**The Brain Thieves – Boring, Well Meaning**

Description: Is your class boring or out of control? Then you may be a brain thief. It may be time to learn more about God’s design of the incredible brain and how today’s research can assist children’s leaders in understanding a child’s brain. From the fight or flight mode of the brain to the reasoning and understanding level, children’s brain play an important role in their social, emotional, intellectual and spiritual development.

**The most incredible amazing computer of all times**

* Know what the most amazing incredible computer is of all times?
* It’s fast, efficient, has more memory than anything on the market.
* It won’t break your budget.
* It can be rewired for free – doesn’t need a tech
* It doesn’t have to be ordered.
* It is designed for the individual and no one can log into it but you.
* Give up? It is the amazing indelible human brain and every kid has one.

Today we are going to be discussing this incredible, indelible human brain.

Are you a brain thief? Do you rob children’s brains so they can’t learn or function? You might be a brain thief if:

1. If you don’t understand the basic elements of the brain
2. You are upset or worried and you bring it to class
3. You don’t get the kids up, moving and breathing
4. If you don’t do activities that cross midline and lateral
5. If you don’t have music during your time with the kids
6. If you don’t talk and communicate with the kids on their level
7. If you lack empathy
8. If you don’t know when a child is under stress
9. If you don’t know how to access 4 different drugs the drugs
10. Laugh and have a good time

**#1. If you don’t understand the basic elements of the brain[[1]](#footnote-1)**

**It’s All About The Brain**

The brain is hardwired to survive.

In times of stress the brain will “downshift”.

It’s as if your receptive arms suddenly close down to information.

The brain is a pattern-seeking device

Standing up gives 10-15% more blood to the brain

The best exercise for the brain is exercise

Love unites us and fear separates

### Brain Downshifts Occur When There Are:

Physical threats – violence; threats from adults to child; possibility of pain

Psychological threats – loss of feeling of well-being; divorce and separation

Intellectual threats – being made to feel one is inferior, reward systems

Emotional threats – can’t identify feeling; you don’t have a right to have a feeling

Cultural/social threats – loss of heritage; bullying; social decay

Resource restriction – loss of resources, revenue, family; moving to low-income apartment complex during a divorce

**Brain stem** – **avoids pain; survival mode; fight or flight mode**

* **Lower level**

Lower level, the brain stem, deals mainly with survival issues and avoiding pain.

Function:reactive and fast; survival center; governs primitive instincts; has movement/motor control and internal functions such as breathing, heartbeat, etc.

The brain stem is always asking, *“Am I safe?”* In this state the brain can only access three skills

1. Fight – examples: Hits, kicks, pushes, is physically aggressive
2. Flight – examples: Withdraws, hides, runs, screams
3. Freeze – examples: Blank stare, immovable; panics

All the brain can do is react. It can’t think through the situation. It can’t learn. It can’t problem solve.

We all know safety for a newborn is to be held, kept warm and have his or her needs met. As the child grows, safety means seeing a parent or caregiver close by. Not only do they need to be told they are safe, but need to feel it, see it and experience it.

What you can and cannot do.

* You cannot rationalize the brain stem.
* You can ***describe*** what the action is. “Your hand pulled back like this.”
* In the brain stem when stress is present
* The immediate response is to a perceived threat ­– the body channels resources for strength and speed. The brain dulls the body’s sense of pain.
* What is happening in other body parts
	+ Eyes- pupils dilate for better vision
	+ Lungs – take in more oxygen
	+ Heart – bloodstream brings extra oxygen and glucose-fuel for

 power. Heart rate and blood pressure rise.

