# Brain-Aligned Strategies: Addressing the Emotional, Social, and Academic Health of all Students



By Dr. Lori Desautels Assistant Professor College of Education Butler University Spring 2017





#### Introduction

A student's emotional, social, and academic health are all interrelated — at the individual level, class level, and even the school level. If Joe is struggling with a personal issue, he may pick fights or withdraw from friends, and may not be able to focus on what is happening in the classroom. Sarah might perform well academically, but the stress of tests causes her to be sick to her stomach. Ethan, who has been bullied since the second grade, struggles to make friends and has seen his grades steadily decline over the years. And Gina, their teacher, is worried about her job and is losing patience with the students in her class. Her students, in turn, can tell she is not herself. Some have responded empathetically, and others have acted out more than usual.

This collection of writings by Dr. Lori Desautels focuses on neuroanatomy and the science behind strategies that help students—and those who work with them—to better understand themselves and their needs, and to prime the brain for learning.

Many of these articles were originally published by Lori on Edutopia, a website and community that is focused on what best works in K-12 education, and are included here along with several other pieces with Lori's permission. These resources draw from the research of Dr. Russell Barkley, Dr. Judy Willis, Dr. Bruce Perry, Dr. Bessel Van Der Kolk, Dr. Rachel Yehuda, Dr. Martin Seligman, and Linda Chapman.

For more information, be sure to check out Lori's free, ondemand, 90-minute webinar with PresenceLearning: Big Ideas in Neuroscience: Brains, Behavior and Engagement for Students and SPED Leaders (slides and a resource handout are also available for download). The "Expert Answers" series on our blog also provides Lori's responses to a number of questions from the audience.

— PresenceLearning



#### **Table of Contents**

10 Bell Work Activities
Trauma in our Classrooms: Middle and Secondary Strategies
Things to do with Trauma
Strategies to Calm the Brain
The Hero's Journey
Steps Along the Path
Status Quo
Call to Adventure
Assistance
Departure
Trials and Hard Work
Approach and Crisis
Treasures
Resolution
Status Quo
A Template for Growth
Five Strategies for Closure and Transition1
Inside Out: Strategies to Build Engagement, De-Escalate Conflict and Improve Creative and Critical Thinking12
Strategies to Develop Islands of Self13
Train of Thought14
Questions for Students14
Strategies for Students1
Calming the Stress Response1
Reasonable Consequences1
The Adolescent Brain18
Redefined Purpose and Identity18
Easing the Transition19



Executive Function Strategies to Implement with All Stude (but Especially Those with ADD)	
Pause	21
The Mind's Eye	22
The Mind's Voice	22
The Mind's Heart	23
The Mind's Playground	23
Brain Labs: The Prefrontal Cortex Café	24
What Is a Brain Lab? What Is Its Purpose?	24
Using Pop Culture to Study the Brain	24
Social and Emotional Components of the Brain Lab	25
Resources for the Brain Lab	26
Cracking the Code of Student Emotional Pain / Strategies Concepts about Pain Based Behavior	
Rewiring Student Brains	27
Learning From Emotions	27
Teacher Well-Being	27
Core Memories in the Classroom	28
Your Classroom's Environmental and Emotional Climate.	28
Instruction and Neuroplasticity: Creating Strong Acade Core Memories	
Three Questions Every Child Wants to Hear	32
Believe	33
Purpose	33
Question Me	34
Incentivizing Your Class: The Engagement-Based Classro Management Model	
Introducing and Customizing the Model	35
Game On: Levels 1-7	36
Level 1	36
Level 2	36
Level 3	37
Level 4	37
Level 5	37
Level 6	37
Level 7	37
Goals and Higher Levels of Attainment	38



Meta-Collaboration: Thinking With Another	39
Ushering in the Conceptual Age	39
Collaborative Metacognition Strategies	40
Teach Students About Their Own Unique Neuroanator	my40
Teach Students About How They Learn	41
Discuss Coping with Emotional and Social Proof or Challenges	
Assign "Do Now" Tasks	42
The Meaning Behind the Language	43
7 Ways to Begin a Dialogue	44
Testing vs. Stressing	46
6 Brain-Compatible Strategies	47
New Class Roles and Responsibilities	49
6 Classroom Professions	50
Giver	50
Storyteller	50
Noticer	50
Kindness Keeper	51
Resource Manager	51
Collaborator	51
Understanding and Empathy	51
Perspective: A Game Changer in the Classroom of Our Lives	
Recognize Triggers and Challenges	53
Show a Different View	53
Offer a Fresh Start	54
Self-Assessment Inspires Learning	55
Big Goals	57
Daily Goals	57
Questions for Self-Assessment	58
Questions and Answers: Determining What Our St Really Need	
The Stressors and the Stressed	59
Turnaround Mantras	60
The Impact of Stress	60
Asking the Right Questions	61



Inner Engineering: Strategies That Align with Connection and Relationships for All Ages	•
Behavior and Emotional Hygiene	65
A Focus on Similarities and Building Strengths	68
Neurodiversity: Our Genius Students on the Spect	rum69
Peering Through a Lens of Strength	69
Peering Through a Lens of Strength	72
Attention Deficit Disorder	72
Connection + Purpose = Well-Being	73
Brain Intervals	75
Emotional Disturbance	75
Trauma Adversity and the Brain	78
We Cannot Afford to NOT Rethink Discipline! B	Sehaviors
in Pain	
in Pain	83 Teachers
Brain Development: What We Have to Know as	Teachers84 Attention
Brain Development: What We Have to Know as and Administrators  Energy and Calm: Brain Breaks and Focused-A	Teachers84 Attention86
Brain Development: What We Have to Know as and Administrators	83 Teachers84 Attention86
Brain Development: What We Have to Know as and Administrators  Energy and Calm: Brain Breaks and Focused-Apractices	83 Teachers84 Attention8686
Brain Development: What We Have to Know as and Administrators	83 Teachers84 Attention8686
Brain Development: What We Have to Know as and Administrators  Energy and Calm: Brain Breaks and Focused-Apractices  Brain Breaks  Focused Attention Practices  Energy and Calm: Change It Up and Calm It Down!	83 Teachers84 Attention868789
Brain Development: What We Have to Know as and Administrators  Energy and Calm: Brain Breaks and Focused-Apractices  Brain Breaks  Focused Attention Practices  Energy and Calm: Change It Up and Calm It Down!  Focused Attention Practices	83 Teachers84 Attention86878989



These strategies originally appeared on Edutopia in my article:

"Ring Their Bells: A New Way
to Deliver Bell Work"
https://www.edutopia.org/blog/
new-way-deliver-bell-worklori-desautels

#### 10 Bell Work Activities

The brain-aligned strategies in this section can replace traditional bell work, as we know how important engagement is at the beginning of each day and class period. These strategies can also be used as brain breaks or intervals.

The following activities have been successful in my classrooms.

- 1. Fantasy Interview: When students enter the class, they choose a half sheet of colored paper with a set of instructions displayed on the Smart Board. In the front of class is an empty chair and a few props to create a comfortable setting. I begin with a question: "If you could spend 15 minutes with any person in the whole world discussing, questioning, and sharing, who would this be and why did you choose him or her?" The students can write or draw their responses and, if they choose, share them following the exercise. When I implemented this experience with middle school and undergraduate students, the sharing and empathy in the room was palpable, and I learned so much about the emotional and social profiles of these students!
- 2. The Things I Carry: At the front of the room is a backpack containing five or six items, pictures, or words that I identify with or hold close to my mind and heart. As I model for my students the contents of my own backpack, I begin sharing who I am as a person. This is a powerful way of not only getting to know your students, but also tying in the backpack's contents with a class novel, science experiment, or any standard that you're teaching simply by aligning items in the bag with what students need to know. Students can guess what items might be in the backpack before you reveal them. Prediction is an effective brain state which increases the brain's dopamine levels that are responsible for pleasure- and goal-seeking behaviors.
- **3. Just Ten Words:** Write or draw a 10-word story on a specific topic that you're teaching, or have students write a 10-word story describing their strengths and expertise. Another option for those who don't want to write is creating an infographic.





- 4. Predict an Outcome: Choose a short TED Talk or documentary and watch the first minute. Following this one-minute presentation, students will predict two or three outcomes as to how this presentation will end. This can be related to subject matter that you're teaching, or it could be a motivational video addressing social and emotional skillsets.
- 5. Beliefs Infomercial: Using images, words, colors, or technology, have students design an infomercial about a strong belief that they hold. It could be a longtime personal belief, one that they've developed through recent experiences, or one that they're beginning to question.
- 6. Reinventing Gum: Place a stick of gum on every desk as students walk in. On five notecards, have them design five new inventions for chewing gum. Students can share and compare at the end of the bell work.
- 7. **Meeting of the Minds:** Students will select characters from a book, historical figures, or any author, inventor, scientist, or individual whom they've been studying. Given a 21st-century challenge, how would these individuals solve it? What would their discussion look like, and how would they relate to one another?
- **8. The Traveling Pants:** Place an old pair of trousers or blue jeans on a table in the front of the room. Present a variety of questions and activities about these pants, such as:
  - Where have they been?
  - Where would you travel?
  - Describe three places you'd travel or goals you'd accomplish while wearing these pants.
  - What will it take for you to get there?
  - How can you begin creating these destinations or goals today?
- 9. Invent a New Language: Either individually or with a partner, have students create a new language that we need today. It could be a language of feelings, kindness, service, or just a silly variation by adding or deleting words, parts of words, vowels, or consonants.
- 10. Legibility Test: With their opposite hand or blindfolded, students write a short review paragraph about a topic on the upcoming test or something that needs to be remembered. Then they trade papers with a classmate to see if they can read and understand what was written.





The strategies in this section originally appeared on Edutopia in my articles:

#### "5 Ways to Help Students in Trauma"

https://www.edutopia.org/article/5-ways-helpstudents-trauma-lori-desautels

and

"7 Ways to Calm a Young Brain in Trauma" https://www.edutopia.org/article/ 7-ways-calm-young-brain-traumalori-desautels

### Trauma in our Classrooms: Middle and Secondary Strategies

The environments that our students bring into our classrooms often reflect a mindset that has developed without effort or awareness. For many of students, attending school is an adverse experience because school hasn't been a place where they've felt emotionally safe or academically successful. They would rather act out or look like rebels than appear "dumb" — especially in front of their peers! As educators, we can start counteracting that negative experience the moment they enter our classrooms. I hope that these bell work activities will inspire your students and set their brain state for feeling capable and engaged at the start of each day.

#### Things to do with Trauma

I am learning that with some students, we must create an emotionally safe environment that provides them the opportunity to feel connected and understood, a place where "that was then, and this is now" becomes a primary understanding and motto in the classroom. The following strategies are beneficial for all students, especially those who come into the classroom carrying negative emotion.

- 1. Begin and end each class with deep breathing: Inhaling deeply brings an oxygenated glucose blood flow to our frontal lobes. Taking just three deep inhales and exhales calms the emotional brain and begins to release the anxiety and fear accompanied with the onslaught of past-trauma-filled memories.
- 2. Release feelings: At the entrance to the classroom, designate an area with a jar or basket where students can leave notes with either words or drawings of their feelings. They can choose to share the feelings with you or not. When we release our feelings and thoughts, we create space in our working memory.



- **3. Hand massage:** Begin class with a 90 second hand massage. Offer each student a drop of lotion so they can perform this relaxation process. The neuroanatomist Jill Bolte Taylor has found that our bodies and brains rinse clean of negative emotion in 90 seconds if we attend to those feelings and the thoughts that stir them up.
- 4. Take a bucket inventory: Explain to your students that we each carry two internal buckets with us each day. One is a stress bucket, which sometimes is so full it just takes a drop or two for it to overflow. The other is a bucket of good feelings that needs to be filled by those around us and ourselves. Which bucket is full? Which feels empty? How can we help fill or empty each bucket? Students are encouraged to help fill one another's good feelings bucket or assist in emptying out the unneeded stress. What are the ways this could be a part of your class rituals and routines?
- 5. Create trigger lists: Older youths (those in grades 5 12) who have experienced trauma sometimes know their triggers those sounds, sights, and experiences that spark negative emotions. A few times each week, I check in with all students and have them create a list of triggers that can block learning and relationships, and also list those experiences, people, or celebrations that enhance positive emotions. This is also a great way for educators to collect perceptual data and build trusting relationships with students. What are your buffers?





#### Strategies to Calm the Brain

- Taking deep breaths brings an oxygenated glucose blood flow to our frontal lobes. Taking just three deep inhales and exhales calms the emotional brain.
- 2. Movement is critical to learning, as it activates several areas of the brain at once while calming the brain. I will usually lead with a rhythm, using a plastic cup or my body, and students will mimic me by drumming the pattern on their legs and arms. The collective sound brings a sense of community to the classroom.
- Once a day, I pass out a drop of lotion, and for 90 seconds students give their hands and fingers a massage, noticing their palms, fingertips, and any sensations that feel uncomfortable or stiff. We always reflect afterward.
- 4. For a few minutes, I have the students rock along their spine to help them feel present in their bodies. This also provides a soothing rhythm that subtly grounds them with sensation and movement.
- 5. Placing our fingers on our throats, we begin the day with a sound or class chant and feel the vibration of our vocal cords. This gives everyone a chance to participate and to see how we can mimic different animals, instruments, and random classroom sounds such as papers crinkling.
- 6. The students sit with their legs straight out and begin wiggling their toes and ankles, shaking knees and thighs, rotating shoulders, arms, and finally their heads, keeping all body parts moving at the same time. Then we reverse the process and stop our heads, arms, shoulders, and on down. This gives children a great body scan and a sequence for working memory.
- 7. Sometimes I'll put on music and give the students old scarves, and we'll dance around the room waving the scarves and feeling the soft sensation as we dance and pass by one another. When the music stops, we freeze and notice our postures and movements. This strategy can be led by the teacher or a student to see if we can mimic a movement or create our own.





This article originally appeared on Edutopia as:

"Teachers, Students, and the Hero's Journey," https://www.edutopia.org/ blog/teachers-students-andheros-journey

#### The Hero's Journey

"The cave you fear to enter holds the treasure you seek." — Joseph Campbell

Joseph Campbell, an American mythologist who studied myths from all over the world, created the famous Hero's Journey, a monomyth that explains how each individual goes through continuous cycles of change and transformation. Nothing could be more accurate than when we apply this monomyth to educators, students, and schools, because the teaching and learning process and emotional connection are real-life cycles of continual challenges, births of new ideas, successes, and transformations. This is a brain-aligned strategy for students in grades 5 - 12.

#### Steps Along the Path

As I reflect upon this past school year and the Hero Journeys that I observed within my own life and those teachers I've worked beside, I return to a strong teaching practice that also recognizes the hero's thousand faces: modeling. I'm learning that modeling our own Hero's Journey for our students provides a powerful teaching and life tool. It offers opportunities for reflection, problem solving, hindsight, foresight, and cognitive flexibility for sitting beside students whose struggles, celebrations, and identities change and develop unceasingly. By being aware and alive on our educational journey, we can begin to model empathy and understanding for one another. We can embrace all that we do, experiencing it as a heroic adventure with no predictable outcomes. Each moment, hour, day, week, and month, we enter into a cycle and travel toward change, challenges, and new beginnings.

#### Status Quo

We begin with an embrace of our ordinary existence. Life feels neutral here. As teachers, we return to a classroom with students who will be learning beside us for the next several months. We anticipate and encounter new student lists, schedules, back-to-school nights, upcoming assessments, grade-level and district meetings, and the list goes on. We're aware of our personal lives and the relationships and experiences that coexist with our professional responsibilities.



#### Call to Adventure

We meet our new students and begin to see novel behaviors, encounter unfamiliar and familiar words, and observe the mini-worlds that each student carries into our classrooms. We notice apathy, excitement, negativity, enthusiasm, and an array of cultures and belief systems. Questions ensue:

- How can I meet the academic, social, and emotional needs of so many students?
- Where do I begin?
- What were the most significant challenges in years past, and how will those help me now?

#### Assistance

We realize that we'll need the help of someone who is possibly more experienced, or who has shared similar challenges with this struggle before us. In this part of the journey, we begin to seek the resources we'll need to meet the challenges. Maybe we turn to the person and share our frustrations, hopes, and ideas. Maybe we reach out to parents in a way that emphasizes collaboration with a gentle underlying request: "I need your input!" We ask ourselves:

- What are the realistic goals for this child or adolescent?
- How can I begin to create a safe environment and a connection with this individual so that mistakes and struggles are embraced?
- How can I begin to share and model gathering my problemsolving resources so that my students feel and see my struggles and calls for assistance?

#### Departure

It's time to step outside of our comfort zone and try new ways of being with the situation or individual that has stimulated change and challenge. We cross the threshold of sameness by listening to learn rather than listening to respond. We have left the ordinary world.





