The Developing Brain & Classroom Success





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About Me



Amanda Lee, M.A.Ed





- Masters of Arts in Education, Best Practices
 - In Education field over 15 years
- Center Director,
 Brain Balance San Diego
 Brain Balance Chula Vista
- Internationally Board Certified Cognitive Coach, IBCCES



Today's Topics

- Brain Balance introduction
- Learning and Brain Development
- ➤ At Home and Distance Learning Tips
- Brain Breaks
- Executive Functioning
- Motivation
- Big Emotions and Behavior
- ➤ How can Brain Balance help?
- > Q&A

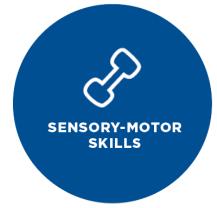




The Brain Balance Program

The Brain Balance Program* is specifically designed to strengthen and build new connections through a unique combination of physical, sensory, and cognitive activities.









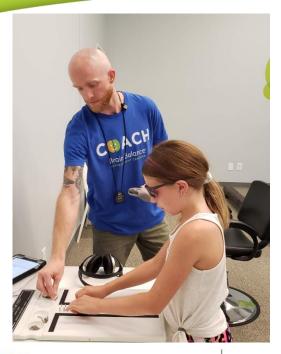




*Serving ages 4-24



Who Does Brain Balance Serve?



We work with students who are developmentally delayed, diagnosis or not:

- Academic Issues
- Social Issues
- Behavior Issues
- Lack of Focus
- Trouble Making Friends
- Family/Social Relationships
- Tantrums/Emotional Outbursts/Sensory Meltdowns
 - Immaturity



- ADHD
- Learning Disorders (Dyslexia, comprehension, Dyscalculia)
- Processing Disorders
- Asperger Syndrome/ASD
- Anxiety
- Sensory Integration
- PDD-NOS
- Other Spectrum Disorders





We Get to the Root of the Problem









What is Learning?

the acquisition of knowledge or skills through experience, study, or by being taught. (Oxford English Dictionary)

physical process in which new knowledge is represented by new brain cell connections.

Did you know there are about 100 BILLION neurons in the brain???





Common Types of Learning Challenges

- Attention / Focus
- Dyslexia
- Dyscalculia
- Dysgraphia
- Dyspraxia
- Anxiety
- Reading / Comprehension
- Executive Functioning







Signs of Learning Challenges

- Schoolwork is not often completed and brought home
- Homework time is a long battle
- Schoolwork takes longer than normal to complete
- Reading or writing is long and laborious or stressful
- Child often forgets instructions
- Child is frustrated
- Child exhibits task avoidance
- Child feels dumb, lacks confidence
- Child is behind grade level
- Child exhausted at end of school day
- Frequent headaches / stomachaches on school days







BRAIN HIERARCHY

PARIETAL LOBE

*Sensory Information

FRONTAL LOBE

- *Abstract Thinking
- *Problem Solving
- *Reasoning
- *Executive Functioning
- *Organizing
- *Motor Functions
- *Regulates Emotions
- *Expressive language

FUNCTIONS

- *Organizes thoughts on paper
- *Remembers facts from teacher
- *Starts and completes tasks
- *Tells stories

TEMPORAL LOBF

FRONTAL

LOBE

CEREBELLUM

SPINAL CORD

TEMPORAL LOBE

- *Speech
- *Auditory Processing
- *Hearing
- *Behavior
- *Emotions
- *Short-Term memory
- *Long-term memory

FUNCTIONS

- *Processes what the teacher teaches
- *Fear
- *Fight or Flight
- *Retains Facts



FUNCTIONS

- *Taste

OCCIPITAL

LOBE

PARIETAL

LOBE

- *Touch
- *Smell
- *Temperature

OCCIPITAL LOBE

- *Visual System
- *Visual Information

FUNCTIONS

- *Processes words on a page
- *Knows shapes and sizes
- *Recognizes letters
- *Knows left from right