* + Adrenal glands – secrets fight-or-flight hormone epinephrine

 (adrenaline)

* + Intestines – digestion halts, allowing the body to dedicate energy to

 the muscles

**Limbic system / mid level – Seeks pleasure**

The limbic system is located in the mid part of our brain and serves many functions including:

* Generating emotions/feeling
* Directing our emotions
* Helping to motivate us
* Directing our drive
* Arousing our attachment
* Establishing the ability for us to have attachments and relationships
* Storing highly charged emotional memories
* Being territorial
* Taping events as internally important
* Controlling appetite and sleep cycles

Indicators – strong affect (anger, tears, outburst) name-calling; is territorial; judges and blames. Examples: “Stupid idiot!” “Hey, no butting! That’s my place.”

What you can and cannot do

* You cannot teach the limbic system
* You can mirror back and reflect what they are sensing (face expressions, body stance).
* Add ***empathy*** to the child in the limbic system

## Cortex Frontal Lobes / Frontal lobes – likes novelty/challenge

Functions: It is all about the frontal lobes in their brain. The frontal lobes are the upper level of the brain or the cortex.

The upper level of the brain (the frontal lobes) is where you find:

* Impulse control
* Empathy
* Working memory
* Sustained attention
* The ability to plan, prioritize, initiate
* Organization
* The ability to develop ethics, altruism and compassion
* Time management (Ever notice single parents are almost always late?)
* Goals and stick-to-it-iveness

Indicators: annoyed; irritated

* Example: “He pushed me!”

What can you do?

* Help person reason; validate feelings; rationalize, etc.
* Facilitate problem solving
* You can ***teach*** when in the cortex

**Frontal Lobes**

It is important to create environments where we can nurture the frontal lobes. These are environments where children need to see, feel and be a part of something that emulates a family environment. It is important for the church and church activities/classes to welcome the child of divorce into the church family.

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In his book [Think Smart: A Neuroscientist’s Prescription for Improving Your Brain’s Performance](http://www.amazon.com/gp/product/1594484430/ref%3Das_li_ss_tl?ie=UTF8&tag=wayswordrseu&linkCode=as2&camp=1789&creative=390957&creativeASIN=1594484430), Richard Restak says,

*“I’ve found that many prisoners, especially those serving time for violent crimes, suffer from deficiencies in frontal lobe function. They can’t plan their lives or control either their emotions or their behaviors.”*

“If the frontal lobes are not nurtured and developed…then we as a society can expect o pay deadly in terms of more crime, broken homes, drug use and violence..” (Richard Restak, 1994)

**#2. You are upset or worried and you bring it to class**

**Question**: Think for a minute about something you are thankful for right now. Now turn to your neighbor and tell them something you are thankful for. <http://www.happybrainscience.com/>

**Demonstration:** Ask someone to share what his or her neighbor is thankful for.

Brain research shows that when we are grateful we are happier and our brains function better. If you go into your group on Sundays frustrated and griping, you will be on the road to being a brain thief. You will be robbing kids of having healthy functioning brains.

The brain is an amazing and incredible part of the human make up. God in His wisdom created the human brain that can out last, out do and out perform any computer or electronic gadget now or those yet to be discovered.

A particularly helpful discovery for kid people was the discovery of something called *mirror neurons*.

**What are mirror neurons?**

This is a gigantic concept and if it were possible I would have bells and whistles going off in this article to bring attention to mirror neurons. Daniel Goleman in “Social Intelligence” (Bantam) explains it this way,

*“One person’s inner state affects and drives the other person. We’re forming brain-to-brain bridge – a two-way traffic system – all the time.”*

In other words, we can catch each other’s emotions. Just like a kid catches a cold, they can catch your neurons.

Essentially mirror neurons allow what is happening in your brain to be projected onto other people. When you smile, it can activate the mirror neurons in another person’s brain and they will mirror your expression. Are you beginning to see what an important concept this is when working with those sad or angry children from divorce in your classes?

Have you ever been having a bad Sunday morning – the type of day where you feel grumpy and out of sorts? You walk into church and someone from the hospitality team greets you with a smile and all of her interactions with you are upbeat and positive. All of a sudden, you feel your mood lifting and you are not quite so grumpy any longer? These are mirror neurons at work.