#### Trials and Hard Work

We now begin to ask the difficult questions that might propel a few more deep dives into reflection and observation, while noticing how our own triggers can escalate the impending challenge or perceived crisis. These questions are for students and teachers:

- What do I need?
- What can my class do to assist me?
- What can my teachers do to assist me?
- How do I handle this negative situation?
- Who are my heroes? What character traits do I admire in these individuals?
- How will I know when I'm on the right track?
- What are three positive emotions that I often feel? What are three negative emotions?
- What are my strengths?
- What are two or three challenges or obstacles that prevent me from reaching these small or large goals?

#### Approach and Crisis

This is where we approach our worst fear. We intuit that a change in relationship, instruction, dialogue, or physical movement is necessary. We begin to understand that the status quo can no longer be sustained. We enter into a type of crisis and intense difficulty. We understand that crises induce movement and change. On the other side of the crisis coin is opportunity, which lets us learn and grow from our darkest hours. We face our vulnerabilities, triggers, worn-out belief systems, and long-held private logic. During times of high stress, it becomes critical for us to provide emotional first aid to one another. Once we demonstrate that we can be with one another at our worst, we begin to build trust.

#### **Treasures**

We claim our treasures by acquiring a new perspective and a personal power that redefines our experiences and relationships. Rather than becoming caught up in an escalating conflict or weighed down by guilt and shame, we learn the skills that help us drain off hostility and frustration, and we look at our situation through a new lens.





#### Resolution

We begin seeing difficult behaviors as opportunities to teach young people, others, and ourselves how to manage conflict and solve problems. We see our role as teacher expanding to include our ability to restore emotional equilibrium in our classrooms and schools.

#### Status Quo

We have upgraded to a new level. We have embraced a perspective of growth and have learned, connected, and reshaped who we are constantly becoming!

#### A Template for Growth

"If kids come to us from strong, healthy, functioning families, it makes our jobs easier. If they do not come to us from strong healthy, functioning families, it makes our job more important."

#### — Barbara Colorose

Below is Matthew Winkler's TED-Ed video that teaches students about the Hero's Journey and how our lives, as well as the movies and books that we enjoy, mirror and model the stages of growth, crisis, and opportunity.





The strategies in this section originally appeared on Edutopia in my article

"Calming End-of-Year Stress:"
https://www.edutopia.org/blog/
calming-end-of-year-stresslori-desautels

#### **5 Strategies for Closure and Transition**

Below are strategies to hopefully lessen everyone's perceived stress while easing the transition to a magnanimous unknown. These strategies are for all grade levels.

- 1. Symbolic Gifts: A talisman symbolizes ritual and ceremony, which our brains enjoy. A token such as a coin, stone, shell, or any object shared with another says that our relationship doesn't end it simply changes. This would be a great resource for transition as students leave our classes knowing that we'll always be a part of their journey even if we don't see one another daily.
- 2. Photos and Affirmations: We all loved photo booths when we were young. Create an affirmation photo booth in the last weeks of class with a positive affirmation written on a post-it or index card and a picture of you and your students to be embraced long after the school year ends.
- 3. Planting and Nurturing: Metaphorically, a connected school always focuses on planting flowers instead of pulling weeds. During the final weeks of school, design a ritual seed-planting celebration. With paper cups, soil, and seeds, students can water, provide sunlight, and take care of their small plants all summer long knowing that they've been the caregivers in a project connecting the symbolism of the plant to their own lives. When we care for ourselves, we grow and flourish. When we care for another, he or she grows and flourishes.
- 4. Remember to Breathe: Calming the brain's stress response is critical to positive emotion, clarity of thought, and emotional regulation. When we use breathing or focused attention exercises to quiet the emotional center of our brains where fight, flight, and fear reside, we are activating neural circuits in the brain that strengthen the flow of oxygen and glucose through the prefrontal cortex. Each day, invite students to join you in a guided or breathing focused attention practice.



5. The Family Tree: A healthy, emotionally connected classroom mimics a family that embraces family privilege. In the final weeks of school, create a family tree within the classroom or school where branches symbolize individual students and their strengths, contributions, and successes within the classroom. Small groups of students could represent larger branches, but all are connected. When the tree's leaves change colors or when its branches bud with new life, these events hold the connection and stories of all students who have been a part of this tree of life. Whether you create this symbol with an actual tree or from school art supplies, give your students a part of their branch to take home.





The strategies in this section originally appeared on Edutopia in my articles:

"Islands of Personality and Trains of Thought" https://www.edutopia.org/blog/islands-ofpersonality-trains-of-thought-lori-desautels

"Contagious Emotions and Responding to Stress" https://www.edutopia.org/blog/contagiousemotions-responding-to-stress-lori-desautels

"The Adolescent Brain: Leaving Childhood Behind:"
https://www.edutopia.org/blog/adolescentbrain-leaving-childhood-behindlori-desautels

# Inside Out: Strategies to Build Engagement, De-Escalate Conflict and Improve Creative and Critical Thinking

In the film Inside Out, 11-year-old Riley holds several islands of personality in her brain. These islands were created from her past core memories, experiences, interests, and passions. Positive and negative core memories create these islands that make up our personality or sense of self. Riley's included Family Island, Friendship Island, Soccer Island, and Goofball Island.

Our brains form islands of personality (or, for the purposes of this discussion, islands of self) because of our interests, relationships, experiences, and how others in our lives have affirmed, supported, or possibly weakened our thoughts about who we are and our ever-developing life purposes. How can educators assist in building upon, repairing, and strengthening our students' islands of self? When we take a few minutes to authentically share and reflect with our students, we cultivate a connection that sustains us through the difficult moments within our classrooms.

Validation is an effective brain-aligned strategy that tells a student, "I hear you and I understand." Validating a child's or adolescent's feelings helps the student to "feel felt," which is integral to every student's emotional, social, and cognitive development. As I began delving into this activity, I interviewed several students aged 7 - 17. Below are examples of their islands of self. Not only did they share the names of their islands, they also explained why and how these islands developed. The students loved this type of reflection, giving me a snapshot into their worlds of beliefs, private logic, and sense of self.

- 1. People Island
- 2. Laughing Island
- 3. Scary Island
- 4. Animal Island
- 5. Intellectual Island
- 6. Dancing Island
- 7. Spiritual Island
- 8. Not Good Enough Island
- 9. Island of the Arts



#### Strategies to Develop Islands of Self

- Ask students to identify and share their islands of self. As
  educators, we begin to model this activity by explaining to
  students that our islands are always changing based on our
  interests, passions, affirmations, experiences, relationships, and
  perceptions. Change is life, and much like real islands, our islands
  can grow healthier or diminish and weaken.
- 2. Create and display islands of self at the beginning of the year, explaining that these could change based on our experiences. This is a fabulous strategy for gathering perceptual data. The more that students know about themselves, the stronger learners they are. Self-reflection and self-observation are the building blocks for cognitive and academic growth. Creating islands of self is an activity for all ages and grade levels as students begin to see analogies, contrast, differences, and similarities in and out of school. How many of our students would have an island of mistrust or an island of a broken heart?
- 3. Create a Future Island and encourage students to imagine, innovate, and begin planning what social and emotional topography will be a part of this island.
- 4. These islands could be integrated into language arts and history curricula, and of course into personal narratives. Consider teaching a history, biology, and geography lesson looking at changes in people, landforms, and our bodies, and how the environment and cultural shifts create and modify new islands of self.
- 5. Islands of self could be compared to building mathematical operations and algorithms.
- Islands of self could assist in developing a thesis and the foundations for nonfiction writing, science research, and the development of a hypothesis.





#### Train of Thought

- 1. In Inside Out, we watched Riley's train of thought run through her mind during the days and stop or slow down when she was sleeping. We know that the brain never stops working unless we are dead, and as my fourth-grade students suggested last week, maybe our trains take other routes when we are sleeping, and quite possibly our subconscious thought processes are the engineers. We saw fear take over Riley's train of thought on her first day of school, followed by anger and sadness. Her changing feelings were distracting headquarters (the prefrontal cortex) in her brain and therefore her train of thought was derailed a few times. Students love to learn about their own neurobiology and when they understand what distracts or derails their train of thought in the frontal lobes, they can implement strategies to help them pay attention and focus.
- 2. Paying attention and being focused are prerequisites to sustainable learning. Sustained attention and working memory are executive functions that are not fully developed until early adulthood. If a child or adolescent has experienced some form of daily ambient trauma, these executive functions can be underdeveloped or stagnant. We know that emotions drive attention, and that many of our students walk into our classrooms in a hyper-vigilant brain state, constantly scanning the environment for feelings of safety and familiarity. Brain architecture is intimately affected when an individual is experiencing chronic levels of stress. In a stress response state, the neural circuitry is forming synapses in the limbic system, leaving the frontal lobes with very little oxygenated and glucose-rich blood.
- 3. For many students, what looks like inattentiveness or lack of focus is quite the opposite. They are paying close attention to the perceived threats in their environments.

#### **Questions for Students**

- 1. When does your train of thought run smoothly with few stops?
- 2. When does your train of thought struggle? Why?
- 3. What can I do in the classroom to help your train run with great speed and accuracy?
- 4. What can you do to help your train of thought stay on the tracks and reach its destination?





#### **Strategies for Students**

- For younger students, it is important to have a tangible train of thought in the classroom. This could be a larger model of chairs and cardboard boxes, or students could build individual models of trains. Images of trains posted in an Attention and Focus corner could help to prime the brain for focus and remembering.
- 2. For older students, creating an analogy or visualization of the train of thought could support goal setting and planning. Where is your train heading right now? Is this where you want to go? What are two changes in planning this journey that you could make today?
- 3. Teaching students about their neuroanatomy is empowering, as well as the foundation of learning and connection.
- 4. Teaching students how to calm their minds through breath and movement will help them focus attention and become better learners. You can read more about this mindful approach in:
  - Amanda Machado's Should Schools Teach Kids to Meditate? (The Atlantic)
  - A collection of Huffington Post articles on Mindfulness in Schools
  - My Edutopia post Energy and Calm: Brain Breaks and Focused-Attention Practices

What other ways might you help students visualize their identity and how it shapes their cognitive processes?



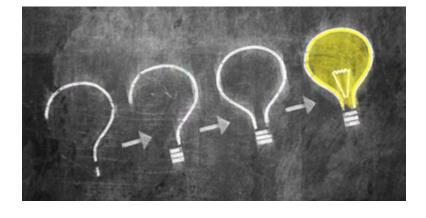
#### Calming the Stress Response

Focused attention practices and movement are the two neurological strategies for calming an angry and anxiety-ridden brain. When we are in this fight-flight-freeze response, we do not hear words or explanations because the neural pathway from the prefrontal cortex back to the amygdala is much like a dirt road — it's underdeveloped, and messages in words are not heard or understood.

 Get Some Distance: Give students — and yourself — a few minutes to step away from a conflict and de-escalate the limbic reaction. You can accomplish this with deep breaths, some physical space, a few push-ups, jumping rope, a walk, or listening to instrumental music while focusing on your breath.



- 2. Validate the Feelings: Once the negative emotions have calmed down and the brain has regulated, validation is critical for helping students know that they are heard and understood. Examples of validating statements include:
  - That must have made you feel really angry.
  - What a frustrating situation to be in!
  - It must make you feel angry to have someone do that.
  - Wow, how hard that must be.
  - That stinks!
  - That's messed up!
  - How frustrating!
  - Yeah, I can see how that might make you feel really sad.
  - Boy, you must be angry.
  - What a horrible feeling.
  - What a tough spot.
- 3. Questions and Choices: Once the student feels heard and felt, we can gain a better understanding of his or her feelings. We then have an opportunity to implement questions and choices. Both questioning and choice assist in up-shifting an oxygenated glucose blood flow to the prefrontal cortex, where we are better problem solvers, to think clearly about choices and consequences. Here are some sample questions:
  - How can I help?
  - What do you need?
  - What can we do together to make this better?
  - What is a plan we can create together?
  - Is there anything you need from me now or later that would help you reach your goals?





#### **Reasonable Consequences**

The brain loves to make sense out of experiences, information, and relationships that fit together. This is why we need to implement consequences that attend to the hurt or pain that one person has caused another. Consequences for poor decisions and the choices aligned with them will make sense and feel relevant and meaningful to students who are ready to process this information, responding from their frontal lobes in a calm brain state. This is the place in which they'll experience and feel the connection between choices and consequences. Here are some examples of those connections:

- For a student who interrupted whole-class learning, have him
  or her create an extra-credit assignment for the class on a
  specific topic or standard.
- For a student who used unkind words to another classmate, have these two partner to create a special assignment, job, or favor for another class or the cafeteria or office staff, starting a "pay it forward" chain for a week of school.
- For a student who showed disrespectful behavior toward an adult, have him or her write a letter of apology explaining what was beneath the hurt feelings that caused the behavior, accompanied by a plan of action to make amends for the hurt feelings that he or she caused.



There are many YouTube videos presenting kindness, empathy, and the tough struggles of others that students will enjoy and learn from. This activity helps us reach beyond our own stubborn egos and negative emotions to serve another. The following links take you to sources of short videos that will help your students create positive emotions and diminish anger:

- Pennies of Time
- Random Acts of Kindness
- Kind Kids Club

What are other ways that we could align consequences to impact future behaviors with positive emotion?



#### The Adolescent Brain

There isn't a more profound scene in the film Inside Out than the death of Bing Bong, Riley's imaginary friend. As the main character approaches her 12th birthday, her brain is beginning to develop in ways that leave her imagination behind. This is the time when children between the ages of 10 and 14 begin dying to their childhoods to be born into their adolescence.

#### **Redefined Purpose and Identity**

Bing Bong represents innocence, imagination, creativity, and childlike joy mixed with love. This is the second greatest time of brain change, the first being birth to three years of age. Inside Out embraces this development in a very visual and meaningful way as Bing Bong intentionally jumps out of the rainbow wagon, watching Joy return to headquarters without the weight of childhood thought processes and feelings. As Riley's brain begins exploring this adolescent stage of life, she begins searching for a new identity and social status, is confronted with intense emotions, and revisits many of her childhood core memories that begin to enrich this new developmental time in her life. Finding a new purpose and discovering who we are becoming characterize the great neurobiological changes that educators and parents need to deeply understand in this time of brain development.

The adolescent's jobs are to question authority and search for an identity. As young people grow into these new responsibilities mandated by their personal development, their teachers and administrators need to understand how to create classroom cultures and relationships that promote creativity, as well as positive social interactions that play into the intense emotions which are an integral part of the adolescent brain. It is our responsibility to help our young adults see a bigger life picture filled with optimal choices and consequences, so that embracing hindsight provides foresight for these genius chaotic minds.

There are also significant changes in the secretion and baseline levels of neurohormones. The adolescent brain contains lower levels of serotonin, which declines in these years. This can contribute to increased aggression along with higher levels of testosterone, which can also contribute to angry outbursts and impulsive behavior. The baseline for dopamine, our feel-good neurotransmitter, is also lower, so more dopamine is required for a satisfying result. Additionally, we know that the frontal lobes of the brain are not fully developed in these years, which limits brain function in problem solving, discernment, emotional regulation, and sustained attention.





There are many brain-aligned strategies that strengthen the creativity and productivity of young adults as we emotionally attach to our adolescents securing a safe environment for them to explore, identify, and connect with one another. Below are some questions that open the frontal lobe for connection, memory, and metacognition:

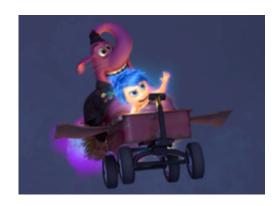
What or who was your Bing Bong? Could it be an object (like a blanket or teddy bear) or something abstract?

- What does Bing Bong symbolize?
- Why is it important for Riley to let go of Bing Bong?
- Why did Bing Bong jump off the wagon?
- What makes it so sad for the audience (especially parents and adults) as we watch this part?
- Do we really ever lose Bing Bong? Explain.
- Do you have a core memory of an experience from your imagination? What is it like?

In The Teen Years Explained: A Guide to Healthy Adolescent Development, researchers from Johns Hopkins University provide a powerful handbook to better understanding the adolescent brain and how we can prepare to sit beside these young adults in a time when the brain is hot, messy, and beautifully intelligent and complex.

What can we do as educators to ease the transition into healthy adolescence?

- 1. Model the behaviors that we want to see. It's chancy to assume that our adolescent students know what we want or are asking for regarding behavior, instruction, and expectations. We need to be specific with our models of instruction and assessment, even developing our own models to share with our students. Each semester, I create a project that's similar to what I ask of my students. They enjoy my explanation and transparency, and they love to give me feedback, just as I do with their projects.
- 2. Tap into the strengths, passions, and expertise of all students. Create expert days where students actually design a professional development individually or in partners to share their interests and strengths. This could take many forms.
- 3. Give students choices and input into developing rules, consequences, guidelines, and class structure. Invite students to lead in morning meetings and class rituals.