CEREBELLUM

- *Balance
- *Coordination
- *Attention
- *Rhythm
- *Proprioception
- *Vestibular

FUNCTIONS

- *Kick a ball
- *Throw a ball
- *Jump on one foot
- *Ride a bike





Right & Left Hemispheres





Imbalanced Brain

Frustrates child's ability to:

- Learn
- Make friends
- Control emotions
- Behave appropriately
- Coordinate motor skills
- Comprehend details or the "big picture"







Signs of Imbalance

Left Brain Weakness

Early Indicators:

- Missed milestones
- Late walking, crawling, or speaking
- Mixed dominance (i.e. handedness: inconsistent use of R or L)
- Persistent infant (primitive) reflexes
- Poor sensory motor skills
- Cognitive and social issues





Poor Math, Verbal, Spelling Skills Poor Reading Skills

Fine Motor Problems

Poor Letter Recognition

> Poor Auditory Processing

> Weak Immune Response

Poor Memory for Details

Misses Small Details

Poor Self-Esteem

Poor Motivation

Task Avoidance

Right Brain Weakness

R

Awkward/Clumsy

Hyperactive/Anxious

Poor Nonverbal Skills

Impulsive/Lacks Focus

Lacks Emotional Control

Poor Reading Comprehension

Obsessive/Repetitive Behaviors

Immature Social Behavior

Allergies/Autoimmunity

Lacks interest in Sports

Misses the Big Picture

Poor Eye Contact

Space Invader



What Does Research Tell Us?

Cambridge University - Brain connectivity involved with ADHD, cognition, learning, behaviors and mental health

(Siugzdaite et al. 2020)

- Connectivity and network hubs were strongly associated with severity of learning difficulties
- Connectivity also play a key role in neuro-developmental concerns (ADHD)
- Previous Cambridge University research also showing a role in brain connectivity and mental health concerns

At Brain Balance, our students have demonstrated a statistically significant change in 11 of the 12 Cambridge Brain Science cognitive tasks.





Getting to the Root of the Issue

Don't just *mask* the issue or concern yourself only with the symptoms (tip of the iceberg).

Improved brain connectivity leads to improvements in cognitive tasks and executive functioning.

Cognitive Tasks	Executive Functioning
Focus	Inhibition
Memory	Behaviors
Learning	Emotions
Comprehension	Organization
Reasoning	Self-Motivation
	Problem Solving

By building stronger brain connections, you can help your child get to the <u>root</u> of their challenges and build a stronger foundation for success.





Neuroplasticity

The brain can change!

brain's ability to change and adapt as a result of experience.

Learning physically changes the brain!





How We Engage the Brain at Brain Balance



Research

<u>Harvard/McLean:</u> Preliminary evidence shows improved brain connectivity as a result of Brain Balance exercises (Teicher et al., 2019)



"This is a degree of improvement that we have not previously observed in children with ADHD unless they were receiving medications, and then only if they were receiving the correct medication at optimal dose."



Studies show that exercise can help with processing information at a faster pace than not engaging in any physical exercise.





At Home

MOVEMENT MATTERS! Use your muscles to engage your brain.

- 3-5 minutes of elevated heart rate and using your muscles in the AM
- Frequent brain breaks
- Counter screen time with movement!
 - Want to watch a 30-minute show? Go run around and play for 30 minutes!
 Set a timer.





Set Up Your Student for Success

- Exercise: engaging your muscles engages your brain
- Limit Screen Time: screen time fatigues the brain; balance with exercise
- **Healthy Nutrition**: what you eat matters; low-inflammatory diet
- **Sleep**: focus on creating healthy sleep patterns
- Train Their Attention: engage in sustained, non-reward driven activities
 - Puzzles, board games, baking, bike ride, read, chores, etc.
- Teach Independence and Problem Solving: growth mindset
- Schedule and Routine: establish and stick to a consistent schedule and routine





Additional Distance Learning Tips

- Plan ahead!
 - Know their schedule, daily objectives, etc.
- Establish a morning, midday, and evening routine
- Review the schedule with your child
 - Large calendar
 - Checklists
- Setting: sensory input, distractions, fidgeting accommodations, etc.
- Flexible seating; ergonomics
- Kinesthetic learning (read out loud, move body, multi-sensory)
- Appropriate breaks
- Caretaker self care
 - Eating healthy meals, stay hydrated, take breaks, mindfulness, etc.