*“Mirror neurons show you what it’s like to experience what others do” (Bruce Perry, Born for Love)*

**Mirror neurons at work – “Have a good day.”**

When I owned a child care, I used to wonder when I was having a bad day why the children and even some of my staff seemed to fit right in and experience a bad day also. Now I know. Their mirror neurons were mimicking what was going on in my brain. I learned that no matter what I was feeling or thinking when I went into any room I went in humming or singing and with smile on my face. I had to think to myself,

*“Have a good day.”*

**Mirror Neurons and the Child Experiencing a trauma or crisis**

Children of divorce see a lot of grumpy and angry people. These expressions are especially true at the beginning of the separation of their parents. The parents might be sad, angry, distracted, confused and worried. Many times their facial expressions say it all. Kids see this day in and day out all week long. When they come to church they need to experience positive and upbeat emotions. They need to experience joy and have leaders that ooze with joy, joy in the Lord.

Imagine being a lonely and confused child and the main adults in your life are negative and distracted. Now imagine walking into the Lord’s house and seeing happy, joyful and calm adults who seem to be having a good time. It makes it easy for a child to perk up. With the concept of mirror neurons, and our understanding of them, we know we can make things even better for these children.

Giggling is contagious. Having a good time is infectious. Smiling is catching. Build relationships with these children and count on those all powerful mirror neurons to mirror your facial expressions back to you. It’s so easy and it is comes from the amazing incredible brain that Lord created in each of us.

*“All the days of the afflicted are evil; but he that is of a merry heart hath a continual feast.” Proverbs 15:15 (KJV)*

**#3 Movement and Exercise: You don’t get the kids up, moving and breathing**Developmental experts have known for years that active movement improves school performance, concentration, mood and behavior. Now we are learning that movement stimulates children’s brains, and organized movement helps the brain to focus. Not only do kids need to be up and moving, but they need organized movement as well.

Kathie Nunley[[2]](#footnote-2) in her online newsletter (February 4, 2004) says, “Exercise has been shown to greatly reduce cortisol levels in the brain as well as increase norepinephrine. Cortisol is secreted as a result of stress and specifically targets the memory area of the brain … Increasing norepinephrine can reduce behavior problems which is generally good news for everyone.”

Dr. Becky Bailey[[3]](#footnote-3) touts that stressed children need more oxygenated blood moving to the brain. For children under tremendous amounts of stress, their breathing tends to become shallow. If you watch, you will notice some of these children’s shoulders will be tense, and their breathing appears to be rapid and carried high up in their chest. When working with a stressed child, teach them to breathe from the diaphragm. If the diaphragm isn’t moving, you’re not accessing the upper level of the brain. It’s not inhaling that is important, but exhaling that is critical. The exhale calms and slows you down. Breathing from the diaphragm could be incorporated into a game or musical activities.

**#4 If you don’t activities that cross midline and lateral**Pam Schiller[[4]](#footnote-4) in an article in “Child Care Information Exchange” May 1998 (p. 52) states, “Cross lateral activities encourage children to integrate the use of the left and right hemisphere of the brain.” In seminars she also says to use extensive hand motions when singing. The more extensive ways you move, the better you can get the message to the brain. She includes shaking your hands, hugging yourself and says to encourage the children any way you can to cross lateral and cross midline.

When DivorceCare for Kids (DC4K) was created many cross lateral and cross midline activities were developed. Wise leaders will use these activities to de-stress children’s brains. One leader said, “For years I have worked with stressed out children and children displaying aggressive behaviors. Early on in my career I figured out if I got these children up and moving around, then our day went better. It seemed like the more stressed out a child was, the more he or she needed to get up and get moving, whether it was running or jumping or whatever. It was as if the child had to be moving in order to learn.” This has been my personal experience also. The more stressed a child is the more a child needs to be up and moving, stretching, and doing cross lateral and cross midline activities.

