

Stress and Learning



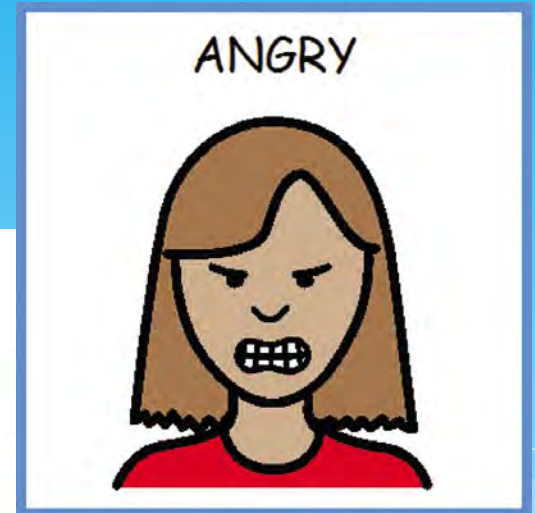
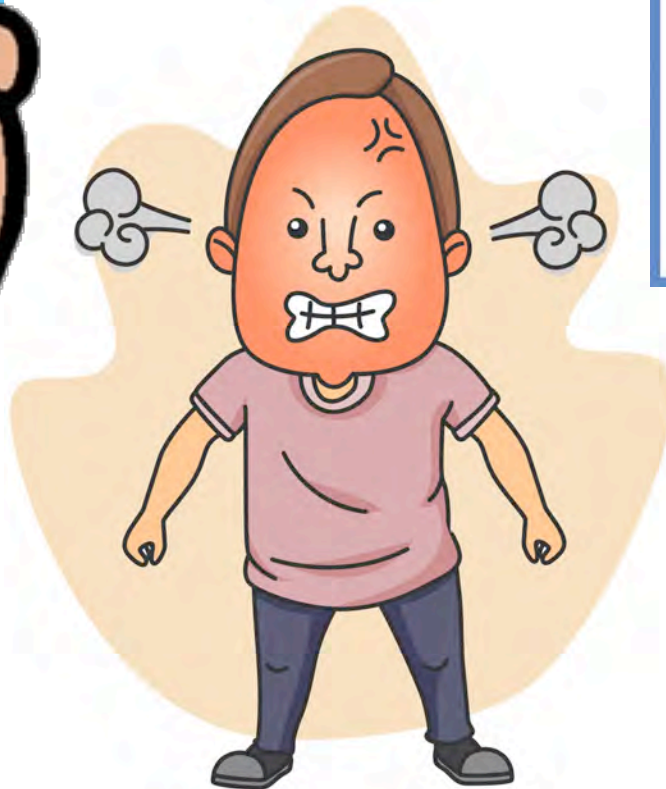
Suki Wessling

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Why is it that pictures of kids learning always look like this...



... and not like this?



Stress happens

- * We know that homeschooling can be stressful
- * Being a parent and a teacher can be complicated
- * The further your child is from you in temperament and learning style, the harder it may be for you to work together
- * Teaching your own child has higher stakes than teaching professionally—you are judged on one child's success!
- * Being together so much can put stress on both of you

From workbooks to swing math

A Case Study

- * Star-crossed from the start: we were very different people
- * “Goodness of fit”
- * Different rhythms, different skills: I like the mornings, she likes the afternoons; I like to know the answer, she likes to make it up as she goes along
- * All goes well until you hit a bump in the road...
multiplications tables! Ack!
- * Listening to others instead of to my child: This is how everyone else does it... why can't you?