- 4. Provide safe and fair boundaries with explanations as to why these are needed. Our brains need structure and boundaries as much as they need novelty. When we explain the nuances of neuroanatomy, students begin to see discipline as a science.
- 5. Teach students about the brain and how it is developing during this time in their lives. They need to understand why they're feeling and acting in ways unfamiliar to themselves and others. Here are two excellent videos to help them reach this understanding:
  - TeenMentalHealth.org's Teen Brain
  - SciShow's The Teenage Brain Explained
- 6. Teach them how to calm their stress response system through focused attention practices and brain breaks that involve movement. I suggested some strategies in my Edutopia post Energy and Calm: Change It Up and Calm It Down!
- 7. Learn your students' ecology. What does this age group like to do on weekends? What is their favorite music and clothing? How do they spend their free time? What is their favorite technology? What are their goals? What career and vocation choices could tap into their strengths and interests? When you show interest in their lives and intermix this data into your standards and topics, you've demonstrated equity in the teaching and learning relationship.

As Urie Bronfenbenner said, "Every child needs at least one adult who is irrationally crazy about him or her." This is the kind of support that adolescents require, too. How do you demonstrate understanding and guidance for your students during this challenging phase of their lives?



The strategies in this section originally appeared on Edutopia in my article:

"Strengthening Executive Function
Development for Students With ADD"

https://www.edutopia.org/
blog/executive-functiondevelopment-students-addlori-desautels

# **Executive Function Strategies to Implement with All Students (but Especially Those with ADD)**

The brain is a social and historic organ that performs, behaves, and learns in the context of relationships.

People will forgive your academic mishaps, but negative behaviors are often viewed as personal afflictions and intentional. The following strategies, designed to strengthen the five executive skills, address these negative behaviors supportively and constructively.

#### Pause

Young people with ADD often show an inability to create a pause, or a moment of self-restraint between stimulus and reaction while weighing the consequences of their impending reaction. To assist students in creating this pause, give their brains the opportunity to make associations with color, visuals, and concrete objects. Tangible items can be symbolic reminders for students of all ages. Here are examples of signaling an intentional pause:

- Flicking a red rubber band bracelet on our wrists or placing a red ball cap on our heads are two practices that teachers could model and repeatedly share when a pause is needed before making a hurried emotional or academic decision.
- Accompanied with a tangible item, teachers can help students identify words that are analogous to waiting and hesitating.
   Stop, halt, think, rest, breathe, float, and tread could be posted in specific areas of the room with pictures and images to add meaning.
- Students could bring in an object from home that reminds them to stop, pause, and wait. These personal objects could be placed in a "red corner," a highlighted area in the classroom where they are seen as reminders. Seeing, saying, and experiencing meaningful and personal reminders can effectively create associations and metaphors that the brain desires and needs for personalizing new responses.



#### The Mind's Eye

Children need to understand how past experiences and reactive decisions have resulted in a negative impact. Dr. Russell Barkley describes ADD as a lack of hindsight — and therefore foresight — to visually see past experiences that did not go well. A lack of hindsight prohibits us from viewing the relevant past, which means that we are unable to see what might happen in the future.

Teachers can address this by having students create a visual or written story about a recent experience. There are a variety of options for implementing this exercise. The following questions might spur a story starter and reflection:

- Who are the characters in this story?
- What is their challenge?
- What were the rising actions, climax, and solutions?
- What were the patterns or repetitious behaviors of the characters in the story?
- How would you create or design a different ending?

#### The Mind's Voice

This skill is developed through childhood beginning with audible talking that moves inward. Without the voice in our head, we are left in a deep void of confusion, feeling disconnected from choices and consequences.

As an activity, identify self-talk when experiences go poorly, while developing coping strategies through class discussion and reflection. Students can write their challenges on colored cards and toss them into a container. They then draw cards and become Problem Solvers, creating Pinterest boards that display a variety of improved strategies to select as social and emotional anchor charts for improved learning and behavior.







#### The Mind's Heart

Through this executive skill, youth feel the connection between their emotional responses and ability to self-motivate. This is profoundly lacking in students with deficiencies in emotional regulation and self-control. Here are two approaches to try:

- Noticing is a form of feedback that is not evaluation or praise, but rather purely informative, indirectly saying to the student, "I am present and understand." Noticing assists students with frequent feedback and is a validating mirror for small motivational steps. When we begin to notice everything new shoes, a smile, a haircut, following a procedure or direction we affirm the process.
- Motivational documentaries are powerful stories that promote emotional connection by igniting mirror neurons in our brains to promote perseverance and motivation. They spur great conversations, questions, and discussions that students can apply within their own lives. The emotional lessons from these documentaries could inspire studentdesigned Snapchats and short videos for discussions, increased positive emotion, and modeling.

#### The Mind's Playground

The fifth executive function embraces problem solving, cognitive flexibility, and empathy. To visualize a problem from a different perspective, we need to empathize, see possibilities, and talk through a challenge, which can motivate us to discover a new way of learning and relating to others. The Mind's Playground incorporates Pause, the Mind's Voice, Mind's Heart, and Mind's Eye. Combining these skills gives us an incredible opportunity to be a part of our students' brain development.



The material in this section originally appeared on Edutopia in my article:

"Brain Labs: A Place to Enliven Learning:" https://www.edutopia.org/blog/ brain-labs-enliven-learninglori-desautels

#### **Brain Labs: The Prefrontal Cortex Café**

#### What Is a Brain Lab? What Is Its Purpose?

Every school or classroom should have a student and teacher created brain lab with these goals:

- Enhancing learners' cognitive, emotional, and social well-being
- Teaching students how their brains work
- Supporting students as they explore their thinking and feelings about topics, relationships, and experiences
- Helping students regroup and refocus
- Improving academic achievement and standards
- Crossing disciplinary boundaries

Students could be assigned personal folders with choices of lab activities. Meanwhile, teachers might choose a brain topic each week or month, such as stress, memory, or exercise, movement, and the brain.

#### Using Pop Culture to Study the Brain

Some brain-related topics could take advantage of recent research and pop culture. For example, one module might include activities related to the ideas expressed by Pixar's film Inside Out in order to show how the brain processes thoughts, feelings, and experiences. The movie teaches a fundamental principle about the mind: We can control how our brain reacts to life's challenges. Students can learn to alleviate sadness, increase joy, or activate anger when necessary. Brain lab would be the space to explore how all emotions connect to students' lives and interests, as well as the academic curriculum.





Another key element of the brain lab curriculum would be the study of how students can adjust their thinking to positively reframe events originally perceived as negative. The understanding of neuroplasticity, defined as the brain's ability to change or adapt based upon experiences, can help students become better and smarter while learning about this important concept, as depicted in the Backwards Brain Bicycle. This short video demonstrates how neural pathways that are traveled frequently become hardwired into habits difficult to change without deliberation and effort. After viewing the video, students could share one undesirable habit that they will intentionally address during the year.

With those fundamental principles about neuroplasticity internalized, students could study new ways of memorizing and understanding information for a test, or ways to broaden their perspective about peers that were previously thought of as aggravating.

#### Social and Emotional Components of the Brain Lab

A welcoming brain lab that invites students to choose what they study can enhance their social-emotional learning skills. The lab can be a place where students refocus and become quiet. Children who quiet their minds and practice self-reflection boost development in the frontal lobes where the executive functions for paying attention, emotional regulation, and cognitive flexibility reside. This type of skill building can be aided by several resources:

- Instrumental music
- Comfortable seating
- Computers
- Headphones
- Stress balls
- Paper, colored pencils, and markers
- Books and magazines addressing social-emotional well-being through poetry, stories, or "how-to" genres
- Peppermints

A posted list of choices for enhancing brain development can be aligned with curriculum standards. For example, if students are learning factor trees in math, they could extend this task by using a similar protocol for creating a family ancestry tree. In order to teach inference making in language arts, instructors could bring a tattered house slipper or other worn object from home, show a video clip, or share a story without an ending. Learners could create an inference with a written or cartoon ending based upon the objects and videos presented.



#### Resources for the Brain Lab

Here are just a few of the documentaries, brain games, articles, reflection and perspective exercises, and many other resources that offer lessons on neuroanatomy:

- The Sentis Creative Showreel features animated brain videos.
- This edition of Edutopia's Five-Minute Film Festival teaches about learning and the brain.
- The Brain Bank at Harvard depicts interesting facets of neuroscience.
- Neuroscience for Kids features a newsletter and video presentation developed by Dr. Eric Chundler.
- National Geographic's Brain Games shows how to tap into imagination to solve problems.
- Edutopia's Social and Emotional Learning topic page contains resources for SEL skill building.

As we learn more about neuroscience and its relationship to teaching and learning, we can add more resources to the brain lab and help students take ownership of their brain development.





Cracking the Code of Student Emotional Pain /
Strategies and Concepts about Pain Based Behavior

The material in this section originally appeared on Edutopia in my article:

"Cracking the Code of Student Emotional Pain"

https://www.edutopia.org/blog/ cracking-code-student-emotionalpain-lori-desautels

#### **Rewiring Student Brains**

As note takers, teachers can record a list of bullet points or keywords for the students as they share feelings and thoughts. These lists can be woven into a story that students compose as a work of art to share. It is the instructor's purpose to help learners perceive themselves as experts in their lives. As codesigners, we can fashion a diagram or mind map that illustrates students' thoughts and feelings to help them understand new options and opportunities, and to perceive their challenges as something that can be conquered. Our brains are wired for change, and they rewire with every new experience, thought, and relationship. This is the greatest miracle of a living system.

#### **Learning From Emotions**

It is the instructor's responsibility to share 21st-century brain research with his or her students. Neuroanatomy discoveries during the 1990s enabled us to observe active images of the brain's metabolic processes. As a brain responds to a directive or image, its feeling and cognitive lobes ignite. We now understand the role of emotions, perspectives, and stress on brain function and learning. Sharing this information with students can empower them to employ improved methods of self-assessment, thus enhancing their personal responses to stimulation and improving their sense of efficacy.

#### **Teacher Well-Being**

There is nothing more significant in the student-teacher relationship than the instructor's self-awareness and self-care. Our emotional states of mind (our non-verbal affect) seep into our relationships with students. What we feel and experience is intimately and quickly picked up and mirrored by our students. Contagious brain states cannot be ignored. To counter negative contagion, I have embarked on activities that I enjoy: yoga, reading, and walking in nature. Every day I plan two activities — no matter how small — that fill me emotionally, enhancing my relationship with my students. Detaching from student choices is critical to my well-being.



As the poet Mary Oliver once stated, "The only life you can save is your own." Moreover, what teachers see as wrong or negative can be the very best possible experience that a student needs for emotional and social growth. As Dr. Vicara Satya Mary Connelly says, "Wake up and be well; practice until there is nothing left and then some. The only life you can save is your own, so treat yourself with ferocious love and compassion."

#### Core Memories in the Classroom

We all create core memories. When we encounter an experience with heightened emotion, our memory systems remember the experiences because of the intense emotions associated with the event. We know that memories can become diluted or distorted with time and distance. When we remember an event from our past, our brains secrete the same chemicals from the same neurotransmitters called forth when the experience happened, creating the same feelings.



#### Your Classroom's Environmental and Emotional Climate

When students spend many hours in a classroom, they develop an emotional relationship with it. And you have considerable control over the emotional climate of your classroom.

- 1. What does the physical ecology of your classroom say to the students? Is it inviting? Are there areas for specific activities and enough space to move around comfortably?
- 2. Is there an area with soft lighting and plants? A few plants and lamps are good for brain health.
- Could you create an imaginary circle of fear, sadness, joy, etc.
  within a specific area so that students can empty out or reflect
  on those feelings? Emotions can be an intense distraction to
  academic problem solving.
- 4. Is there an area for imagination, innovation, choices, vision boards, or travel pamphlets for future careers and vocations?
- 5. Could you create an area in your classroom or school for a brain lab?



- 6. Could you capture and share two or three positive memories that you've noticed about our students (selecting one to three students a day)? Could you model handling a few challenging experiences from your own life and share those with students during a discussion or circle time?
- 7. Make your class a memorable place for your students. Greet them sitting down or from a headstand. Declare an Opposite Day and intentionally change up your typical ways of "doing school." For Do Nows and Bell Ringers, post questions from the list above or show a short video and have students reflect on serving another.

Below are lists of videos to strengthen students' understanding of service, the anatomy and circuitry of their own brains, and the importance of creating positive core memories in your classroom.

- The Sentis Creative Showreel features animated brain videos.
- This edition of Edutopia's Five-Minute Film Festival teaches about learning and the brain.
- The Brain Bank at Harvard depicts interesting facets of neuroscience.
- Neuroscience for Kids features a newsletter and video presentation developed by Dr. Eric Chundler.
- National Geographic's Brain Games shows how to tap into imagination to solve problems.
- Edutopia's Social and Emotional Learning topic page contains resources for SEL skill building.





The information in this section originally appeared on Edutopia in my article:

"Creating Core Memories in the Classroom"

https://www.edutopia.org/blog/ creating-core-memories-in-classroomlori-desautels

## Instruction and Neuroplasticity: Creating Strong Academic Core Memories

Research reports that when students are asked to explain something during a lesson, they are better able to connect new ideas with prior causes and effects. These student-created explanations don't have to be accurate. The brain works hard when we feel heard and are close to solving a problem. When we teach what we need to learn, we form stronger memories.

- Have students predict the new topic before you begin teaching it. They can create a series of guesses based on clues that you provide even if the subject matter doesn't feel exciting. Our brains love to predict and anticipate. Implement real objects, make signs or advertisements, create a skit, or wear clothing that hints at the subject area.
- 2. Our brains are wired for patterns and context, which is why we love stories. What kinds of stories can you create that integrate what you're teaching? The narratives can include personal information about the school or class, using students' actual names. A story can make them care and wonder. Stories create anticipation and change up the ways that we traditionally learn.
- 3. Brains hold the stories of our lives, and memories exist as networks of linked cells. These connections between cells thicken with repeated use of synapses. Brains don't typically store facts -- they store perceptions and thoughts, which are more subjective than facts. Brains hold onto what is relevant, useful, and interesting. Share these facts with students.
- 4. Teach students about the power of their memories. Memories build and weaken quickly. They have two strengths: retrieval strength and storage strength. No memory is ever gone, but its retrieval strength weakens without reinforcement. This is why practicing any new skill or habit is so very important.



- 5. If we lose information or a fact and we work hard to remember it again, we've deepened our learning. So forgetting is actually good for the brain! The harder we work at retrieving a memory, greater its strength will be.
- 6. Teach in images and pictures our brains innately remember them. No matter the subject area, start with a picture and let the guessing begin. Create a brain state of anticipation by breaking students into small groups with a visual clue about the topic. Students could even act out their clue and then combine the clues from all groups to assemble the lesson's topic or standard. Here are some examples:
  - Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a work of literature and contributes to the development of the theme, characterization, setting, or plot.
  - Explain how an author develops the point of view of the narrator or speaker in a work of literature, and how the narrator or speaker impacts the mood, tone, and meaning of a text.
- 7. Choose a sentence or paragraph from a piece of literature and act out, pantomime, show a video clip, or have the small group sit in chairs and dialogue their clue while the rest of the class observes and guesses.

How could you design brain states of anticipation to create academic core memories?



The material in this section originally appeared on Edutopia in my article:

"3 Things Students Desire to Hear From Teachers:"

https://www.edutopia.org/blog/ students-desire-to-hear-fromteachers-lori-desautels

#### **Three Questions Every Child Wants to Hear**

"Every child needs at least one adult who is irrationally crazy about him or her." — Urie Bronfenbrenner

A year and a half ago, I decided that I needed to return to the K-12 classrooms and really experience ground-level teaching, testing, core standards, differentiating, and emotionally connecting with children and adolescents in ways I had not for many years. I have been and still am an assistant professor in the school of education at Marian University, but the environments, experiences, and my own learning have grown and changed immensely from returning to the classroom 18 months ago.

I asked the university for a course release, taking the lectures, research, and strategies into the early adolescent grades. And three and a half semesters later, I am discovering, sometimes failing, sometimes celebrating, but always walking the walk of my graduate students and sharing these experiences with my pre-service teachers. Two mornings a week, I have entered six fifth grade classrooms in three elementary schools in Washington Township, a large Indianapolis public school district. Currently, I am co-teaching in four different seventh grade classrooms. I am learning more than I ever could have imagined, but the greatest lesson has been discovering the three key themes or words that keep showing up with the hundreds of students that I have had the privilege to teach and mentor.

I have surveyed the students and teachers with these questions in mind:

- What does your teacher say to you that feels encouraging or motivating?
- What do you want to hear from your teacher about your performance or disposition in school?