**#5 If you don’t have music during your time with the kids**

**Music**

Music can be a great stress release. Research in studying the brain and how music affects the brain is revealing some interesting data. We now have reason to believe that harmonies have the capacity to actually rewire the brain, creating connections between different regions in the brain. Some research shows that listening to music can boost memory, attention and learning. Music can lower stress, and it can activate both sides of the brain. Music can have a positive impact on a person’s mood, and it can actually alleviate depression in some people.

Use rhythmic activities such as praise songs with a strong rhythmic beat. Kids body’s automatically move and rock to heavy and strong beats.

By using music with children, we can pump information into their brains and their hearts that they normally wouldn’t hear. The children can then turn this around, and at some point in time these words will come back out of their mouths. Did you know that Alzheimer’s patients who can no longer communicate with loved ones will still sing the words to the hymns they learned as a small child? They can’t remember other things or communicate, but they can sing the correct tune with the right words even when no one else is singing. “*The secret things belong to the LORD our God*” (Deuteronomy 29:29).

Listen to music that is set to 60 beats a minute. This is the normal heart-resting rate. Use Justin Knight’s music therapy CDs ([www.justinknight.com](http://www.justinknight.com)).

* Music can soothe the hurts.
* It can convey important ideas and concepts.
* It can relay messages children might not otherwise hear.
* As pathways in the brain become secure, the children will crave the music.
* Music can be lively or soulful.
* Reduces pain perception
* Facilities deep breathing
* Increases energy and confidence
* Reduces stress and depression
* Improves posture and the immune system

**#6. If you don’t talk and communicate with the kids on their level**

Some kids need to be encouraged to talk and you can accomplish this by asking questions. Don’t be afraid to ask the child about their time at home and school. Don’t probe, but just bring the questions into the general conversation. Be sure to incorporate prayer request into your environment also and give the child of divorce the freedom to request prayer for the parent that no longer lives in their home.

Build relationships with the children. The number one concern for children in the US is the lack of connectedness. Kids are not connecting with the important people in their lives.

**#7. If you lack empathy**

What does one Baby says to the other baby? “Here take my blankie, take my pacie, my bottle, don’t cry”. Children automatically have empathy. Just go watch infants in the church nursery.

Empathy is

* The ability to feel what someone else is feeling.
* The ability to place ones self in the situation a child or another person is experiencing.
* Looking at a situation from the other person’s perspective.
* The ability to share feelings.

“To feel with another is to care.” (Daniel Goleman, “Emotional Intelligence” pg 105) Just knowing someone truly cares about them helps the child of divorce. Empathy allows the child to connect with you in a personal way and that is magic to them.

The topic of empathy is an exciting one to me because as I read and understand the Bible I see that Jesus brought empathy into the world full force. Christians can imitate Christ’s empathy in our world today. We are learning from brain research about the importance of empathy on the learning brain.

Today we are experiencing a lack of empathy in our world. Research shows that empathy is declining among children. [Tim Elmore](http://www.psychologytoday.com/blog/artificial-maturity/201403/why-empathy-is-declining-among-students-and-what-we-can-do) tells us “As screen time goes up, empathy goes down.” He goes onto explain that when kids spend hours on screen time they may have intellectual understanding but they can’t connect with the pain others feel. This tells me that we now have hurting children who have friends that don’t understand their pain nor do they want to try and understand their friends hurts. It seems to the child that no one cares. In reality they may be right in that everyone is tuning them out.

**#8. If you don’t know when a child is under stress**

Healthy developing children can all of a sudden be sent into a wave of panic by a something stressful. Stress is the body’s way of reacting to challenging or frightening events, one of which for children is the divorce their parents. These children become the disruptive kids in your groups.

When the stress response is activated is when children need loving and caring relationships that understand what is taking place. When children don’t have healthy and available relationships to calm the brain, the stress response can become overwhelming.

