listen to them and what they think happened
- NEVER TRY TO TALK IT OUT WHEN THEY ARE UPSET OR IN THE MOMENT!

62 **“Kids do well if they can” (Dr. Greene, Lost at school)**

- If the consequences we have been using are not changing behavior why do we continue to use them???
- Kids with behavioral challenges already know right/wrong
- If kids COULD do well, don’t you think they WOULD? Why aren’t they?

63 **Apps, Equipment, Etc.**

- 360 thinking app- clock that shows “get ready, do done” colors
- Onlinestopwatch.com/largeonlineclock
- Cognitiveconnections.com- time cop, time robber, planner
- Dynamic seat cushions- isokinetics.com but also found at amazon
- Snap Type app lets you take a photo of a worksheet and write or type on it First...Then app lets you take pictures and quickly put them into first then jargon but you can always just use your phone/iPod camera
- Planner pro- Daily calendar. View month/week, track task, make lists, sync between devices

- Forest app: forest-stay focused (\$1.99)

64 **Books or Authors for Executive Functioning, Behavior and Parenting**

- Dr. Greene: The Explosive Child, Lost at School, Lost and Found
- Anthony Wolf: Get out of My Life, but first could you drive me and Cheryl to the mall?
- Ana Homayoun: That Crumpled Paper Was Due Last Week
- Howard Glasser: Transforming the Intense Child Workbook (and all other Nurtured Heart Approach books)
- Richard Guare PhD, Peg Dawson EdD, et al. Smart but Scattered (all of their books are good-one for teens too)
- Sarah Ward, Kristen Jacobsen. Efractice.com, Cognitive Connections