The symptoms of stress

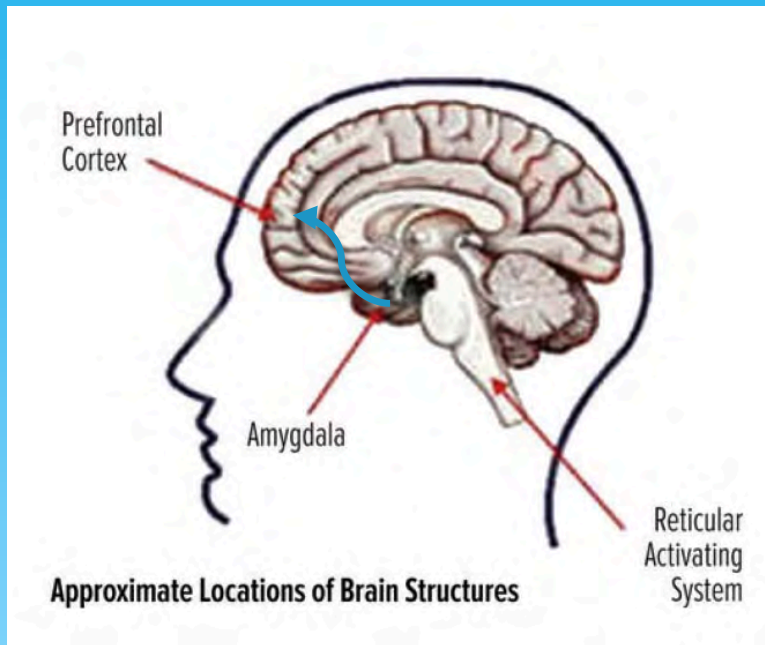
Medline

- * Physical symptoms such as stomach aches, headaches, rapid breathing
- * Regression, not being able to do tasks already mastered, loss of interest in certain activities
- * Aggressive, stubborn, or anxious behaviors
- * Clinginess, recurrent fears
- * Unwillingness to participate in activities



Sound familiar?

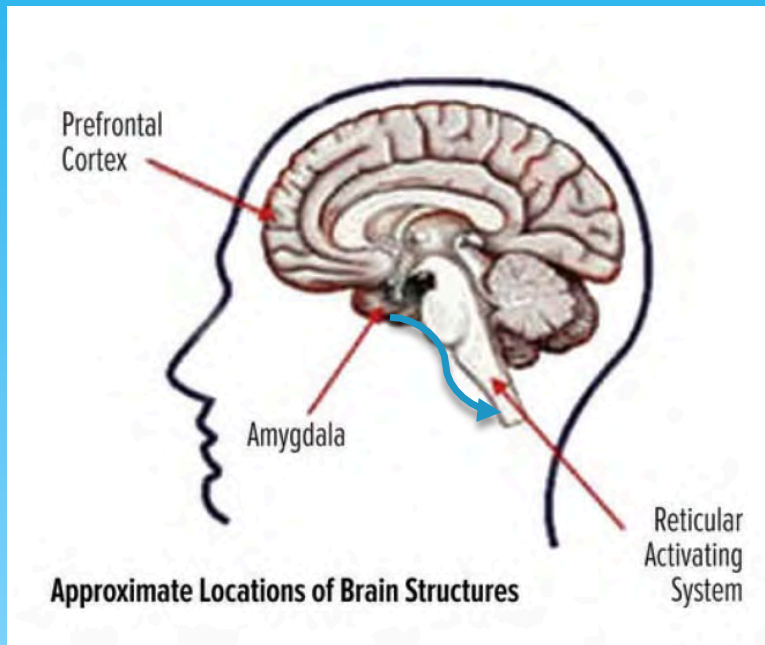
What happens in the brain when kids are learning well?



Information entering the brain is “vetted” by the amygdala, which sends the information on to the higher thinking center, the prefrontal cortex.

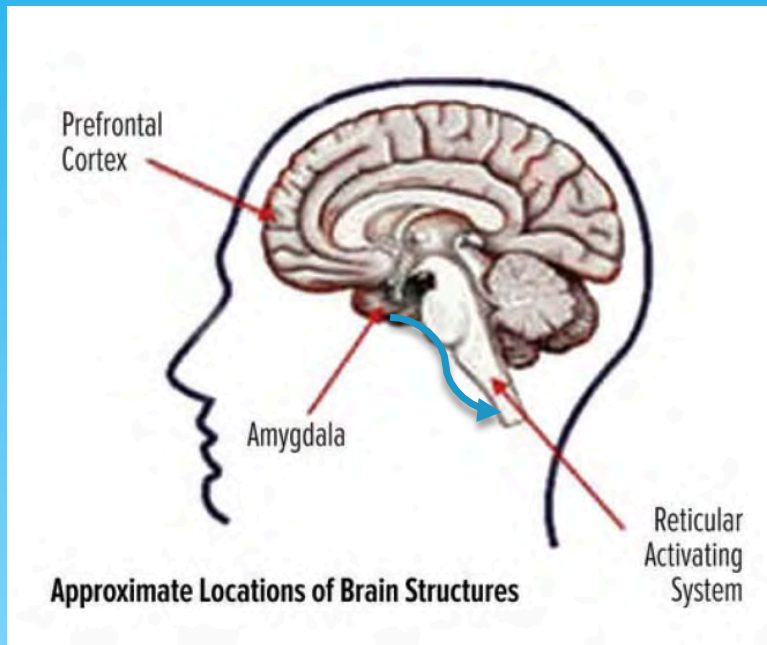
Your child’s brain connects the information to other things s/he has learned and makes logical associations.