From a variety of educators and students in three large districts, four elementary and middle schools, along with undergraduates, the answers to these questions have affirmed how very significant social acceptance and feeling "felt" are inside of schools.



#### Believe

"I believe in you. You are going to be successful someday. You're going to make it! If you apply what I see in you, there is nothing holding you back!"

To believe in another is to see what cannot be seen just yet. It requires focusing on all that is going well and right, even though there will be conflicts, bad moods, ornery behaviors, and consequences for poor choices. We notice it all — new shoes, hairstyles, kind gestures (though they may be scattered and few) — and we build upon even the most challenging of performances that, with a perspective shift, could turn on a dime to a strength. We are detectives, looking for the missing pieces that we know exist but have been momentarily buried. We create experiences, "forced successes," that give the student an opportunity to feel capable. By this time of year, we know our students well, yet we can fall into an emotional and academic rut. So we begin to give a few more acceptable choices that are aligned to our standards and topics. We can leave affirming notes and share our personal challenges that caused us to doubt ourselves at an earlier time in our own lives.

"I believe in you! Let's make a plan together for just tomorrow. Let's choose two accomplishments that you want to see through and design a way for them to happen."

#### **Purpose**

"You have a purpose. I see it and feel it! Let's have fun and discover what it is. A purpose might change, and that's a good thing, but it's there!"

How do we help a student find his or her purpose? We begin with an affirmation: "You have a purpose!" We listen for interests and signs. We respect the off days and the off hours, and we try again. We share stories of others who lost a bit of hope and purpose, but tried again and again. J.K. Rowling, Bill Gates, Michael Jordan, and Walt Disney are just a few well-known individuals that defined purpose through their mistakes and failures. We talk about the gift of failing and how we can choose to respond and learn from those moments of illusory despair. We begin to create a purpose for those students at school and in our classrooms. We make a plan inviting the student to serve another. Maybe he tutors a younger student or helps to plan a surprise meal for the custodians and the cafeteria staff. Maybe she targets another student who is struggling, becoming a secret inspirer for a week.



Maybe we connect the class to a retirement home and Skype with another generation who has lived through these tumultuous years of adolescence and would love the companionship and communication from middle and high school students. Field trips are fewer today, and this allows us to invite community members with their own purposes and gifts into our classrooms as guests, igniting and sharing the work they are doing with homeless populations, incarcerated youth, and other service organizations that thrive on volunteerism.

#### Question Me

Listen for this unspoken request from students:

Ask me how I am. Ask me what I need. Ask me my thoughts and feelings. Ask me what my opinions are, even if my response is ridiculous because I don't want to stand out in front of my peers! Ask me in private — always in private. Ask me to teach you anything about my world, my culture, music I love, my beliefs, and my story. I may not say a word, and it may take the entire school year for me to respond to your questions, but I hear you. I hear your interest and your compassionate concern for what I like, what I need, and what plans I would like to create.

When we serve another, our own emotional circuitry changes. As we proceed with transparency, self-awareness, and persistence, our perspectives broaden, raising positive emotion while enhancing our own feelings of purpose and well-being.





The material in this section originally appeared on Edutopia in my article:

"Incentivizing Your Class: The Engagement-Based Classroom Management Model"

https://www.edutopia.org/blog/ incentivizing-engagement-basedmanagement-modellori-desautels

#### Incentivizing Your Class: The Engagement-Based Classroom Management Model

When I think of our most struggling and distracted students, I see how social pain and rejection often hijack their ability to be academically focused and successful. Optimal school performance requires positive emotional connections with those students that we want to prosper while feeling capable and competent.

When students and teachers feel this connection, we are all responding from the higher cortical regions of the brain, and our dopamine reward centers are activated by these feelings, these positive emotions. Our interactions with students are intimately connected with our own feelings and agendas. When our efforts in the classroom meet with frustration and opposition, we can inadvertently mimic our students' negative emotions.

#### Introducing and Customizing the Model

In this post, I'm proposing a classroom management model that I developed with the help of Judy Willis. This model for behavior and emotional engagement incentivizes students to self-assess and reflect, choosing options that are socially rewarding. The model resembles a video game, with students moving through levels and noting how they feel. They choose options at each level that motivate them to the next level, which lessens growing anxiety and anger. Many of our students don't have the social modeling from their environments to assess an alternate way of approaching a problem, especially in those moments when negative emotion is growing stronger.

Just as we discuss and model other procedures, we will initially need to teach students about this model. It will look different based upon students' grade level and age. Teachers and students must agree ahead of time about how they will communicate their growing frustration, ideally with a signal or gesture that indicates a need to choose an option at a specific level. Adjust this model to the growing and changing needs of your students and your personal teaching profile.



The first aspect of this behavior engagement model is to teach our students about their own neuroanatomy. When we understand how the brain learns and feels — with every word, thought, and experience — we empower our students with the lifetime tools that will enhance their experience in and out of school.

As many teachers report that the most difficult parts of the day occur during transitions, we begin by creating a mutual goal for the students participating in this model, generating "forced academic and behavioral success." This goal must be clear, malleable, specific, and measurable:

- 1. John will work on the assigned project for 15 minutes without distracting his classmates by talking, gesturing, or interrupting their learning.
- 2. Alice will enter the classroom, gather her work or supplies, and be ready for instruction within three minutes.
- 3. Anthony will choose a signal and a Level 2 option within a five-minute period when feeling angry or frustrated.

#### Game On: Levels 1-7

#### Level 1

The student has reached the point of no return — angry, closed off, disengaged, hopeless, and feeling the desire to fight, freeze, or flee. At this level, we need space and time to drain off the negative emotion. We emphasize process, effort, and attainable goals once the negative emotion has been cleared away.

#### Level 2

All learning has ceased. The student feels increasingly irritated, somewhat oppositional, and shuts down to feedback and learning. He or she is reacting from lower-brain and emotional centers and needs options to recharge and begin again:

- Revisiting choices previously discussed during a neutral time
- Movement, stretching, water, snack
- Focused attention practice
- Minutes off the task with an activity that de-escalates the stress response (such as running an errand for the teacher)
- Moving to another classroom to assist another teacher or serving another student
- Design instruction in an area of choice and expertise for a few minutes



#### Level 3

The students and teacher may begin to feel frustrated, irritated, and antsy. The distracted student may be willing to try another option and begin again.

#### Level 4

The student is slightly engaged, a bit distracted, and the flow of learning is interrupted. It is at Levels 3 and 4 that we move in closer to the student, touching a shoulder, showing authentic interest while observing all forms of communication. Notice with words, tone, questions, and affirmation:

- What could I do to help you?
- What do you need?
- How can we come up with a plan?
- Should I check in with you in five minutes?

#### Level 5

The student is less engaged but there is still effort and collaboration. We continue to implement affirmation, noticing the effort, and sharing our observations about the high engagement.

#### Level 6

The student is engaged and trying to complete tasks.

#### Level 7

The student is engaged and in the flow. Teaching and learning are happening seamlessly. Social intrinsic rewards work well here, because when someone else notices what's working well, we continue doing it.







#### Goals and Higher Levels of Attainment

The social rewards can be many and varied for students who attain the higher levels of this model on an hourly, daily, or weekly basis. Depending upon the student's age, grade level, and severity of reactions during stress responses, these higher levels can offer:

- Designing a special project and teaching a younger class or another teacher
- 2. Choice of outside speaker aligned with the student's interest, learning about a vocation or life passion
- 3. Song selections for a class blog
- 4. Organizing a service event
- 5. Teacher completes weekend homework that directly ties in with the student's interests and passions
- 6. Positive referral certificates
- 7. Developing a class newspaper
- 8. Leading discussion groups
- 9. Bring in college or vocational students to share different majors and minors

Consequences for repeated low levels of engagement are still explained and enforced. If a student is not working during class time, we need to think about an alternate environment and time where he or she can complete assignments once the negative emotion has been drained. Research repeatedly reports that social rewards are sustainable and meaningful when assisting students in shifting habit, mindsets, and behaviors.



The material in this section originally appeared on Edutopia in my article:

"Meta-Collaboration: Thinking With Another"

https://www.edutopia.org/blog/ meta-collaboration-thinking-withanother-lori-desautels

#### **Meta-Collaboration: Thinking With Another**

What if we could dramatically improve our thought processes and learning strategies by tapping into the social genius of another? What if a classmate, colleague, or friend could help us recognize and claim our strengths, new habits of thought, and strategies from a perspective that we never imagined by ourselves? As human beings, our survival depends on others. Our ability to cooperate and collaborate has trumped the stress response state of competition within our species and throughout evolution. With a group affiliation to nurture these relationships, we can strengthen and reappraise our own thought processes.

#### Ushering in the Conceptual Age

The two aspects of being human that set us apart from other mammals are metacognition and the deep desire to belong or feel felt. Our sense of needing to belong to a group is an inherited part of our neurobiology, and collaboration with others is the desired outcome. Metacognition is our brains' miraculous innate ability to self-assess, think about our thinking, and reshape our perspectives.

Feeling the emotions of others, social acceptance, and cooperation are critical to our early development of the identity and industry stages. Author and motivational speaker Daniel Pink states that the future belongs to conceptual cooperative thinkers. He observes a definitive shift in the developed world from a logical/technical age to a conceptual age, which places a premium on knowledge. Pink believes that these conceptual skills include:

- Design to change the world in significant ways
- Story or narrative skills focused on understanding
- Symphony and synthesis
- Empathy
- Play
- The pursuit of meaning



To empathize and make meaning out of our cooperative experiences using the imagination is our reason for bringing metacognitive collaboration into the classroom. I believe that it begins with teachers and students in a new co-teaching model, as we may need to teach the metacognitive and collaboration skills we desire to see from our students — we cannot assume that every child knows how to "do" school! We know that the more students understand how they think, process, connect, and remember information, the better their learning. Recent research has also reported that working memory skills matter more than IQ and are a better predictor of academic success.

#### Collaborative Metacognition Strategies

When teachers model their own understanding of personalized learning and coping strategies, students pay attention. Listed below are collaborative and metacognitive strategies that lay the foundation for creativity, empathy, and a deep dive into teaching students about their own thinking.

#### Teach Students About Their Own Unique Neuroanatomy

This works best in small groups with a designated student as your co-teacher. When children and adolescents understand the impact of emotions, stress, and memory capacity on their learning, they are empowered with choices that impact everything they do. Four neuroscience terms easily understood and shared can change the way students think about their thinking:

- Neuroplasticity: This is the brain's ability to rewire and reshape its neural pathways based upon experiences.
- Prefrontal cortex: We find this when we place our hand on our forehead. It is here that we problem solve, emotionally regulate, and learn to pay attention.
- Amygdala: The amygdales are two clusters of neurons deep within the limbic system in each hemisphere of our brains.
   When these are ignited, we move to a fight/flight/freeze response, and the prefrontal cortex shuts down.
- Hippocampus: The hippocampus can be shown with our pointer finger curled down shaped like a seahorse. The hippocampus works beside the amygdala helping our brains memorize and connect learning. Under stress, the hippocampus does not perform well.

Teaching our students what happens in our brains is intrinsically motivating. Knowing how stress distorts thinking is comforting to students. The assigned co-teacher can review what he or she heard, give the teacher feedback and share examples of real life experiences where the stress response was activated.



#### **Teach Students About How They Learn**

Co-teaching is a powerful tool in our classrooms when students and teacher are the co-teaching models. Assign one student per class or week to be the co-teacher. Together, teacher and student develop and share these questions with the class: How do you learn new information? How do you make connections between what you already know and what is being taught? As an example:

We need to read out loud while writing key words down in our notebook or textbook. We also use lots of colors to help address the most important parts that we need to memorize.

One by one, students begin to describe how they approach new material and how they think and feel about it. We decide as a class that we will create a periodic table with learning strategies. We discuss how seeing the different strategies will help us choose one that we might never have considered.

#### **Discuss Coping with Emotional and Social Problems or Challenges**

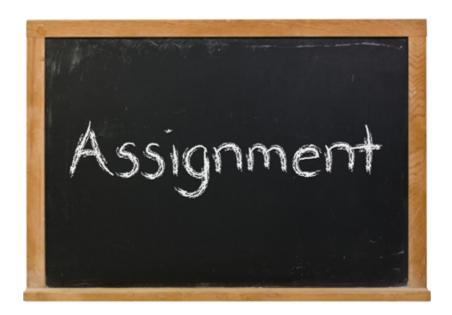
School is more about the development of a student's social life than anything else. If a child or adolescent is feeling preoccupied with other relational dilemmas and isn't feeling positive emotion, learning won't take place. The co-teacher's responsibility is sitting beside the teacher and modeling coping strategies when life becomes challenging and feels hopeless. As the lead teacher, I would begin:

For me, I give myself a good talking to in private. "Lori, take a deep breath and believe this problem has a solution somewhere in your brain. Let's list all the reasons why this might have happened and what you can begin to do with these options!"

The students might laugh a little and talk among themselves for a minute, but once the sharing begins, the feedback and stories become contagious and therapeutic. As a class we gather coping strategies that students share. We post this growing list on a template of the brain hanging on a wall in our classroom. Some examples are:

- Taking a walk
- Spending some time alone
- Talking the problem out with others
- Eating some ice cream or wheat thins
- Moving away from the challenge for a little while
- The students understand that this colorful display allows them to choose a strategy that they might never have considered during a heightened emotional moment.





#### Assign "Do Now" Tasks

The purpose of these short assignments is not learning new content but possibly reviewing from the prior day or filling time while attendance and the day's logistics are in progress. Use this morning time for collaboration. As students enter the classroom, give them a baggie of three items and a number. The numbers pair the students. As the partners move to their area, they have seven minutes to design an invention with these three items.

On another day, students will be given a challenging social/ emotional problem to solve together. This problem will be relevant to their ages and cultures. After seven minutes, they will need to share a joint solution with the class. Not only will students begin to think about how they approach their thinking, they'll also get an opportunity to intentionally collaborate. You'll see how your students will benefit greatly from shared strategies and options.

Do you teach your students about how their brains work and how they can work together? Has it affected their learning outcomes?



The material in this section originally appeared on Edutopia in my article:

#### "'Whatever! You Think I Care?'"

https://www.edutopia.org/blog/ whatever-you-think-i-care-loridesautels

#### The Meaning Behind the Language

Every day, we observe these developing minds and hearts as our students try to find their place, purpose, and way in the world. My question is: If we could decode and understand what is possibly being stated beneath a lexicon that feels inappropriate, disrespectful and hurtful, would we choose different responses and communication strategies? I believe we would.

Below are some recent examples of student responses that I've heard over the past few months and years in moments of hopelessness, shame, intense anger, and escalating conflict. I've arranged the student response and the possible deeper meaning or underlying feelings side by side.

What They Say	What They May Be Trying to Say	
F*ck you!	I'm so angry, and you cannot possibly understand how I feel!	
Go ahead, I don't care.	Nothing matters right now, and whatever you say to me or do to me will just add to the troubles I am facing and feeling!	
Whatever!	We are so far apart on our views, it doesn't matter, because you will never walk my walk.	
You think I care?	What you don't realize is that I am protecting myself and defending all I have — myself!	
I wasn't even talking! You didn't get mad at her!	Life feels very unfair to me, and no matter what I say, when I say it, or what I do, it's always my fault.	
Oh. My. God!!	Once again, you are so far away from understanding or hearing me! I don't even want a relationship with you! I can not trust you!	
I'm over it.	I need you to give me some space and time. Come back when you're ready to listen to learn instead of just listening so you can respond.	



From my experiences and perspective, all of these responses originate from a perception of lack and scarcity. They are stating, "I am not enough," along with the pain-based thinking of shame. Feelings of shame create a self-protective and self-destructive cycle, and teachers often see this pattern more than any other adult. I believe this is why functional behavioral assessments are so helpful, because engaging in this process leads educators to look at the antecedents, behaviors, and consequences of an event or experience.

#### 7 Ways to Begin a Dialogue

The most helpful strategy in this type of escalating conflict is really not a strategy, but a way of being in dialogue, checking in with "you" and recognizing the pressure-filled moments in the relational atmosphere. Our students are closely observing our responses. If modeling is one of the best practices we can employ, then modeling kind and personally detached dialogue is key in understanding so many of our students' underlying needs.

Questions are processed in the brain long after they have been asked, so the power of providing a question for deepened understanding presents an opportunity for our children and teens to answer in a completely different tone and direction. Sometimes we feel almost frantic to get the consequence into place — right now! We can provide a consequence, but we can also wait to provide it until we are able to feel more neutrality between us.

The following questions and invitations call for a period of reflection between a negative reaction and a needed conversation.