Structure and Routine

- Work With the Teacher
 - Know what's on the agenda, homework assignments, projects, tests, etc.
- Get Organized: Tools and Structure
 - Consider using an <u>organization chart</u> to track daily routines
 - Create a structure for writing and remembering homework
 - 3-inch binder divided into sections for each class. Give each subject its own folder in the binder, and include homework folders for "Homework to Be Done" and "Completed Homework" at the front of the binder
 - Maintain a detailed <u>homework log</u> to track when assignments are due and what materials are needed
 - Consider duplicate tools at school and home





Structure and Routine

- Teach time management
 - A large calendar can be useful, as it serves as a guide to when assignments are due or when tests are coming up
 - Use a different colored marker for each subject
 - Break down big homework projects into manageable blocks on the calendar
- After School Routine is Vital
 - Have a specific time of day when homework is done. Homework routines may take a couple of months to establish (consider extracurriculars, chores, type of setting, breaks, etc.)
 - Build in breaks (every 10 to 20 minutes)
- Rewards for Completed Homework
 - Additional outdoor or screen time
 - Verbal praise





Brain Breaks

Brain breaks: time away from whatever you are focusing on

- Grade school: every 10-15 min; Middle/High School: every 20-30 min
- Key is to take them before fatigue, distraction, or lack of focus sets in
- Goal is to reduce stress and frustration and increase attention and productivity
- Can be active or quiet and relaxing
- Short: 1, 3, or 5 minutes
- Plan ahead: interval breaks (timed intervals) vs. ratio breaks (tied to behaviors)





Brain Breaks

Try these:

- Mindful Minute: breathing, sound bowl, tap into your senses
- Breathing/stretching/yoga: YogaEd Digital Wellness Breaks Volume 1, 2, 3
- Piano fingers: tap thumb to each finger and back 25x per hand
- **Doodle break**: blank paper/surface, writing utensil, soft music
- Mirror: have student copy your movements as if they're your mirror; switch turns
 - Extra challenge: have student mirror opposite movements
- Jumping Jacks: try 20 in a row; try with eyes closed
- Cross Crawls: march and touch hand to opposite raised knee; try 20 in a row
- High Knees: jog in place and bring knees up to raise heart rate; try 30 in a row
- Push-ups/Sit-ups: 3 sets of 10; wall, inclined, knees, regular
- 1 leg balance: try for 30-60 seconds; uneven surface; eyes closed





Executive Functioning

Executive Function Skills

refers to brain-based skills required for humans to execute, or perform, tasks

- Crucial for making decisions, learning and development, solving problems, regulating behaviors, achieving goals, and so much more!
- Not something we are born with but something individuals must foster and grow throughout life
- Ability to self-manage towards creating and achieving goals and reflect on own progress to succeed in everyday life
- Most of us have a combination of executive function strengths and challenges





Examples of Executive Functions

- Behavior
- Impulse Control
- Emotional/Self Regulation
- Problem Solving
- Flexible Thinking
- Self-monitoring/Motivation
- Working Memory
- Organization
- Time Management/Prioritization
- Task Initiation





Tips to Improve EF Skills

Ages 6-12 → Board Games, Structure

Board games or card gamesPuzzles	following rules, motor skills, reasoning skills, strategy, focus/attention, cognition flexibility, dealing with losing/frustrations
Instruments or danceMartial arts or organized sports	very structured, encourages effort and body coordination, improves adaptability with others or to environment

Ages 12+ → Goal Setting, Planning, Monitoring

	Planners Study Skills	pre-planning, prioritizing, organization, time management, goal directed persistence
-	Self-talk and reflection	self-monitoring, self-evaluation, stress tolerance