What happens in the brain when kids are stressed?



Information entering the brain is “vetted” by the amygdala, which senses the stress and sends the information to the lower, involuntary, quick-response brain—the fight or flight center.

What is the function of the “fight or flight” center?



This section of our brain developed when we needed the ability to quickly respond to physical threats. It is our “lizard brain” and cannot process information logically. Information sent this direction is essentially lost.

What are some triggers for stress?

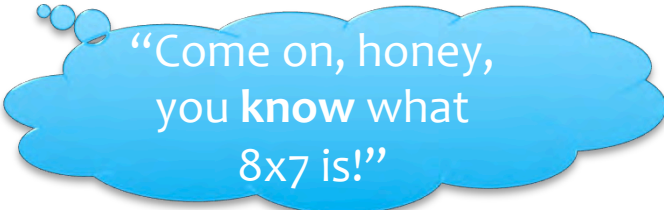
- * Physical discomfort—hunger, too hot or cold, not in a comfortable position
- * Tackling a task we've failed at before
- * Being given something that seems too difficult
- * Being around other people who are clearly experiencing stress (“mirror neurons”)

A big trigger for stress in children is boredom and lack of engagement

- * Kids are built to play, not to be drudges
- * Kids who are “thinkers” need their minds engaged in order to be happy
- * Kids who are “doers” need their hands to be engaged in order to be happy
- * Kids who are “dramatists” need to be involved in a narrative/storyline
- * Too much of what teachers—and some homeschoolers—fall back on is simply boring, not engaging

So... what happened when I got out our math books?

- * My daughter saw the physical cues that we were going to do something that she had failed at before
- * I started to get stressed out because I knew I hadn't found a way to help her learn this skill
- * She sensed my stress and that created a sort of "stress feedback"
- * I ignored her mounting stress (and my own) and pushed on with, "OK, what's 8×7 ?"
- * I further complicated things by making her use pencil and paper, a skill that is hard for her
- * I pushed on even though I saw her skills regressing, her writing becoming messier and her ability to control her behavior melting
- * Her stress reaction triggered her "fight or flight" mechanism and the game was over



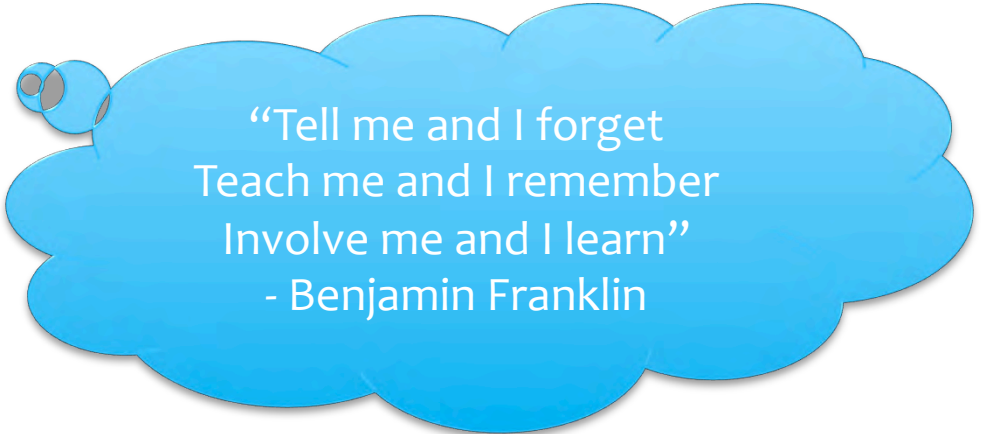
"Come on, honey,
you know what
 8×7 is!"

How to avoid stress

- * Get to know your child—it is likely that s/he is not just like you in some key ways
- * Take care of yourself—a stressed out homeschooler is an ineffectual homeschooler
- * Keep learning activities engaging and meaningful
- * Always provide “scaffolding” for new, difficult subjects
- * Enlist your child’s help in planning and decision-making
- * Approach previously stressful activities with caution

Once stress happens...