- I know you are so angry! I also feel that I could never know what it feels like to be in your shoes. But if you want to share what happened, I can promise you I will listen — and listen hard.
- 2. It must feel so frustrating to come into this classroom and always feel that you are being picked on, or you are unable to do something successfully! What can I do? What do you need from me to feel even just a little better this morning?
- 3. Is there anything about you, your life, or experiences that you could share so that I could know more about how we can work this out together?
- 4. I am learning every day, just as you are, and honestly, I become frustrated sometimes that I don't have enough time for getting to know everyone better. What more can you share that would help me understand?



- 5. Do you think we could create a plan for the two of us? How could we develop some type of communication or agreement where we meet each other halfway? (This could be a behavior agreement, homework agreement, etc.)
- 6. Do you think or feel at some point that you might want to share your challenges or frustrations with other students, and then share your plan of action with them? I see your strong mind and hot emotions, and these form a perfect equation for being a leader! How could you serve others in our school as you learn more about yourself? Could we make a plan for this over the semester or next few weeks?
- 7. If it's difficult to put into words, could you explain your feelings or the situation in another way? Art? Music? Poetry? Is there anything from home that you would like to share that would help me to understand more of who you are?

Right now, students across the nation are embarking upon a series of standardized tests following intense days and weeks of test preparation accompanied by anxiety and worry from both parents and educators. Many of these test participants are English as a Second Language (ESL) learners with a wide diversity of learning potential, social and emotional challenges, strengths, cultures and interests. Among these young learners, there are many who put themselves to bed in the evening, get themselves up and ready for school, and do not have breakfast, arranged homework times or adult support to guide their school days.

Researchers from many higher education institutions are sharing the knowledge that "how" we are currently teaching and "testing" is the exact opposite of how the brain is wired to learn. Dr. John Medina, developmental molecular biologist with the University of Washington School Of Medicine speaks of brain rules, principles for how the brain naturally learns, processes and retrieves information. We did not have this research 30 years ago, but we do now. We are discovering that we are not wired to sit for long periods of time learning in sedentary positions, as many traditional schools and classrooms require. Emotion drives attention and learning. As biological beings, we are wired to pay close attention to every stimulus in our environment. The brain always processes meaning before detail.



The material in this section originally appeared on Edutopia in my article:

"Survive and Thrive During Testing Season"

https://www.edutopia.org/blog/ survive-thrive-during-testingseason-lori-desautels



#### **Testing vs. Stressing**

To formulate our response to these discoveries, here are some of the questions that we should be asking ourselves during testing season:

- Have we created meaningful associations in our testing environment?
- If a child or adolescent does not perform well on a test, why not?
- Do we know and understand where the errors were?
- Was there anxiety in simply taking the test that immobilized the parts of the brain that think, problem solve and discern with logic and fluidity?

Many of our students are walking through our classroom doors in a chronic survival mode, where everyday stress is a waking part of their lives. We know that stress shuts down learning — there is a definitive cognitive collapse. Perceived stress is as individual as our thumbprints, and its direct impact on the our brain's limbic system directly affects our ability to learn and remember.

Placing emotional connections into the content being taught helps to alleviate the stress response in children and adults. When we weave emotion into the content standards through stories, our own enthusiasm increases as well as that of our students.

For the very first time in the history of this test-taking movement in education, I am intimately involved. Last week, I found myself rushing through fifth grade instruction, neglecting the personal and emotional comments and questions from 11-year-olds in a way that should have demonstrated a "felt presence." I felt pressured to make sure that we spent every minute re-teaching, reviewing and testing their endurance for academic mastery. Then I remembered that the brain is a social organ, and within the context of relationships and felt connections, we learn through the brain-compatible strategies of questions, discussions, reflection, story-telling and modeling.



#### 6 Brain-Compatible Strategies

Connections and relationships created between students and educators are game changers for academic success. What can we do when reviewing and re-teaching to prepare our students emotionally? How can we stimulate an environment where creative thinking, self-efficacy and problem solving are brought to life? I suggest:

- We can engage our students by helping them see their own expertise in so many areas within their own cultures and lives. Share with students that these tests are important, but they do not define their personhood or intelligence.
- We can encourage and notice every small effort or action that
  is positive, no matter how insignificant. Create a sheet for
  positive, on-target behaviors that you notice in each student,
  and send it home every day during the weeks of test prep
  and testing.
- 3. Share your concerns and stories that invite empathy, letting students know that "you are not alone in your thinking and feelings." This strategy is extremely effective when the dialogue is respectful and neutral with regard to tone and disposition. For example, you might say, "I know how nervous you must have felt before the first part of the test yesterday, as I remember taking my college entrance test, and my hands were so sweaty I could hardly grip the pencil."
- 4. We can weave the tested material into stories where we create context and patterns, because our brains are wired for storytelling. For example, if I am teaching persuasive writing passages, I can create my own passage in an area of student interest, and model a story of how I came up with the topic. Or you might compare the topic sentence to the boss of a company like Hershey, while equating the details of the paragraph in the story to the employees in the chocolate factory.
- 5. We can take brain breaks, pulling up casual and mutually inclusive class discussions for a few minutes on a popular topic, or read a story of interest together. We can get up and move, practice some deep breaths, or listen to music for five minutes.
- 6. We can encourage our students to write out their sadness or worries on small sheets of paper to be tossed in a basket before an assignment or test. Research reports that when we write out any worry or concern before a test, we create space and cognitive capacity in the working memory.



Remember, emotions are contagious, and how we feel at any given moment can be subconsciously mirrored by our students. Be aware of your moods and feelings, and of how these directly impact the dispositions and overall enthusiasm of your students. We are wired to model behaviors even subconsciously, and with awareness, we can shift our perspective, our emotions and our behaviors.



loving-community.com

Reynolds 2013



The material in this section originally appeared on Edutopia in my article:

"New Class Roles: Building Environments of Cooperation" https://www.edutopia.org/blog/new-roles-building-environments-cooperation-lori-desautels

#### **New Class Roles and Responsibilities**

We see students survive every day. We ourselves survive every day — a class, a test, a conflict, a relationship, and a challenge. Yet surviving is very different than thriving! Many students that we see daily bring a degree of their stress into our classrooms. Thankfully, many of them also have supports in their lives that allow them to manage this stress in a productive manner.

Our most difficult students, however, are not as lucky. They live in a state of chronic toxic stress, which changes the brain, literally placing it in a survival mode. If the brain is in chronic toxic stress, its creative, resourceful, and cooperative higher-level thought processes are compromised because of emotions and thoughts that feel unsafe, unfamiliar, and threatening. We walk into our classrooms feeling disconnected from one another, the learning, and our purpose. When we feel shame, anger, sadness, or any negative emotion over an extended period, our brains begin creating neural pathways that ignite habits of feelings in response to the thoughts that call forth these emotions. This self-centered focus on survival greatly inhibits learning. Stressed brains resist new information.

Our classrooms can become "holding environments" where children and adolescents begin to feel good about themselves through serving one another, increasing their sense of purpose and capability, which increases self-esteem and positive emotion.

How do we establish bonds based on commonalities rather than differences in our schools and classrooms, places where feelings of mastery, autonomy, and purpose intimately impact the learning and instructional process? I suggest that we create classroom responsibilities, tangible roles, and cooperative tasks that position students and teachers for success.



#### 6 Classroom Professions

Last week as I was driving to one of our large, diverse public elementary schools to speak with teachers about connection, my mind went to a different realm of classroom structure and function. I began to think differently about what bonding and empathy look like in our classrooms. Traditionally, we give students classroom responsibilities with different jobs (paper passer, line leader, errand runner, etc.), but what if we built relationships and trust through leadership and caregiving roles? These roles and responsibilities call us to explore an emotional climate in our classrooms that would breed service and compassion. When we engage with one another, feeling the power of our compassion and service, the neural circuitry in the brain shifts, and our "reward system" of dopamine and serotonin sharpens our focus, emotional regulation, and engagement. We prime our brains for deepened learning and social connection.

The following "classroom professions" can change as needed and are presented as guidelines and ideas for exploring and adapting at all grade levels. These class responsibilities and roles are vitally important in secondary education as well, as we are providing opportunities for our students to experience coleadership roles rather than being passive recipients of rules, lectures, and dispensed knowledge.

#### Giver

This student's responsibility is to give encouragement, affirmation, and acts of kindness throughout the day. The giver may use post-its, create signs, deliver spoken messages, or communicate hopefulness by any means.

#### Storyteller

Storytelling could take many forms, such as seeking books to share, or integrating vocabulary or content words into a story. Younger students might create a story with pictures. Older students could work with journal stories, writing, sharing, turning them into screenplays, or submitting them for publication. Your storyteller may develop an iMovie or blog for the class. He or she could create a class story with classmate's names and school projects, or weave any content into this context for learning standards or subject matter. The brain adheres to stories!

#### **Noticer**

This job is to notice what is going well and right. It is the antithesis to tattling or snitching.



#### Kindness Keeper

This student would record all of the kind acts performed throughout the day or week. The kindness keeper reflects on these kindnesses and shares with the class periodically.

#### **Resource Manager**

The resource manager suggests ideas, resources, or ways to solve a problem or locate information, either academically or behaviorally.

#### Collaborator

This is one role that could be assigned for acting outside the classroom. Maybe there is another teacher, staff member, or student in the school that needs an emotional, social, or cognitive boost? At department and all-staff meetings, the collaborator would share ideas that promote student-to-teacher or student-to-student relationships, or bridging in- and out-group biases that happen when we only perceive differences.

Enjoy these new roles while collecting the perceptual data through surveys, observations, and feedback from one another as the roles change and modify.

#### Understanding and Empathy

Creating emotional connections inspires a sense of belonging and service, elevating feelings of purpose, identity, and positive emotion. When we model for one another what we desire to see with regard to behavior and engagement, the social, emotional, and academic learning deepen and are remembered for the long term.

The Cleveland Clinic has produced a video on empathy which helps us to better understand the life and feelings of another. Our fifth grade students in Washington Township are creating a similar video in the school. They will record students in the halls, classrooms, and other areas, and place "thought bubbles" depicting what these children might be thinking or feeling. They will share their documentary with the school and create discussion groups in different grade levels.

- 1. What roles could you develop in your classrooms that are MAPS for creating student mastery, autonomy, and purpose?
- 2. How can we model service through our instruction, assessments, and the culture (emotional and physical design) in our classrooms and schools?
- 3. What are some small "pay it forward" tasks or initiatives that our students could create for the entire school?



The material in this section originally appeared on Edutopia in my article:

"Perspective: A Game Changer in the Classroom and in Our Lives" https://www.edutopia.org/blog/ perspective-game-changer-inclassroom-lori-desautels

## Perspective: A Game Changer in the Classroom and in Our Lives

What is perspective? What does it have to do with teaching, leadership, and learning? The Oxford English Dictionary defines perspective as: "A particular attitude toward or way of regarding something; a point of view." Blending this definition into our instruction, classroom cultures, and relationships, perspective drives all we are and do in our classrooms. Perspectives are bundles of beliefs, a mindset that we each embrace determining how we see one another, our experiences, and possibilities or lack thereof. As teachers, our perspectives directly impact student emotions and their learning, because emotions are contagious.

How I feel, understand, or interpret any situation always determines the "perceived" outcome of an event, or the collective disposition experienced and acted upon with a group of students or colleagues. When we feel any kind of negative emotion, our perspectives narrow, and we spin in repetitive conflict cycles, reacting and subconsciously creating more negative emotion. Under negatively experienced stress, we feel bound and limited in our choices of responses. Neuroplasticity is the brain's innate ability to structurally and functionally change with every new experience. Our perspectives hold the power to create more of what we desire to experience.

When we change our perspectives, we provide ourselves with a novel view through a lens that can open us to a growth mindset, defined by Carol Dweck as a belief that emotional and cognitive intelligence can change based on our desires and the plasticity of our thought processes.

What can we do to shift perspective in our schools and classrooms? From my experiences, these three practices might assist us in approaching relationships, instruction, and even assessments with a novel working lens and increased learning.



#### Recognize Triggers and Challenges

Write down two or three of the greatest teachers in your classroom or building. (These are the individuals who trigger hot emotion inside of you.) Your triggers could also be a particular routine or procedure that feels stale and oppressive, or simply not invigorating anymore. After you identify the experiences or persons that feel challenging; write down two positive outcomes that, once upon a time, did not feel so challenging about those persons or situations. These don't have to be enormous realizations. They can be daily "noticings" that have disappeared from our vision because our mindset and eyes have landed on the tedious, repetitive negative.

Here's a powerful example. A few months ago, Darren began his typical rendition of a poor choice sequence of tiresome behaviors. He was bouncing out of his seat without permission, interrupting instruction as he conversed with students around him. When asked to turn around or to please sit down, there was the usual eye rolling, denying, and increased anger. I decided to create a shift for both of us, and thought of Darren's expertise and strengths. I knew he was very familiar with smartphones and, even at 12 years old, probably knew more about them than I did. I used his knowledge and leadership to turn our perspectives around. "Darren," I said, "I need to respond right away to one of my students who just emailed me at the University, but I have to prepare for our group discussion here in three minutes. Could you please send her a message for me?" I pulled out my phone, called up the email, and explained to Darren what I wanted to say.

There are no words to describe how excited he was as he crafted a perfect message to my undergraduate student, forgetting his bad mood and his "felt" opposition toward me and toward the class. I thanked him, and we began again. Darren asked if he could use his new phone to pull up additional research while other students moved to the computers. The rest of the afternoon felt different and pleasurable, as my perspective guided Darren away from his usual precipice and onto the safer ground of feeling capable and successful.

#### Show a Different View

Teach your students about the power of perspective. Explain that we all see, feel and behave in ways that mirror our own attitudes, thoughts, and emotions. As you begin to implement the muscle of perspective, greet students at the door with a directive to move to a certain area in the room so that each student is seeing a different view. A few students could be lying down, while others could be facing a bulletin board, the door, the sink, a window. Explain that although everyone is gathered in the same room, each person has a different view, and that is how we can all approach daily experiences



and relationships. After each student has recorded his or her view, talk about these changed views, relating this activity to a frustration or a stuck thought or feeling. There is great change that occurs in groups as together we can brainstorm new ways to see worn-out behaviors and relationships.

#### Offer a Fresh Start

Change up the routine for a week to generate fresh methods of instruction and classroom culture. When students walk in on Monday morning, offer subjects in a different order, wear your clothes backward, or create mottos or nicknames to use for the week based on an attribute of each student. Connect props to content and standards, wear two different shoes, or greet your class as you sit by a freshly decorated entrance to the room, a gesture that indirectly states, "You have a fresh start every time you walk through these doors. What will you choose to see and create today?"

Some people see scars; and it is wounding they remember. To me, they are proof of the fact that there is healing.

— Linda Hogan





## This article originally appeared on Edutopia in my article:

"Self-Assessment Inspires Learning" https://www.edutopia.org/blog/selfassessment-inspires-learninglori-desautels

#### **Self-Assessment Inspires Learning**

Self-reflection is self-assessment, and one of the most significant learning tools we can model for our students. Ultimately, we want our children and adolescents to be the self-assessors of their work, dispositions, and goals. Research repeatedly reports that the difference between good teachers and superior teachers is that superior teachers self-reflect.

The brain is wired for this strategy, and it has been a part of our evolution. When we teach to a child's or adolescent's brain, we empower that student with the "inner resources" that directly affect his or her ability to pay attention, engage, and create meaningful learning experiences. School culture is simply about relationships, and the brain is a relational organ designed to survive, think, and feel. People change people; programs do not create sustainable meaningful changes. Through the integration of resiliency research coupled with a deep understanding of how our neuroanatomy affects the stress response system, and our attention and ability to remember, we no longer need to manage behavior. Instead, we begin to engage one another.

Simply stated, when the brain feels any type of a threat (emotional, social, or cognitive stress) the thinking part shuts down. Unless a school culture feels or is perceived as "safe," learning does not occur. We are unable to process, integrate, and remember topics, concepts, and standards. Educational neuroscience is about creating states of mind for learning that initiate curiosity, anticipation, autonomy, self-reflection, and awareness.

The following self-assessment survey, created for students and educators, provides questions that address short- and long-term goals. In doing so, it provides a framework for metacognition (thinking about our thoughts) and helps us each to clarify, reflect on, and prioritize our feelings, actions, and behaviors. It allows us to begin feeling a sense of autonomy throughout our learning processes.



**#BESTYEAREVER** 

### SELF-ASSESSMENT

# Social & Emotional Development

SELF-CREATED GOALS	ATTEMPTING/BEGINNING	STRONG EFFORT	MEETING SELF-EXPECTATIONS	EXCEEDING SELF-EXPECTATIONS
Are my choices moving toward my goal?				
Does my behavior mirror what I want to accomplish?				
Are my words and conversations positive/helpful in creating my successes?				
Have I developed a plan of action when I feel frustrated?				
Have I listed or discussed three resources to assist me in reaching my goals?				
Have I self-assessed how I have moved toward or away from my goals?				
Am I recording my reflections in a journal so that I see my progress?				

