



*Better
Brains for
Babies*

Better Brains for Babies Trainer Refresher

**October 8, 2009
GAYC Pre-conference**

The participants in the 2009 Trainer Refresher session shared the following ideas and information during our discussion.

Who We Are

- Katherine Falen – BFTS
- Diane Bales - Extension
- Edda – Extension
- Bea – GA NW Tech
- Kathy –
- Kim – Consultant
- Priscilla – Center Director
- Patricia – R&R inclusion coordinator
- Polly – R&R tech assistance coordinator
- Gloria – QCC R&R – NW GA
- Jason – R&R training manager
- Lisa B – QCC – Atlanta
- Victoria – QCC – Atlanta
- Devanie – Brilliant Beginnings
- Pat – TA for GAYC
- Garyon – BFTS
- Bobbee – Kids R Kids
- Dru – Consultant
- Lisa H – Consultant
- Landis – HS ECE Coordinator
- Trudy – Consultant

How We Are Using BBB Information

- Child care training – 10
- Incorporate into hs/college classes – 4
- Parenting training – 5
- Head Start
- Sunday school
- Center staff training
- Parent news letters
- CDA classes - 2
- Ft. Benning
- Children's librarians – 2
- Health fair exhibit
- FACS teachers
- Montessori interns
- Trainers

What Do We Know About Brain Development and...

Language

- Every brain has the capacity to learn every language in the world – 1
- Gets harder with age
- There is a natural time of pruning of vocal sounds that the infant does not hear on a regular basis – 2
- The window for learning new vocabulary never closes.
- Early exposure to a non-home language helps with healthy brain development – 1
- Critical window for language development

Consistency

- Consistency is important to the child's feelings of security and safety.
- Consistency helps to make or strengthen the connections. -5
- Routines promote secure attachment. – 6
- Consistent caregiving routines, inc. discipline and IQ – 1

Stress

- High stress in a child's environment affects negatively brain development. – 3
- Stress can make the brain forget things.
- Consistent negative stress makes children feel insecure and how he relates to his/her world. -3
- Stress affects cortisone. -2
- Stress affects 5 senses.
- Stress affects motor control.
- Our children are experiencing more and more and more of this.

Adolescence

- Emotional processing begins occurring in different parts of the female and male brains. – 1
- Brain not completely developed until early adulthood 23 – 25
- Esp. in Males -8
- Frontal lobe develops last – to help explain the crazy things they do
- Brain development “usurges” “regresses” 13-17 yrs of age
- Zinc improves appetite (affects taste and smell) for girls with anorexia (does not change behavior)
- Lack of physical and emotional stimulation results in less connections forming in the brain
- Basal ganglia – deteriorates; can have adult onset – hard to diagnose

Special Needs

- Kids with dev. disabilities behave different when sick – hitting, biting, crying vs. fever
- Baseline for understanding typical development and “red flag” for children with special needs.
- Early detection is essential – 4
- Inclusion helps those to learn from others.
- Metabolism affects dev and synaptic connections.
- “Speech Apraxia” causes a short-circuit in the brain between thoughts and vocalization.
- An early-age (<3) head trauma can be compensated for by the other hemisphere.
- Kids with Down Syndrome have low levels of many vitamins A, B, C, E.

Play

- DHA effects play in the infant toddler years. It helps to develop connections within the brain by repeating task. -2
- Foundation for higher learning - 2
- Builds skills in all domains of learning and development – 4
- Allow time for play. -3
- Play enhances learning to complete connections in the brain.
- Rough play activates social processing for children. – 1 Opens the imagination.
- Play allows children to work through real world problems.
- Promotes language.
- Not “just play”

Relationships

- Need to be formed early
- Attachments – secure, non-secure -- Can affect the rest of a child’s life
- Build trust (baby learn to trust)
- Social development
- Gentle touch and eye contact help form relationships and help with brain dev and limbic system.

- Provide limits and boundaries with positive guidance with love, love love!
- Lack of affection/physical touch can slow down brain development
- Adrenaline makes men more interested (attracted to) in women

Nutrition

- Allergies may affect behavior & development
- 4 most common allergies – dairy, wheat, eggs, soy (soy in most processed foods)
- Breast feeding – 1
- Good eating habits develop early in life – 1
- Nutrition effects cognitive functioning.
- Omega rich diet = increased development
- DHA Brain Food
- Leptin (hormone) generated during sleep - Lack of sleep > low leptin > hunger specifically for carbs
- Malnutrition can cause a baby's brain to grow at a slower rate. – 1
- Reduce preservatives and artificial sweeteners!
- Read "Crazy Makers"
- Gluten/casein free diet – 1/3 of children with autism get radically better with diet, 1/3 improvement, 1/3 no effect
- Greater intake of high anti-oxidant foods (berries, concord grapes and walnuts) may increase "health span" and enhance cognitive and motor function in aging

Safety

- Is important to provide a safe environment for security.
- A child must feel safe before they can begin to learn new things. -3
- Male brains are surrounded by more spinal fluid than girls – cushions brain from blows.
- Choose "safer" practices when healthy brain development is present.

Physical Health

- Directly relates to healthy brain development. -1
- Strengthens brain connections. – 2
- Promotes good motor development. – 2
- Exercise, increased serotonin.
- Get adequate sleep and nutrition – stay active.
- Children and adults who are active perform better on knowledge-based and performance-based testing.

Public Policy

- We must be a voice for children!
- Instructional manual for all new parents prior to leaving the hospital.
- Funding Decisions
- Teenage Parenting info
- *Educate policy makers on the importance of 0-3 learning -4
- Brain development not learning to read.

- Helping policy makers understand play
- Need for recess/active play to support learning.
- Gap between early childhood and elementary standards and expectations
- Brain research as validation for importance of DAP
- Respect for EC field

Public Policy Ideas Related to BBB

- 1 pagers
- Continuum of brain dev
- Effect of substances on brain development
- Quantify in terms of \$\$
- Bill Cosby piece

Resources Shared Discussed at the Refresher

- “One Child, Two Languages” (by Tabors)
- Home Environment Scale (by Betty Caldwell)
- “The Primal Teen” book
- “Crazy Makers”
- www.mitoaction.org
- United Streaming online video clips (may require password)
- Jeopardy game templates on MS office
- “Children Without a Childhood” book
- “The Hurried Child”