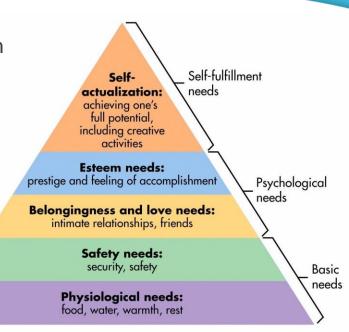


Activities Guide: Enhancing and Practicing Executive Function
Skills with Children from Infancy to Adolescence,
Center on the Developing Child, Harvard University

Motivating Unmotivated Students

- Check in with their physical, emotional, and mental health
 - Maslow's Hierarchy of Needs
- Have or find a purpose of the bigger picture
 - Often, kids don't know what's the point
- Do they have the skills?
 - Planning and prioritizing (executive functioning)
- Motivator: what lights them up?
 - Ex: Get the A on assignment/test? Experience they're looking forward to? Tangible item?
 - Intrinsic vs. Extrinsic motivation
- Growth Mindset







Motivating Unmotivated Students

Know your "WHY"

What do you want? Why do you want it? How will you achieve it?

SMART GOALS



SPECIFIC

State exactly what you want to accomplish.



MEASURABLE

Use smaller, mini-goals to measure progress.



ACHIEVABLE

Make your goal reasonable.



REALISTIC

Set a goal that is relevant to your life.



TIMELY

Give yourself time, but set a deadline.







Big Emotions & Behavior

Back to the basics: Maslow's Hierarchy of Needs, what's frustrating them?

Behavior is a Result of Development

The more our brain matures the better we can:

- Tolerate sensory input sound, texture, visual stimuli
- Inhibit an action or reaction (NOT biting, hitting, kicking, mean words)
- Keep it together, even when frustrated
- Transition past the meltdown or upset faster





Breaking the Cycle

 Giving Up = tantrum/child aggression is reinforced

 Succeed = parent aggression or escalation is reinforced

Parent gives command Child Caregiver refuses gives up or and/or succeeds* becomes agitated Parent agitated and Child Caregiver escalates





3 R's

REGULATE

RELATE

REASON





Research: Mental Health

Journal of Mental Health and Clinical Psychology suggests that Brain Balance is

"an effective, non-drug option for reducing and improving emotional and developmental challenges like anxiety, ADHD or autism."

The findings showed that nearly all the kids who participated in the program saw improvements in the mental well-being of their children with most categories reaching an average of **40-50% improvement**.

Average Reported Improvements After Brain Balance







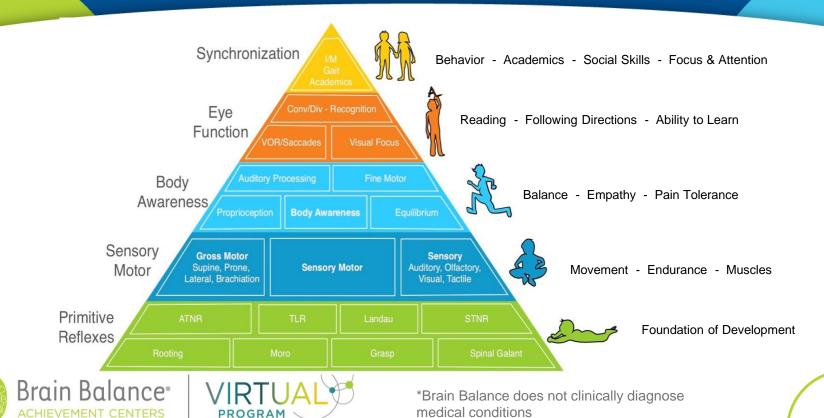
"Child seems depressed"			53%
'Child does not seem to be in touch with his/her feelings"		49%	
"Child often appears unhappy"	44%		
"Child does not demonstrate a ot of emotion"	44%		

It Takes a Team!

Sometimes you are doing your best and exhausting your abilities. It's ok! Ask for help.