Courtesy of Lori Desautels

едиторіα

edutopia.org/back-to-school

Click to Download



I designed this rubric for educators to share with students so that daily standards, subject matter, and behaviors presented in the classroom and schools can reflect the integration of significant and smaller incremental goals. Here is where the rubber meets the road, because when any of us emotionally experiences the connections to what we do and say — either in alignment with our desires and plans or completely off the intended track — we can become intrinsically motivated to pursue those short-term goals. And we know that, in the process, we not only begin to feel better, but we also begin to see and reap the benefits of our efforts. These come through making mistakes, confronting challenges, and seeing through a lens that is broader than the classroom walls. They become helpful perspectives and resources in self-perseverance, creative visualizations, and self-awareness.

#### Big Goals

- 1. Completing project successfully
- 2. Summer job
- 3. Peer tutor or advocate
- 4. Guest presenter in a class or organization
- 5. Manuscript submission
- 6. Volunteer position
- 7. Improved grades in school
- 8. Joined organization or clubs

#### **Daily Goals**

- 1. Work completion
- 2. Dialogued about frustrations
- 3. Stayed focused on assignments
- 4. Showed respect and compassion for others
- 5. Regrouped and continued on with work after a frustrating time
- 6. Helped another teacher or student
- 7. Contributed some ideas and suggestions to a conversation
- 8. Used positive language in describing a need or desire
- 9. Self-reflected how my daily work and interactions affect my big goal
- 10. Shared big goals with parents, administrators, and community
- 11. Created a personal statement, visual, and/or tool for encouragement when working on big goals

Click to Download



#### Questions for Self-Assessment

- What do I need?
- What resources (people, activities, or things) could assist me in reaching my small and larger goals?
- How can I show that I am progressing to bigger goals?
- What can my class do to assist me?
- What can my teacher do to assist me?
- How do I handle negative situations? When these situations occur, what do I typically say to myself?
- What would be a statement that would encourage me?
- Who are my heroes? What are the character traits I admire in these people that make them my heroes?
- How will I personally know when I am on the right track toward my goals? What will tell me if I stray off the track?
- What are three negative emotions I feel most often?
- What are three positive emotions I feel often or sometimes?
- How could creative visualization help me?
- How could I learn to begin again even after a day of small mistakes?
- What three strategies can my school or teacher adopt that would assist me in moving toward my goals?
- What two or three challenges or obstacles prevent me from reaching small or big goals?
- What are my strengths?
- What are my challenges?
- How will I plan to focus on these strengths knowing that my thoughts and feelings drive my behaviors and words toward others?

Click to Download



The material in this section originally appeared on Edutopia in my article:

"Questions and Answers:
Determining What Our Students
Really Need"

https://www.edutopia.org/blog/ questions-determining-what-studentsneed-lori-desautels\

## Questions and Answers: Determining What Our Students Really Need

This morning I sat in two inner city middle school classrooms in Indianapolis as I do most weeks. But something struck me deeply in the center of my chest as I was observing the boredom and apathy in the detached, sleepy and seemingly sad faces of many of these seventh grade students. The teachers were cheerfully present, the standards were posted, the paperwork was almost completed, there were no overt disruptions, and compliance was at hand.

The procedures, rules and transitions were hard-wired into the brains of these middle school students and adults, but an "inner" inspiration and deep subconscious yearning for something else attached to the notion of the "purpose of school" were nowhere to be found.

#### The Stressors and the Stressed

There is much talk in Indiana and across the nation about the effectiveness of charters, public schools, voucher initiatives and private schools. But, in reality, our children most in need are often the first to be rejected socially and emotionally, the first to be expelled and the first to be relegated to sub-standard services where parents are uninformed, misinformed or unaware of their options, rights and responsibilities. Often, when children with learning and emotional challenges enter a charter or private school option, they're shocked to discover that the services and/or in-house systems are set up in ways that are unable to meet their legal needs, let alone their emotional, cognitive and social, and least restrictive environment needs. When we look inside the minds and hearts of troubled youth, zero tolerance policies and coercive behavior management practices administered by untrained or unaware adults are basically fighting pain-based behavior with more pain. I know this because my own students, firstand second-year teachers, are seeing this every day!



#### **Turnaround Mantras**

Turnaround schools might create mottos and class chants, encasing notions that an effective teacher can change the entire trajectory of a troubled and impoverished student's school success, but is this accurate? Is this the end point, the true marker of successful education? Have we taught our students to reach within, to listen to their hearts, to their intuitive knowledge, to live outside the walls of school? We repeat slogans such as "College or Die," and we evaluate student and teacher success on assessment scores, state-created rubrics, student growth models and curriculum development. Yet are six hours of compliance — a tucked-in shirt, walking quietly in a straight line through a hallway while toggling through the standards — the telltale signs of emotional engagement and passionate and question-filled learning? Are these compliant students positing the product of creative problem-searching and questioning?

#### The Impact of Stress

What we do know is that chronic stress intimately affects learning, long- and short-term memory, and our immune systems. We know that deep learning is held in long-term memory when it is experienced and self-assessed.

School stress levels may be getting worse. Let's start with kids. Nationwide, over 20% of 11-to-17-year-olds have some type of a stress disorder: depression, reactive attachment disorder, learned helplessness, bipolar, etc. The top three stressors for adolescents are school academic pressures, family pressure and bullying (kidshealth. org). Among kids from poverty, 60-95% have chronic stress.

Chronic stress hurts student achievement. It is well known that chronic stress contributes to over half of all school absences (Johnston-Brooks, et al. 1998). The ways to reduce this in the classroom include:

- More physical activity, yoga or stretching
- Greater sense of control, including decision-making and responsibility
- Improved coping skills (For example, share everyday incidents with your students and let them suggest how they would solve the problem.)

We do know that the brain processes questions long after they have been asked. We also know that when an individual is given a question filled with optimism, a bit of hope or affirmation, or an acknowledgment that one small thing is going well, that individual's perspectives broaden. The frontal lobe of the developing brain, the seat of our higher thought processes, engages as we slowly leave the fight/flight/freeze response of our lower, more primitive brain. We



know that every moment we encounter a conversation, an experience, a novel way of attempting an assignment, and the give-and-take of a relationship, the brain structurally and functionally changes!

#### Asking the Right Questions

So as teachers, school leaders and parents, what can we do? We begin by asking questions. "What do you need? How can I help?" We begin to inquire and take notes from a heart and mind combination. Just for a moment or two, we look beyond the behaviors we're observing and into the eyes of someone with an injured heart. We listen to understand rather than listen to respond.

My graduate students, second year teachers in the Indianapolis public schools, are doing just this. They are changing it up this semester, presenting their students with these questions in a self-assessment format. These teachers are learning about many aspects of their students' lives. One teacher reported that her adolescent student gave this frustrated response to a few of the questions on the self-assessment: "I don't like people trying to get into my heart!" Together, this teacher and student shared a moment of insight inside unknown territory and a precipice for where to begin as this relationship unfolds. We ask the questions, listen and then take those responses and sit beside our students, working together to build an "action plan of hope." We implement small steps, feedback, self-assessment and a collaborative process that begins with the courage to ask, to sit for a while with the unknown. As teachers, we open the door, and then we wait, affirm, proceed, remind, guide, show consequences... and learn.

Below is a list of questions that might lessen these emotional and cognitive chasms developing in this time of heated, chaotic school reform debates. These questions do not solve problems; they explore what cannot be seen with only the eyes. They propel self-reflection and social and emotional self-assessment by initiating dialogue, carrying to the surface some long held negative emotions and beliefs that have barricaded learning, blocking active school motivation while hijacking feelings of well being. Choose two or three of these questions and work with those students who trigger your emotions and leave you sleepless on many nights. These social and emotional questions have the potential to raise those test scores and close those gaps. But more importantly, they have the potential to raise the curious creative thinking patterns our brains were and are wired to hold and expand. This expansion begins when we mentor and question from the inside out.



- What do I need?
- What resources (people, activities or things) could assist me in reaching my small and larger goals?
- How can I show that I am progressing to bigger goals?
- What can my class do to assist me?
- What can my teacher do to assist me?
- How do I handle negative situations? When these situations occur, what do I typically say to myself?
- What would be a statement that would encourage me?
- Who are my heroes? What are the character traits I admire in these people that make them my heroes?
- How will I personally know I am on the right track? What will tell me if I'm straying off the track of my goals?
- What are three negative emotions I feel most often?
- What are three positive emotions I feel often or sometimes?
- How could creative visualization help me?
- How could I learn to begin again even after a day of small mistakes?
- What are three strategies that my teacher could use to assist me in moving toward my goals?
- What are two or three challenges or obstacles that prevent me from reaching small or big goals?
- What are my strengths?
- What are my challenges?
- How will I plan to focus on these strengths knowing that my thoughts and feelings drive all my behaviors and words with others?





#### Inner Engineering: Strategies that Align with Building Connection and Relationships for All Ages

- A. All experiences structurally and functionally change the brain!
- B. All Behavior is Communication!
- C. When we are stressed, we are dumber!
- D. Self-Reflection The more students know about themselves, the better learners they become.

These three statements drive all of the strategies I am listing below. We now know how emotions and stress affect learning, how learning is driven by our dopamine reward center, and how our environments play a huge role in our phenotypes. It is the genetic expression we are trying to affect. We are privileged to be teachers in the 21st century!

Teachers are reporting that pain and shame based behaviors disguised in opposition, defiance, a withdrawal of attention and interest ,or a shutting down coupled with apathy. These are the most challenging aspects of the teaching and learning process. It is not content expertise. It is about emotional and social engagement.

Where do we begin? We do the work inside ourselves! We need to be in a constant peace-filled state of role changing.

"We teach who we are." — Parker Palmer

- 1. Toxic stress in our lives and in our students' lives derails healthy development. The brain is underdeveloped at birth. The brain organizes in a use-dependent way. Stressed brains resist new learning! When attachment has not occurred in the first years of life, we are sitting beside students who do not trust adults. To trust is to begin.
- 2. Teach in the Gap! (Milton Keys) Do not assume anything! Teach the behaviors you want to see... teach how to do homework, how to plan and organize, and how to shift perspectives. This is a best practice because we are modeling what we desire to see.
- 3. Teach how to set up rituals, routines, and positive self-talk! What do you say to yourself when things go wrong? Thoughts become things!



- **4. Learning Architecture:** There is nothing taught that cannot be taught without images and pictures, for this is how the brain learns. Mind Maps and stories teach in this way, connecting ideas and thoughts so there is a stream of deeper understanding.
- 5. Rituals and Routines, and new sets of Rules. Sometimes we need two sets of rules for different occasions in the classrooms, in our homes, and at different times when unexpected experiences show up... What is a new ritual you would like to begin class?
- 6. Do Nows and Bell Ringers can be implemented for inspiration, engagement, and motivation and still be completely aligned to learning. Begin a story... ask the students to finish. Create a living room or kitchen scene... who would you like to have as a guest at your house tonight? Bring in an object out of the junk drawer and have students give 10 unusual uses or create an invention with the object. In two minutes, think of all the words you can that begin with "B," create a homework assignment for the evening, make a business card with a logo, and start working on a business plan.



Kids fear losing safety, dignity, and self-control.

#### **Behavior and Emotional Hygiene**

Children and adolescents who have not formed healthy attachments and or live in chronically toxic environments have much more significant needs than needs for power, control, and attention. We all want these needs to be met. The question is, what is driving the extreme needs our students seem to have for power, control human interaction, and validation?

According to Dr. Nick Long, we need to return to looking at how a child sees, perceives, and behaves. The stress and problems kids create are actually an attempt to gain safety, control, and comfort. This all has to do with LOSING SOMETHING! Kids fear losing safety, dignity, and self-control. When children and teens act up or hurt others or themselves, it is a hyper vigilant response in the brain that has become hard-wired... this is what a habit is! Most children behave in patterns as it is rarely random, and this is why perceptual data is so important.

1. Validation Questions: What do you need? How can I help? How can we work this out together? Tell me more... Please help me to understand... If I understand, then I can help you!

#### 2. **Dual Reflections**: Example:

Today I found myself mimicking your anger and I was not calm
or helpful! This is something I need to work on, and I realize this.
Next time, I am going to try and
I feel helpless sometimes because I am not sure I understand
what is going on in your mind and heart. Next time, I am going
to try and listen much harder, and I may not get it right, but I am
going to try. Today, when I saw your reaction, I felt a little cheated.
I really worked hard on this lesson and room arrangement and
had everything ready for learning. What I realized after our talk is
that I need to be more flexible and go with the flow. I am going
to try and the next time. I may need
your help!



- 3. Hug the Lesson and Prime the Brain: Many of our students are not feeling successful and capable in school...they struggle "doing school." When you hug the lesson, you create infomercials all week and all day long! You introduce, consolidate, and use props to create a surprise each day that is related to the topic or standard. This really needs to be something that is directly connected to the student's life! Use signage, podcasts, videos, and all of your wild imagination to conjure up out-of-the-box novel teaching!
- 4. Video tape your lessons and sit with students giving one another feedback on behaviors: how well you did, what you could have done in a different way, how we all could respond more appropriately? This is a great activity and strategy to promote modeling, engagement and self-reflection.
- 5. Before a test, share a personal story using student names, and all that is familiar to them with pieces of the content they are to know and memorize inside the story. I did this with my undergraduates before their midterm, and here is an example:

EDU 230 was preparing for their midterm exam. Three days prior to this assessment, I could feel their amygdales strengthening with neural connections because many of the students had expressed severe test anxiety! They so much wanted activation in their prefrontal cortexes where they would problem solve, be creative and implement fabulous answers on their exam. On the day of the review, we discussed how contagious emotions are and watched and talked with one another about this escalation of emotions when we feel stuck, unproductive, and even stupid! We talked about how stressed brains resist new learning. A couple of the students challenged me with there being too much information to study for on this midterm Their remarks were angry and irritating and I began to become defensive and red in the face. I felt my stress response system activated. Suddenly, we decided to do a couple of focused attention practices together to calm all of our brains. We thought of changing up the environment, test time, and added water and snacks. We agreed for a longer period, and thought about how these changes could activate our prefrontal cortexes, and if we practiced this type of thinking we would encourage the neuroplasticity of "how" to prepare and take a test. We remembered that brain states become neural traits. We decided to call this type of test preparation "Prompt Day" and we agreed anytime new content or standards were introduced we would together try and wrap these into a story because the brain loves stories because of its pattern seeking nature, opportunities to predict, and find the resolution. Stories also allow us to make sense of isolated facts!



- **5. Prediction** drives the dopamine reward center. Creating curiosity by using a sealed envelope or a draped object can be used as a teaching too. Anticipating getting the answer raises dopamine in the brain.
- 6. Co-teaching and Co-designing. This strategy involves inviting a student to co-desing or co-teach a lesson with you, or help to plan a quiz or develop test answers together. Middle school or secondary students may prefer to do this with a partner for the whole class.
- 7. Online career majors. Every student has a different path. Sometimes students get frustrated because they don't understand why they need to learn subjects or lessons that they deem irrelevant to their life or chosen path. This site helps students to make the connection between schoolwork and a chosen career path.



As a class, have each student identify the things that trigger negative emotions like anger, frustration, or sadness, and then come up with a coping strategy for each.

## A Focus on Similarities and Building Strengths

It is a fact that students irritate — and are irritated by — one another on a daily basis. The following tactics help to keep this in check by helping students to learn each other's' strengths and passions, as opposed to differences and weaknesses.

- **1. Baby pictures and stories.** Have students post their pictures up on a story wall and discuss where they come from. Students can write their own stories, and add to their biography year after year.
- 2. Use affirmation, appreciation, and attention to focus on all that is right in a student's life. This encourages engagement for emotional regulation.
- **3. Check-ins.** Short one-on-one meetings of just a few minutes provide a useful barometer on how a student is doing, what is going well, and where challenges lie.
- **4.** Leadership and Service Roles. Empower students with a job that he or she is regularly responsible for at the beginning of the day or class. This can be a part of bell work.
- **5. VIP days and walls.** Create a recognition program celebrating and sharing each student's strengths.
- **6. Triggers and strategies.** As a class, have each student identify the things that trigger negative emotions like anger, frustration, or sadness, and then come up with a coping strategy for each. Post the triggers and strategies to a "periodic table of triggers" as a way for students to see their similarities and help one another.
- 7. Homework assignments for teachers. Devise three homework assignments for yourself, and have the class decide together which one you should complete.
- 8. Perspective exercises. Put on your creative thinking cap and create scenarios that force the class to look at something differently. Put your clothes on inside out, walk into the room backward, teach from the back of the room. Students will connect by experiencing something unique together!
- 9. Student evaluations. Have students think about their soft skill and cognitive skills, and track their efforts in a weekly habit sheet. This helps students to understand their process and progress. Examples include: Did you work independently Did you follow directions? Did you give up?