* Stress can cause the immune system to be weakened
* Stress can rewire the brain
* Stress can damage the brain when the stress lasts long-term

**3 Type of stress**

1. Positive stress response
* Normal part of life
* Produces brief increase in heart rate
* Produces mild elevations in hormone levels
1. Tolerable stress response
* Activates the body’s alert system
* Results are longer-lasting
* Is serious but temporary if *buffered* by *supportive relationships*
1. Toxic stress
* Prolonged stress
* An absence of protective relationships

Cortisol levels in the brain increase when under tremendous amounts of stress. Exercise has been shown to greatly reduce coritsol levels in the brain as well as increase norepinephrine. Increasing norepinephrine can reduce behavior problems. (Kathy Nunley)

Brain research revealed one of the reasons: [the toxic stress of this trauma](http://developingchild.harvard.edu/resources/multimedia/videos/three_core_concepts/toxic_stress/) damages the structure and function of a child’s brain. Kids become anxious and can’t sit still; or become depressed and withdraw; or become angry and fight. They can lose focus and stop learning. As they get older, they cope with anxiety, depression, and anger by drinking, smoking, doing other drugs, fighting, stealing, overeating, having inappropriate sex, participating in thrill sports, shedding marriages like a snake sheds skin, and/or becoming overachievers on their way to becoming workaholics.

##### **Stress reducing tips that help the brain to focus**

Stretching – tense muscles and release muscles for effective stretching.

Breathing – from the diaphragm.

Movement – cross lateral and cross midline movements help brain to focus.

Stressed out children may not have the capacity to memorize.

Don’t rush stressed children. Love them unconditionally just like Christ does.

**#9. If you don’t know how to access 4 different drugs the drugs or chemicals**

I realize there are many of you that want no part of using drugs with kids whose parents have divorced. However, the drugs or chemicals I’m introducing here today will help you and make your ministry more effective when you make use of them. They are legal and they are free!

These four drugs have the ability to

* Affect attention/reward
* Encourage affirmation
* Increase trust
* Help with stress management

God has wired our brains to access these drugs and chemicals. Stress can affect the production and efficiency of some of these drugs.

[Charles Stone](http://charlesstone.com/4-legal-drugs-every-leader-know-use/) does an excellent job of explaining these drugs. He has given me permission to use his information. Charles says that basically there are two kinds of chemicals. Neurotransmitters traffic in our brain’s neuron or brain cells and hormones flow through our blood.

The four significant body-brain chemicals that can help when ministering to the child of divorce and any child in trauma for that matter are

* **Dopamine**: a neurotransmitter involved in attention and reward. When you learn something new or check something off your to-do list, dopamine gives you a nice pleasurable feeling.
* **Serotonin**: the neurotransmitter the brain releases when we feel pride in our work. When someone compliments you on a task you did or a talk you gave, that ‘feel good’ sense comes from serotonin.
* **Oxytocin**: the neurotransmitter/hormone called the trust hormone. When you feel safe and secure around another and feel that you belong, this chemical releases and also makes us feel good.
* **Cortisol**: called the stress hormone. We need this hormone to respond to the stresses in life. But when under prolonged stress, too much cortisol can damage our cardiovascular system, suppress our immune system, and diminish cognitive function like memory.