- * Recognize and acknowledge it
- * Be willing to back off and change gears
- * Ask for your child's help in solving the problem
- * Come up with activities to blow off steam



“Tell me and I forget
Teach me and I remember
Involve me and I learn”
- Benjamin Franklin

A note about “Good Stress”

- * Stress responses are designed to help us run away from tigers, so they’re not all bad
- * “Good stress,” rather than disabling, enables the person to perform at his or her highest level
- * “Good stress” during learning might be seen as a “learning high,” where a child is stimulated by a learning situation to push harder
- * “Good stress” is easiest to identify during a performance situation where it is advantageous to get focused energy and the task being performed is well-rehearsed: e.g. math competition, music or sports performance, academic test

From ripping paper to “Swing Math”

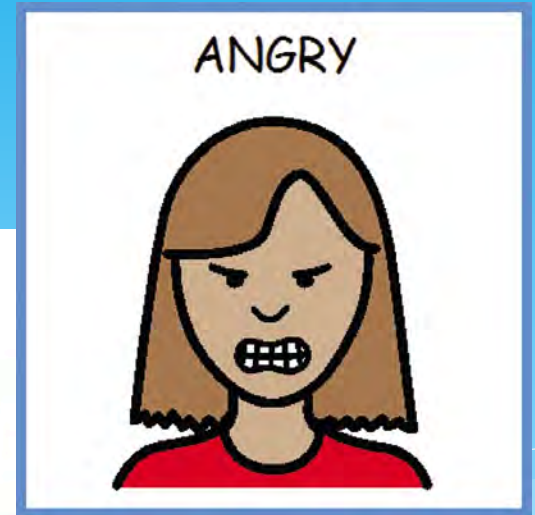
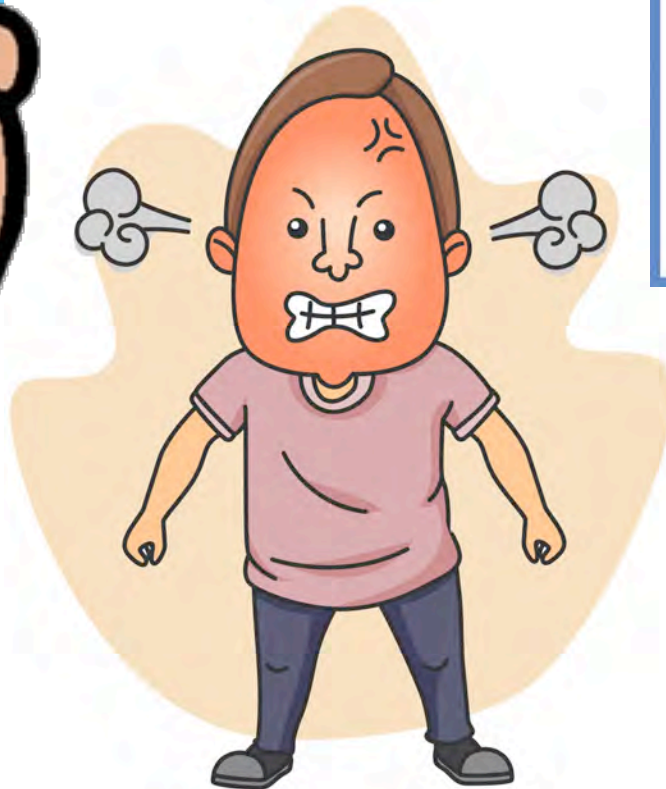
- * I acknowledged it wasn't working, and gave up on my idea that children “should” learn this skill at a certain age
- * We took time off and found ways to compensate for the missing skill
- * I enlisted my daughter's help in coming up with fun math activities
- * I listened to her (grudgingly!) when she made a suggestion
- * We achieved success as a partnership, with her creativity and my support



So why is it that pictures of kids learning always look like this?



Because kids who look like this
are physically unable to learn



Resources

- * [Children and Stress from Medline](#)
- * [“Stress, Learning, and the Gifted Child”](#) by Judy Willis
- * [Inspiring Middle School Minds](#) by Judy Willis
- * [The Eide Neurolearning Blog](#) is a great resource for learning about learning
- * [Kidlab](#) is another website with lots of great information about the brain and learning
- * [An “ABC” of the Brain](#) from CERI

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