When we teach in the "gap," we are teaching between our vision of what could be and what is — and here lays a great source of energy.

# Neurodiversity: Our Genius Students on the Spectrum

## Peering Through a Lens of Strength

I am so excited to share a fresh perspective exploring how we can embrace learning, social, and behavioral challenges on the autism spectrum from a strength, interest, and passionate angle inside our classrooms and schools. This school year I am co-teaching in a fifth/sixth grade classroom two mornings a week along with my courses at Butler University. On Monday and Wednesday mornings, the students and I discuss how our unique brains learn, respond to stress, and how we can develop the innate tools to enhance our own emotional and academic development. Two of the students I am teaching have significant emotional, learning, and social challenges which fall on the autism spectrum. These two bright young students have actually assisted me with my blog. We have been discussing in our small groups the strategies below and how implementing these can shift how educators understand and teach to their neuro-diverse and specialized brains.

Autism Spectrum Disorder (ASD) refers to a group of neurodevelopmental disorders on a continuum, and is the fastest growing developmental disability at this time in the United States. It affects approximately 1 out of every 68 children in the country. There is a significant increase in the diagnosis of boys, but we still know very little about the origins of this neurological challenge. We also understand that ASD can occur in all racial, ethnic, and socioeconomic groups. We understand that communication skills may be significantly affected which can interrupt social relationships and the expression and reception of verbal and nonverbal language. My intention is to not expound upon the symptoms of ASD but to challenge the reader with a shift in perspective in how we can build relationships, strategies, and engagement in creative ways with all children and youth in our schools who learn, communicate, and behave differently.



Children and adolescents on the autism spectrum are as unique as an individual's fingerprint and there are no universal strategies that could ever attempt to teach in standardized ways when we sit beside these diverse genius learners. In my blog, we will explore some common innate characteristics on this spectrum and how these individualities can shift into strengths with a change in perspective.

Neuroplasticity is the brain's ability to rewire and modify based on environment and experiences. This is fabulous news for educators and parents as we begin to provide hope and optimism in understanding and teaching to the neurodiversity of all children and adolescents. According to Peter Senge, from "Schools that Learn," when we teach in the "gap," we are teaching between our vision of what could be and what is — and here lays a great source of energy. We must learn to intentionally look for, find, and move toward that gap!

Many of our students with ASD hold strengths in learning through pictures, pay great attention to details, excel with hands on activities, and have strong memories for specific subjects. Various students are able to stay focused, persistent, and intentional with subjects and disciplines of high interest. Many older children and adolescents I am teaching are solution-oriented and are not as clouded with emotion and drama when completing a task or project that is of interest to them. Below are strategies that can enhance learning and relationships in the classrooms with children and adolescents who have been identified with ASD.

- Interest and expertise inventories could be given to the students
  ahead of time with small group planning and brainstorming
  for the sharing of expertise for a "Neurodiverse" Fair day!
  Once a week or month, showcase student strengths through
  a medium of the student's choice. This could be a live video,
  podcast, or poster display. Students could bring in special
  guests, hobbies, or share areas of interest with parents, other
  educators, or community members highlighting their areas of
  interest and strength.
- 2. What are some systems or projects in your classroom or school that would benefit from reordering, reorganizing and a new design? Schedules, daily planning, repairing or recreating areas in the room or school with new features, or changing and modifying routines will provide concrete ways for the students to feel empowered and part of the classroom in a leadership role.



- 3. New class roles and responsibilities that address learning and student expertise could include class photographer and film interpreter. We all learn best through visual images and many students with autism see the details and patterns that many of us miss because our brains are not tuned into the details and facts that pictures and movies provide.
- 4. Design a living area for a new class pet or garden could be an excellent opportunity to strengthen social skills and utilize a student's creativity and abilities to innovate and produce a tangible project.
- 5. Serving others is an excellent vehicle to increase good feelings in the brain while practicing social skills that are often times challenging for students with autism. I have always been a proponent and dreamed of how we can pair teachers, administrators and students together where students serve an adult. Across our schools, nationwide there have always been student buddy systems or teachers partnering with one another to serve children and youth more effectively, but all students could be an invaluable asset to educators and staff across grade levels and throughout the building, paying it forward and caring for an educator's heart. When we serve another, our brain chemicals designed for pleasure and motivation increase and we become stronger in our empathy and cognition. For a period of two or three weeks students could create kindness notes or drawings, help teachers solve a problem, attend a staff meeting sharing celebrations or details from a variety of students that teachers have not noticed. Students could create a piece of art or share a gift aligned with his or her passion. By serving another our students will indirectly exercise and strengthen their social skills!



The material in this section originally appeared on Edutopia in my articles:

## "Emotional Regulation for Kids With ADHD"

https://www.edutopia.org/article/emotionalregulation-kids-adhd-lori-desautels

"Reaching Students With Emotional Disturbances"
https://www.edutopia.org/article/reaching-students-emotional-disturbances-lori-desautels.

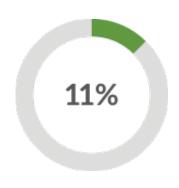
### **Peering Through a Lens of Strength**

### Attention Deficit Disorder

This article will peer through a lens of possibilities and strengths as we look at the social and learning challenges of students diagnosed with Attention Deficit Disorder (ADD). I am so grateful to be co-teaching in a fifth and sixth grade classroom along with my undergraduate and graduate courses at Butler University. The students in my class are significantly challenged with paying attention, focusing, and regulating their emotions. The strategies below are ones I am implementing this school year as I teach to the strengths and interests of my students who are struggling with attention and engagement. According to the National Center for Disease

Control and Prevention, 11 percent of children in the United States age 4-17 (6.4 million) have been diagnosed with ADHD as of 2011.

Dr. Russell Barkley, clinical professor of psychiatry at the Medical University of South Carolina and medical expert in ADD, shares that this disorder is primarily about emotional regulation and self-control. It is not just about



inattention, impulsivity, and hyperactivity. Emotional regulation, which is foundational to social, emotional, and academic success, is underdeveloped in these youth. He emphasizes that the cause of this disorder arises from within neurogenetic roots and ADD is not a knowledge or intelligence disorder.



### Connection + Purpose = Well-Being

Each day I am learning from my students who struggle emotionally, socially, and academically that without a sense of purpose and connection, we begin to wither away in deep feelings of self-doubt and uncertainty. Below are a few brain aligned strategies that I am implementing in the Indianapolis Public Schools where I am co-teaching this year.

- 1. Whole Class Discussions: Nothing is more unsettling than "guessing or assuming" when we see another struggle and do not understand the reasons or the story beneath the struggle or challenge. At the beginning of the year, grading period, or simply when behaviors and learning as a class go awry, we have the opportunity to address the challenges and strengths of various learning and emotional disorders with the entire class. Invisible disabilities are often times met with fear and anger from other students because of the unknown or misunderstanding the emotional, social, or academic challenges. Just as some of us need glasses to see clearly or take insulin to regulate blood glucose levels, others need an oxygenated supply of movement, brain intervals, or space and time to regulate after a ten to twenty minute instructional lesson. Holding class discussions about the neuro-diversity of each unique brain is critical for all students to understand.
- 2. It Takes a Village: Bringing in community members who have experienced Attention Deficit, anxiety, or those who have struggled with staying focused is a wonderful way for students to feel connected and hopeful about their future and plans for success. TED talks, and other young adults who have been challenged with these disorders who share their personal and professional journey, bring a sense of community, understanding and acceptance to all learning styles and challenges. A motto that needs to be embraced in this New Year is: "Everyone gets what they need."
- 3. I Noticed: Homemade "I Noticed" sheets are great tools for reinforcing all that is going well moment by moment even when a morning or afternoon has had moments of adversity. Students who struggle with attention and focus need this constant feedback throughout the day to help them track how they are learning and to know that the teacher is present and aware. All students love homemade sheets as this indirectly states that the teacher has taken time and effort to help them feel and be successful!





4. Brain Stories: Brain stories are the collections of personal experiences, strengths, interests, and feelings in narrative or picture form that our students can create! Children and adolescents who struggle to pay attention and focus sometimes do not feel accepted or successful in school. They struggle to stay connected to the teaching and learning process and to the subject matter. Beneath many of the neurodiverse challenges within our students, are personal brain stories that highlight a student's strengths, gifts, and feelings that are not always shared during content instruction.

At the start of the day or class period, teachers and students could take a few minutes and create a brain story. These could be in the form of images, graphs, timelines, or drawings. These stories could be created all semester or through the academic year posted on a weekly or monthly timeline. Psychiatrist Dr. Dan Seigel reports, "What is shareable is bearable, and what you can name, you can tame." In our new book, Unwritten, The Story of a Living System, we have created a template for electronic brain stories that students could design from a variety of mediums.

- 5. Homework for the Teacher: Students who struggle with regulation, attention, and focus are not always feeling successful at school! One of the best brain aligned strategies I have implemented with all ages is doing homework for them on the weekend! Each Friday, I select a couple of students who are in need of affirmation and who have struggled to meet a few of their goals. I usually know their interests and likes, and so I ask, "I have some time this weekend and would love to learn for you! What would you like for me to research this weekend? What would you like to know more about? I will bring my work to you on Monday!" The excitement and the feelings of connection are palpable, and each time I see more effort from this student than I did the weeks prior to this invitation.
- 6. Chunking: Chunking/condensing assignments and instructional time with frequent feedback is an excellent way to build on small successes. Students diagnosed with attention challenges may require a smaller list of tasks to complete within a structured, shorter period of time. As an example, I am working with a second grade student diagnosed with ADD and anxiety who was literally throwing tantrums and disrupting the class several times a day when he began feeling frustrated, overwhelmed, and unsuccessful. We have now chunked or condensed his assignments and written those on colored sticky notes.



When he arrives in the morning, he has two assignments to complete that are clear and easy to accomplish. When he completes those two assignments, he is given a brain break for a few minutes before he returns to the next task. We have seen amazing improvement with his ability to pay attention and to remain focused and inspired with these shortened assignments and tasks. We will continue to build and lengthen these assignments over a period of time with the renewal of time spent on something he loves and enjoys.

#### **Brain Intervals**

Some examples of brain intervals include:

- Reading a favorite book or comic
- Drawing or designing art for the classroom or main office
- Computer time and or watching motivational videos or playing a brain-aligned video program such as Brain Pop. Below is a great resource for the classroom!

http://teachthought.com/uncategorized/30-of-the-best-education-games-for-ipad/

### **Emotional Disturbance**

In the Individuals with Disabilities Education Act (IDEA), the term "emotional disturbance" encompasses significant challenges in a student's behavior and mental health. For children with emotional disturbances, we can generally trace a developmental history where attachment and connection to an emotionally healthy caregiver has been broken in early development or a significant traumatic event has created a survival brain state that has continued throughout his or her early life. These young people are in a persistent state of alarm.

### **Building Resiliency**

The encouraging news is that young people have the innate capacity to bounce back from adversity. You can create an environment that feels safe and connected by helping students understand how negative emotions hijack our learning. I am currently teaching young adolescents, many with significant emotional and behavioral challenges. To facilitate a predictable and consistent environment, we create class guidelines, procedures, and engagement systems so each student knows the class expectations and routines. Here are four strategies that have really worked with my students.



### 1. Brain-Based Learning Centers

In my classroom, students can go to one corner to recharge and calm down from negative emotion. This corner is called the "amygdala first aid station" as the amygdala is the fight/ flight/freeze center in the brain. Students needing a quiet area with tables to study or to complete work can go to the "hippocampus area," named after the part of the brain that memorizes and connects new information to what we already know. Finally, the "prefrontal cortex area"—named after the problem-solving center of the brain-includes tables and collaborative spaces for students who are ready to discuss projects or ideas, watch documentaries, and collaborate. When we teach students about their brain functions and connect them to specific activities, they become more selfaware and fluent in their own cognitive processes. Check out my post "Brain Labs: A Place to Enliven Learning" for a helpful resource as you think about how to design predictable and safe spaces to learn, socialize, and recharge.

### 2. Personalized Check-In Notes

If students are in a negative brain state, we must regulate behaviors before any learning will occur. The best way I have found is to first attend to their emotional temperature, to let them know I am present and available no matter the negative behaviors. To connect with and create consistency for a diverse array of students with different needs, I use waiter and prescription pads as a way of personalizing communication throughout the day. These are particularly effective for reaching those students who don't respond to spoken communication. Share notes, small goals, affirmations, and requests to maintain individualized consistent connections. Once the task or goal has been ordered and received, you can create fun ways to make a payment or incentivize.

### 3. Structured Emotional Support

The "2x10 Strategy" developed by psychologist Raymond Wlodkowski is an excellent brain-aligned strategy to implement with our most challenging students. For two minutes each day, 10 days in a row, teachers have a personal conversation—either written or in-person—with a student about anything the student is interested in, as long as the conversation is G-rated. Wlodkowski found an 85 percent improvement in that one student's behavior. In addition, he found that the behavior of all the other students in the class improved.



### 4. Locked Journal for Safe Self-Expression

When we write out our thoughts and feelings, we clear space in the frontal lobes for positive emotion and higher cognitive processes. A locked journal can give students a safe place to release anxiety while maintaining control over their own privacy. If a student chooses to write or draw their feelings and thoughts through this format, we discuss how this journal can become a trusted friend, and how they might be able to use it to prototype creative forms of expression to be shared under the appropriate circumstances.

### **Delivery Matters**

In working with students, your method of delivery will make a big difference. Students who are emotionally shut down and unresponsive to words may respond better with written notes. You can create note cards for directions, choices, or explanations, and give students the opportunity to write their responses rather than speak. All behavior is communication. Although I might not get a verbal response from a student, I always keep trying with the option of sharing notes and letters.

What I am learning every day—even as a seasoned educator—is that I must regulate behaviors before any learning will occur, and the strategies above have helped immeasurably. Students who struggle with emotional disturbances are some of our most vulnerable, but when we can create predictable and consistent supports for them, their inner resilience can shine.



# This article was originally shared on LinkedIn:

https://www.linkedin.com/pulse/ trauma-adversity-brain-lori-desautels

## **Trauma Adversity and the Brain**

We see students survive every day. We ourselves Trauma often times occurs in the context of relationships, disturbing people's relationships long after the trauma while landing in the body. The body acts as the unconscious mind holding these negative emotions and sensations long after the adversity has passed.

Trauma fundamentally changes the brain. The front part of the brain is where we develop socially, where we pay attention and emotionally regulate and the back of the brain is about taking care of the body. Sleeping, sexual drive, eating, heart rate, breathing and all of the automatic functions that occur without conscious thought are held in the back parts of the brain. In times of adversity, the back of the brain becomes agitated and active and people literally begin to feel uncomfortable in their own skin! Bodies develop a new normal where they are on constant alert scanning the environment for danger.

In this type of trauma, the front part of the brain becomes sleepynot fully online (like ADD) For many people, this unsafe feeling feels like living in a room with the lights turned off!

Trauma creates a disturbance in perception. People will superimpose their own perceptions of the world on everything! There is a fundamental reorganization of how the brain perceives which leads to an impairment of imagination and mental flexibility!

People affected by significant or chronic adversity live "halted lives"... where it is difficult to learn from past experiences becoming stuck, and replaying the same experiences over and over again!

Trauma changes the brain so much that many people do not feel fully alive in the present moment! We completely lose our sense of present moment living!

To change the brain, we have to understand the importance of how adversity is held in the body and words are not heard! When we move, breathe rhythmically, act, and use art, these bring us back to the present moment.



The essence of trauma is physical immobilization and helplessness because our brains and therefore our bodies are neurobiologically wired to fight back or flee! This immobilization becomes a conditioned response as brain circuits become rewired causing panic, fear anger, and feelings of being paralyzed. Trauma is stored in the deep sensations of the body, the unconscious mind.

The insula and mPFC which is responsible for our feelings of self-awareness goes offline. This part of the brain is necessary for healthy living because it helps us to understand what is going on inside of us! It is through these brain parts and functions that we learn to pay attention to ourselves and begin to self-reflect.

In trauma, the rational brain cannot quiet the limbic brain! There is not a smooth circuitry going from the prefrontal cortex back to the limbic brain! We cannot talk ourselves out of hunger, sleeplessness, agitation and uncomfortable primal feelings that have become embedded in circuits that have become reactive in the brain. We cannot own and be in control of ourselves without feeling a sense of self-awareness.

Trauma is a reaction to the event! It isn't out there somewhere looming in our environment. It is held in our perceptions and the stories we keep retelling ourselves day after day, hour after hour! It is held in the body. Treatment begins when we begin to integrate the different parts of the brain! When we bring back the communication between the front of the brain and the back of the brain, healing occurs.