**How to leverage these chemicals**

1. Dopamine (attention / reward)
* Help children set goals. Research shows that when children can set a goal and then check off the goal upon completion it raises the dopamine. This is why many classrooms have kids write out their goals for the day or week.
* Eye contact and gentle touches help create connections that feel good and raise the dopamine levels.
* [Pam Schiller](http://pamschiller.com/) in “Start Smart” says, “The brain pays closer attention to things that don’t fit an established patterns, things that are new and different (novel).” In other words use novel ideas such as taking the class outdoors one day; use pictures or puppets to get a point across.
1. Serotonin (affirmation)
* Children who suffer abuse or emotional upheavals appear to have a lower production of serotonin. Serotonin is a chemical in the brain that affects our emotional states.
* When a child’s voice is getting louder, the child is getting aggressive due to lowered serotonin.
* Stretching will lower stress thus raising serotonin.
* Mastering a challenge helps a child’s serotonin level.
* Creating a feeling of family with close bonds aids in the production of serotonin.
* Activities and classrooms that say, “I’ve got this. I can do this” helps a child to feel good due to increased serotonin levels.
* Competition and reward systems only serve to lower brain function. (Dr. Becky Bailey, [Conscious Discipline](http://consciousdiscipline.com/))
1. Oxytocin (trust)
* Look for ways to build trust levels with the child of divorce.
* Provide safe places for children to increase trust levels.
* Spend time with the kids so strong relationships can be built.
1. Cortisol (stress management)
* Breathing from the diaphragm helps children de-stress
* Doing physical activities that cross midline (elbow to knee) and cross lateral (right hand to left shoulder) have the ability to calm a child.

**#10. If you don’t laugh and have a good time with the children;** **be full of joy**. **Lighten the Mood**

Judy Willis[[5]](#footnote-5) says to lighten the mood by making jokes and creating a lighter mood in the group. She says to create a welcoming environment through welcoming rituals and games and give the children plenty of opportunities to ask questions and engage in discussions without judgment about what is said. She also encourages us to create an environment in which mistakes are encouraged. And lastly she says to listen to the kids.

Laugh: Laughter can be one of the best stress releasers of all. Researchers are learning that laughter releases endorphins, the feel-good brain chemical, which enhances moods. Laughing has been known to lower blood pressure and block pain. It has been said that a good session of laughter can be a jog for the internal stomach muscles. That means you have to laugh until you hurt. Many children of divorce just don’t get that opportunity very often so lighten up and have fun.

*The cheerful heart has a continual feast,* Proverbs 15:15

**#11. Love the Lord with all your heart**

# Brain Fast Facts

The best exercise for the brain is exercise (get the kids moving) (Bailey)

Emotions and intellect walk hand in hand. Coordinate experiences that nurture both the social-emotional development and the intellect. (Schiller)

Recognize the value of repetition. Brain connections are strengthened and sometime are replaced or expanded by repetition. (Schiller)

Intelligence is in large part our ability to see patterns. (Schiller)

Include both music and movement in programs/curriculum. Both help children develop a sense of patterns. (Schiller)

Connections on the outside with others create connections on the inside (rituals) (Bailey)

The brain functions optimally when it feels safe (Be a Safe Keeper) (Bailey)

Emotions enhance memory. Events accompanied by intense emotions are more easily recalled. (Schiller)

Memory is kept more accurate by revisiting the information frequently. (Schiller)

Practice makes permanent (not perfect). (Schiller)

# Dress Code

“*Clothe yourselves with compassion, kindness, humility, gentleness and patience. . . . And over all these virtues put on love which binds them all together in perfect unity”*

(Col. 3:12, 14).

1. Much of the brain information is taken from Dr. Becky Bailey’s *Conscious Discipline* <https://consciousdiscipline.com/> Phone: 800-842-2846 [↑](#footnote-ref-1)
2. Kathie Nunley is the author of *A Student’s Brain: The Parent/Teacher Manual* published by Morris Publishing. Her website is [www.brains.org](http://www.brains.org) [↑](#footnote-ref-2)
3. Dr. Becky Bailey, *Conscious Discipline* (Loving Guidance, Inc.) 800-842-2846 [www.ConsciousDiscipline.com](http://www.ConsciousDiscipline.com) [↑](#footnote-ref-3)
4. Pam Schiller , *Start Smart* (Gryphon House) <http://pamschiller.com/> [↑](#footnote-ref-4)
5. Judy Willis, neurologist and former classroom teacher as stated in the article, “To Enable Learning Put (Emotional) Safety First, [www.edutopia.org/neuroscience-brain-based-learning-emotional-safety](http://www.edutopia.org/neuroscience-brain-based-learning-emotional-safety) [↑](#footnote-ref-5)