Understanding Your Student’s Developing Brain
Brain Balance Achievement Centers

WHERE EVERY KID CONNECTS WITH SUCCESS

Today’s Topics

• Developmental Delays

• Brain Development

• Affecting brain development in the classroom

• Helping parents develop their child’s brain
Brain Balance Achievement Centers

WHERE EVERY KID CONNECTS WITH SUCCESS

What We Do

We work with students who are developmentally delayed

• ADHD

• Learning Disorders

• Dyslexia

• Processing Disorders

• Asperger’s
Diagnosed or not...Here We Come!

More kids are struggling with:

- Immaturity
- Attention
- Emotional Reactivity
- Social Interaction
- Sensory Issues
- Difficulties learning

Brain Balance
Understanding Your Student’s Developing Brain
Developmental Delays are on the Rise

Statistics

- 1 in 10 kids are currently taking meds for ADHD
- 1 in 50 kids are diagnosed with Autism
- 1.5 in 10 kids are affected by Dyslexia
- These numbers are increasing each year
- 50% of this increase is due to better recognition; 50% is due to new cases

Why???
What We Do Affects Brain Development
Our lives are different than before

• In America 60 years ago, the average family meal time was 90 minutes, today it is 12 minutes

• Childhood is spent mostly indoors, watching TV, playing video games or on the Internet
  • 27% of kids age 9-13 play organized baseball, 6% play on their own
  • Bike riding is down 31% since 1995

• In the 1960’s 4% of kids were overweight
• Today 19% of kids are overweight
  • In Texas 1 in 3 kids are overweight

• Children under the age of 6 average 4.5 hours of screen time daily
• Children ages 7 -18 average 5-7 hours of screen time daily (during the school year)
How do we change?
Let’s Talk About Brain Development

Understanding Your Student’s Developing Brain

December 18, 2017
Developmental Stages

Stages of Development

- Primitive Reflexes
- Sensory Motor
- Cognitive
- Alternates between Right and Left Brain Development
  - Age 0-3 Right
  - Age 4-6 Left
  - Age 7-9 Right
  - Age 10-12 Left
  - Age 13-15 Right
  - Age 16-18 Left
  - 19 + Frontal Lobe
Right Brain

Behavioral/Emotional Center

Functions

- Attention
- Impulse control
- Emotional reactions
- Spatial orientation
- Sensory processing
- Big picture
- Reading comprehension
- Math word problems
- Gross motor control

Underdevelopment

- Distractibility (poor attention)
- Impulsivity
- Hyperactivity
- Delayed speech
- Anxiety, emotional reactivity
- Poor spatial orientation
- Lack of self awareness
- Poor pragmatic skills
- Overactive immune response
Left Brain
Academic/Cognitive Center

Functions
- Decoding
- Speech/Language
- Auditory processing
- Phonics
- Memory
- Motivation
- Fine Motor
- Math calculations
- Fine Details

Underdevelopment
- Poor reading (decoding)
- Articulation issues
- Poor auditory processing
- Poor verbal communication skills
- Poor spelling skills
- Poor memory
- Poor math operations
- Poor handwriting
- Task avoidance (with Academics)
- Poor motivations
- Miss small details
1. Use the weak areas
   • Do not live into strengths
   • Focus on weaknesses

2. Give the brain increasing amounts of sensory input
   • Senses
     • Tastes, smells
     • Eyes
     • Ears
     • Touch
   • Movement
   • Fine/Gross Motor
   • Rhythm/timing
   • Balance
In the Classroom

Applying brain development information

What **NOT** to do

- Create an over-stimulating classroom environment and expect calm students
- Have kids sitting stationary without movement for more than 15-20 minutes (depends on age)
- Reward with unhealthy foods
- Ignore other parts of development and focus solely on reading and math
- Cut out or reduce recess for more instruction time
- Encourage “educational” computer (tablet/smart phone/PC) use at home
In the Classroom

Applying brain development information

What TO do

• Move, Move, Move!
  • Clapping and rhythm games
  • Sitting in a circle
  • Skip Count
  • Sing
  • “I’m going on a picnic”
  • Partner Up
  • Eye stretches
  • Deep breathing exercises
  • Posture exercises

• Use hand/body motions
• Vocabulary words
• Turn and teach
• Spell across the midline
• Sky-write with hands and feet
• Squats, lunges, jumping jacks, marching, etc.
• Give and get
• Encourage both fine and gross motor... balance is key!
Teaching: What, When, and How?

Instruction Time

- “You can teach more and faster, but students will simply forget more and faster.”

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Direct Instruction Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2</td>
<td>5-8 min</td>
</tr>
<tr>
<td>3-5</td>
<td>8-12 min</td>
</tr>
<tr>
<td>6-12</td>
<td>12-15 min</td>
</tr>
</tbody>
</table>
Behavior Management

Reward or Punishment?

What’s best?

• Left brain deficiency calls for positive reinforcement
  • “If you do [behavior], you will get [reward].”

• Right brain deficiency calls for negative reinforcement
  • “If you don’t [behavior], you will not get [reward].”
Brain Development Information for Parents

Educate Parent

• Send newsletters, notes, emails, etc.
  • Nutrition (limit sugar, increase fruit and veg., water)
  • Sleep (schedule, hours, preparing for bedtime)
  • Physical Activity (sports, unstructured play, outdoor time)
  • Screen time (setting limits, weaning off, negative effects)
At Home

Applying brain development information

Day-to-day Activities that HELP

• Limit screen time
  • Birth-3 years: no screen time
  • Age 4-6: 30 minutes on weekdays; 1 hour on weekends
  • Age 7-18: 1 hour on weekdays; 2 hours on weekends
• Sit down to eat meals at the table routinely
• Eat at home
• Play outside every day (even in the Winter)
• Plan unstructured time every day
• Move, Move, Move
• Strive for balance
Resources

Disconnected Kids

Reconnected Kids

The groundbreaking Brain Balance Program™ for children with Autism, ADHD, Dyslexia, and other neurological disorders.

“A visionary new approach.”
—Daniel Goleman

Dr. Robert Melillo
Creator and Cofounder of Brain Balance Centers™

Help your child achieve physical, mental, and emotional balance.

Discover the Brain Balance Family Empowerment Program.

Dr. Robert Melillo
Creator and Cofounder of Brain Balance Centers™
Author of Disconnected Kids
Resources

Teaching with the Brain in Mind
2nd Edition
Eric Jensen

Super Teaching
Fourth Edition
Over 1000 Practical Strategies
Eric Jensen

Brain-Based Learning
Second Edition
The New Paradigm of Teaching
Eric Jensen

Understanding Your Student’s Developing Brain

December 18, 2017
Thank You