Motor

- Muscle tone, strength, and coordination
- Rhythm and timing
- Bilateral coordination
- Dominance
- Gross and fine-motor skills
- Primitive and postural reflexes
- Eye-muscle balance and coordination
- Vestibular balance and posture

Sensory

- Hearing
- Vision
- Smell (not during COVID)
- Touch
- Vestibular (inner ear)
- Proprioception (the ability to know where one's body is in space)
- Balance and spatial perception



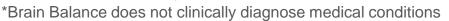


^{*}Brain Balance does not clinically diagnose medical conditions

The Academic and Cognitive Assessment—Over the course of this cognitive assessment looking at factors such as attention, memory, inhibition, and reasoning, it becomes clear which types of academic and executive functioning skills are strong and which are weak and, further highlights the corresponding areas of the brain that are affected.







Time: 1.5-2.0 hours

Report: 24-48 hours after assessment

• Brain Balance can develop custom school accommodation recommendations based on assessment results and meet with your child's school

Assessment Special







A Solution That Works

Brain Balance is an integrated, non-medical approach helping kids who struggle with meltdowns, focus and confidence.



WHO WE HELP

Kids, aged Pre-K to 12th grade who struggle behaviorally, socially and academically:

Lack of Focus • Impulsiveness Tantrums • Learning Challenges Family/Social Relationships

WHY IT WORKS

Brain Balance puts the brain back in sync.

Poorly functioning brain:

Left and right sides pass on partial information.

This is the root cause of many types of learning, behavioral and social struggles.

Properly functioning brain:
sides of the brain communicate equally

WE SUCCEED WHEN YOUR CHILD SUCCEEDS

READ OUR REVIEWS

 We rank 4.6 out of 5 across Google and Facebook reviews.

RECOMMENDATIONS BY PARENTS

 >80% of customers said they were very likely or extremely likely to recommend Brain Balance to a friend or family member.

SEE IMPROVEMENTS IN YOUR CHILD

- On average, after completing the Brain Balance Program parents saw a:
- 60% improvement in overall happiness1
- 46% improvement in social confidence²
- 43% improvement in behavior3
- 42% improvement in an ability to learn in school⁴





See what our parents are saying about us:

Brainbalancecenters.com/our-stories/

Discover Life After Brain Balance

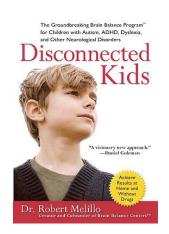


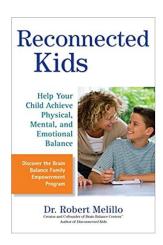
Stay Connected with Us!

- Schedule a Center Visit
- Call/Text us at 858-324-5545 or email sandiego@brainbalanccenters.com
- Refer a friend or family member, or a student
- Read and learn more









Stay Connected with Us!



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- <u>@BrainBalanceSanDiego</u>
 @BrainBalanceChulaVista
- O

Instagram:

- @BrainBalanceSanDiego
- @BrainBalanceChulaVista



YouTube: Brain Balance of San Diego





Webinars/Blogs: <u>brainbalancesandiego.com</u> or <u>brainbalancechulavista.com</u>





Upcoming Events

Open House: Back-to-School Prep

<u>San Diego</u> Thursday, August 12, 2021 4:00 pm - 6:00 pm

Chula Vista Wednesday, August 18, 2021 4:00 pm - 6:00 pm

💮 Brain Balance



Open House: Back-to-School Prep San Diego - Thursday, 8/12/21 4pm-6pm Chula Vista - Wednesday, 8/18/21 4pm-6pm

Discover how Brain Balance can help your child get ready for the new school year. Set yourself and your student up for success! Improve focus, learning, social skills, and more.

Free back-to-school guide. Limited assessment specials and enrollment scholarships.

In-Person Event. COVID-19 protocols will be in place.

RSVP for San Diego: bbsdaug2021.eventbrite.com RSVP for Chula Vista: bbcvaug2021.eventbrite.com





Q & A

thank you!







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