A traumatized brain can be tired, hungry, worried, rejected, or detached, and these states are often accompanied by feelings of isolation, worry, angst, and fear. The neurobiological changes caused by negative experiences trigger a fear response in the brain. When we feel distress, our brains and bodies are flooded with emotional messages that trigger the question, "Am I safe?" When will this end? We react physiologically with an agitated limbic system that increases blood pressure, heart rate, and respiration as the levels of the hormones cortisol and adrenaline increase in our bodies. Chronic activation of the fear response can damage those parts of the brain responsible for cognition and learning.

What can we do in our classrooms?

We have to begin the day or class period with a releasing exercise that primes the brain for cognition, attempting to bring the PFC back online!



## How do we begin to control the reptilian and limbic brain? We enter the back door!

- 1. Teaching our students to take deep intentional breaths with longer exhales begins to quiet the limbic and reptilian brain.
- 2. Movement and massage- hand lotion and hand massage
- 3. Tapping on acu-points guiets the limbic brain- will be explained
- 4. Movement each day, we could incorporate specific movements through dance, exercise or even chair dancing!
- 5. Talk in a funny voice for 30 seconds. This could be a deep, high slow drawn out, laughing, or voice with hiccups interspersed, etc. Let the students decide!
- 6. Art and writing for 90 seconds before the day begins. I am going to have students draw and paint with their eyes closed this semester as this brings attention back to the present moment!
- 7. Drumming- on our laps, with cups, etc.
- 8. Stretching exercises- hold and breathe!
- 9. Talisman/ and object to hold and remember
- 10. Yoga movements / holding postures increase endorphinsthere are certain postures that can trigger the feelings of trauma so we need to be aware. Warrior is excellent as are seated postures with twisting, and standing postures where we can see our environments.
- 11. Legos and building materials

#### **Breathing**

- A. Inhale four counts, exhale with lips pursed through the mouth for 8 counts---initiating the parasympathetic stress response.
- B. Place your fingers in front of your mouth just an inch or two. As you breathe in through your nose and breathe with your shoulders in a shallow breath feel the air... Now breathe in through your nose and exhale through your mouth as you blow up your belly with a deep diaphragm breath. Feel how much warmer this air is against your fingers.
- C. Place one hand on your belly and one hand on your chest. Breathe in and out normally and see which hand rises and falls... how do you normally breathe? Deeply or in a shallow way?
- D. Inhale and lift your forefinger of your left hand and lower this finer as you exhale. Go through these breathing movements raising and lowering each finger on both hands. You can use other parts of your body to match the inhale and exhale with 10 deep breaths always exhaling a bit longer than the inhale!



- Movement is critical to learning, as it activates several areas
  of the brain at once while calming the brain. I will usually lead
  with a rhythm, using a plastic cup or my body, and students
  will mimic me by drumming the pattern on their legs and
  arms. The collective sound brings a sense of community to
  the classroom.
- Once a day, I pass out a drop of lotion, and for 90 seconds students give their hands and fingers a massage, noticing their palms, fingertips, and any sensations that feel uncomfortable or stiff. We always reflect afterward.
- For a few minutes, I have the students rock along their spine to help them feel present in their bodies. This also provides a soothing rhythm that subtly grounds them with sensation and movement.
- Placing our fingers on our throats, we begin the day with a sound or class chant and feel the vibration of our vocal cords.
   This gives everyone a chance to participate and to see how we can mimic different animals, instruments, and random classroom sounds such as papers crinkling.
- The students sit with their legs straight out and begin wiggling their toes and ankles, shaking knees and thighs, rotating shoulders, arms, and finally their heads, keeping all body parts moving at the same time. Then we reverse the process and stop our heads, arms, shoulders, and on down. This gives children a great body scan and a sequence for working memory.
- Sometimes I'll put on music and give the students old scarves, and we'll dance around the room waving the scarves and feeling the soft sensation as we dance and pass by one another. When the music stops, we freeze and notice our postures and movements. This strategy can be led by the teacher or a student to see if we can mimic a movement or create our own.





- Noticing Sheets- With older students, this "noticing can be reciprocal with ground rules. If you notice details, behaviors, moods, students can mark on your sheet too! Students love homemade worksheets from their teachers! Even if there is an off day with many challenges, we can always notice very specific behaviors moods or actions!! This also allows us to track patterns of behaviors! Very simple but very effective when we pass these out each day! Even with 30 students as we walk the room we can jot down a quick note or even a "thank you!" When we see a positive in the moment!
- Ultra Natural Pain Relief Gel- when we place a drop in an area on our bodies that feels tense, anxious, tight or uncomfortable, we teach our students how to pay attention to one particular spot and notice sensations! This is a great way to prime the brain for attention as we hold a quiet time for about 2 minutes while students smell, feel the texture and place a drop on their hands, arms neck, or shoulders. These two minutes integrate the senses, bring us to the present moment and rejuvenate our frontal lobes so they are ready to learn!
- Write a letter to someone who has been especially kind. This could be once a day, once a week or whenever the time feels right. This doesn't have to be a fully written letter, but a few sentences that can be shared after they are written! Nothing moves us so swiftly and steadily to positive emotion more than gratitude!





# This article originally appeared on LinkedIn:

https://www.linkedin.com/pulse/ we-cannot-afford-rethink-disciplinebehaviors-pain-lori-desautels

## We Cannot Afford to NOT Rethink Discipline! Behaviors in Pain

"Resilient children are made, not born!"

— Dr. Bruce Perry

Those 49 techniques that promise to get you into college are meaningless and short lived if we are not emotionally connected to one another meeting the student where the brain development has landed!

The below research and strategies are not just for some youth — although critically important for those children and adolescence walking in with pain and adversity — but for all students and educators.

As this summer season of presentations, teaching, and researching comes to a close, I have and am learning more about negative behaviors than I could have imagined. As I have delved into the pain and perceived stress beneath the oppositional, defiant, shut off, and apathetic brain states, I am beginning to understand that behavior management is about me. It is not about our students, and when I lead, mentor, and sit beside students that carry in their worlds their social maps, I am responsible for placing myself in a brain state that is co-regulated, coherent, and ready to explore the complexity of those maps. If I find, inside a tenuous encounter with another, that my resting heart rate is elevated, my fightflight-freeze response can become activated and I can become and have become a clear unscathed mirror of the antagonistic and angry behavior in front of me. I can also unintentionally begin to personalize that which can only escalate the conflict that is budding. I lead the way when disruptive behavior is present. Fear literally arises from the core of the brain affecting all brain areas and their functions with neurochemical activity. Two significant brain regions involved with the fear response are locus coeruleus — this is where the majority of noradrenaline neurons are located (brainstem area) — and the popular amygdala, located in the limbic area, the emotional center of the brain.

More than desiring compliance and obedience, I want to stay emotionally connected with my students through the discipline process. This is why understanding a child's brain is critical to the teaching and learning process.



Early childhood experiences (positive or negative) have a far greater impact than later ones and in the first years of life. If we have not developed the healthy neural circuitry that allows us to reach out and connect with others or to self-soothe inside acute negative experiences, we can easily become hard-wired and habitually reactive in those older and lower parts of the brain where the stress response system is chronically activated. One of the most important characteristics of memory, neural tissue, and development, is that they all change with patterned repetitive activity. So, the systems that are used the most will change and those that are not activated will not.

What does this mean for many of our most troubled youth who are consistently being met with an array of discipline and punishment sanctions? Because our brains create unconscious implicit memories and make associations of our earliest experiences, we then subconsciously begin to predict what the world is like based on our personal schema and social maps. If those early experiences are negative and toxic to forming the healthy neuronal networks that breed connection and safety and the ability to self-regulate, our predictions can then guide us to very dysfunctional ways of relating to others, and being in the world in healthy purposeful ways.

If you lack a deep memory of feeling safe and loved, the receptors in the brain that respond to human kindness fail to develop! If we feel safe and loved, our brain specializes in collaboration, play and cooperation. If we are constantly feeling unloved and unsafe, then our brain specializes in managing feelings of fear and abandonment.

# Brain Development: What We Have to Know as Teachers and Administrators

Early neglect and other environmental and relational adversities cause a dysregulation of body rhythms and a stress system that is overly sensitized to even minor stressors. Just the thought or memory of an aberrant childhood experience can trigger a hyper-aroused alarm in the emotional centers of our brains and this trigger can come out of nowhere because it is an internal perception of the past. In many instances, this stress system can actually interfere with the other systems compromising the brain's ability to regulate mood cognitively process and relate to others. What does this look like? In a classroom both disassociation and hyper-aroused responses can look like ADHD, ODD, and anxiety. We can also see depressive symptomology.



What I am learning today is that at birth, human touch is not innate to the brain; it feels novel and can be perceived as a stressful stimulus. Only when consistent human touch or contact is provided does the brain respond in positive ways, but if this physical and emotional contact is not experienced, the brain stem sets off a stress response. If children, especially in the first year of life, are not given that human tactile connection consistently, they learn to numb and are unresponsive, creating associations in the brain that embrace toxic memory templates stagnating the later developing skills such as empathy and the ability to create options, be creative, and employ cognitive flexibility. For when one lives in a survival brain state, one is very centered on the "me." The survival brain state can look selfish, aggressive, violent, and shut down. And in the classroom, what we forget as educators, is that harsh discipline, sudden movements, and yelling feels familiar to the student, and although it could escalate the conflict, there is certainty in misery because we have begun to associate these negative feelings with safety and the known. The survival brain has three components; when we are living in survival mode, with our stress response turned on all the time, we can really focus on only three things:

- Body- Am I ok?
- Environment-Where is it safe?
- Time- How long will this threat be hanging over me?

Think how often, with especially younger children we have unintentionally (during bouts of bad behavior) have escalated the encounter asking for eye contact, or brusquely and physically turned a child toward us or an adolescent desiring respect? In our discipline systems, we have to remember that the language of the amygdala is feelings. The amygdala can only be regulated through movement, breath, and space. When both teacher and student have upshifted to the prefrontal cortex where are thinking is clear, we feel emotionally calmer, and we can listen to one another to learn.

Within the discipline process, all children need:

- 1. Slow approaches
- 2. Gentle movements
- 3. Very little to no eye contact

Teach a child or adolescent how to calm the amygdala, modeling techniques that use movement or breathing. These strategies from Psych Central could be incorporated into an Amygdala First Aid Station. We could also use a metronome to help to mimic a heartbeat that has become sporadic!



# This article originally appeared on Edutopia:

https://www.edutopia.org/blog/brainbreaks-focused-attention-practiceslori-desautels

# **Energy and Calm: Brain Breaks and Focused-Attention Practices**

When presented with new material, standards, and complicated topics, we need to be focused and calm as we approach our assignments. We can use brain breaks and focused-attention practices to positively impact our emotional states and learning. They refocus our neural circuitry with either stimulating or quieting practices that generate increased activity in the prefrontal cortex, where problem solving and emotional regulation occur.

### **Brain Breaks**

A brain break is a short period of time when we change up the dull routine of incoming information that arrives via predictable, tedious, well-worn roadways. Our brains are wired for novelty. We know this because we pay attention to every stimulus in our environment that feels threatening or out of the ordinary. This has always been a wonderful advantage. In fact, our survival as a species depended on this aspect of brain development.

When we take a brain break, it refreshes our thinking and helps us discover another solution to a problem or see a situation through a different lens. During these few minutes, the brain moves away from learning, memorizing, and problem solving. The brain break actually helps to incubate and process new information. Consider trying these activities with your class:

- 1. The Junk Bag: I always carry a bag of household objects containing markers, scrap paper, and anything that one would find in a junk drawer (for example, a can opener or a pair of shoelaces). Pick any object out of the junk bag and ask students to come up with two ways this object could be reinvented for other uses. They can write or draw their responses. Once students have drawn or written about an invention, they can walk the room for one minute sharing and comparing.
- 2. **Squiggle Story:** On a blank sheet of paper, whiteboard, or Promethean Board, draw one squiggly line. Give students one minute to stand and draw with their opposite hand, turning the line into a picture or design of their choice.



- 3. Opposite Sides: Movement is critical to learning. Have students stand and blink with the right eye while snapping the fingers of their left hand. Repeat this with the left eye and right hand. Students could also face one another and tap the right foot once, left foot twice, and right foot three times, building speed they alternate toe tapping with their partner.
- **4. Symbolic Alphabet:** Sing the alphabet with names of objects rather than the letters.
- **5. Other Languages:** Teach sign language or make up a spoken language. In pairs, students take turns speaking or interpreting this new language for 30 seconds each.
- 6. Mental Math: Give a set of three instructions, counting the sequence to a partner for 30 seconds. Example: Count by two until 20, then count by three until 50, finishing with seven until 80. Switch and give the other partner another set of numbers to count.
- 7. Invisible Pictures: Have a student draw a picture in the air while their partner guesses what it is. You could give them categories such as foods, places, or other ways to narrow the guessing.
- **8. Story Starters:** A student or teacher begins a story for one minute, either individually or with a partner. The students then complete or continue it with a silly ending.
- **9. Rock Scissors Paper Math:** With the traditional game, the last call-out is "math." With that call, students lay out one, two, three, or four fingers in the palm of their hand. The best of three wins.

### **Focused-Attention Practices**

A focused-attention practice is a brain exercise for quieting the thousands of thoughts that distract and frustrate us each day. When the mind is quiet and focused, we are able to be present with a specific sound, sight, or taste. Research repeatedly shows that quieting our minds ignites our parasympathetic nervous system, reducing heart rate and blood pressure while enhancing our coping strategies to effectively handle the day-to-day challenges that keep coming. Our thinking improves and our emotions begin to regulate so that we can approach an experience with variable options.







For the following practices, the goal is to start with 60 to 90 seconds and build to five minutes:

- 1. Breathing: Use the breath as a focus point. Have students place one hand close to their nose (not touching) and one hand on their belly. As they breathe in, have them feel their bellies expand. As they exhale, they can feel the warm air hit their hand. Students will focus on this breath for only one minute. Let them know that it's OK when thoughts sometimes come into the mind uninvited. Tell them to exhale that thought away.
- 2. Colors: Visualize colors while focusing on the breath. Inhale a deep green, and exhale a smoky gray. Have the students imagine the colors as swirling and alive with each inhale. If a student is de-escalating from an angry moment, the color red is a great color to exhale.
- **3. Movement:** For younger children, direct students to stand and, as they inhale, lift an arm or leg and wiggle it, exhaling it back to its original position. For younger grades beginning these focused-attention practices, it's good to include an inhale and exhale with any type of movement.
- **4. The Deep-Dive Breath:** We inhale for four counts, hold for four, and exhale slowly for four counts. You can increase the holding of breath by a few seconds once the students find the rhythm of the exercise.
- 5. Energizing Breath: We pant like a dog with our mouths open and our tongues out for 30 seconds, continuing for another 30 seconds with our mouths closed as we take short belly breaths with one hand on the belly. We typically take three energizing pant breaths per second. After a full minute, the students return to four regular deep inhales and exhales.
- **6. Sound:** The use of sound is very powerful for engaging a calm response. In the three classrooms where I teach, we use rain sticks, bells, chimes, and music. There are many websites that provide music for focus, relaxation, and visualization. Here is one of my favorites.
- 7. **Rise and Fall:** As we breathe in and out through our noses, we can lie on the floor and place an object on our stomachs, enhancing our focus by watching the rising and falling of our bellies.

When we are focused and paying attention to our thoughts, feelings and choices, we have a much greater opportunity to change those thoughts and feelings that are not serving us well in life and in school. When we grasp this awareness, we see and feel the difference!



# This article originally appeared on Edutopia:

https://www.edutopia.org/ blog/energy-calm-change-it-uplori-desautels

### **Energy and Calm: Change It Up and Calm It Down!**

Unlike the sequels to movies, I hope that part two of last year's Energy and Calm post will continue to strengthen your understanding of how our brains naturally learn, think, and behave. So let's return to the calming yet energizing zone of focused attention practices and brain breaks, a place that would greatly benefit students — and their teachers — when revisited frequently.

### **Focused Attention Practices**

Our brains prioritize survival above learning and emotion. Because our circuitry for survival is so strong, we pay attention to everything that feels threatening, unsafe, and unfamiliar. For students, this may apply to new standards, testing, complicated topics, personal struggles, and challenging relationships. These perceived strains can neurobiologically create a stress response state in our brains. In a fight-flight-freeze response, our ability to think clearly, stay focused, and problem solve shuts down. Research repeatedly shows that quieting our minds ignites our parasympathetic nervous system, reducing heart rate and blood pressure while enhancing our coping strategies to effectively handle the day-to-day challenges that keep coming. Teachers in all grades have found these quieting practices helpful during various times of the day, although the most popular intervals are still first thing in the morning and at the end of the day. These practices, like any new skill, take much persistence and patience.

1. Breath: Sitting up nice and tall with both feet flat on the floor, take three slow, deep breaths down to the belly, breathing in through the nose and out through the mouth. Count to four on each inhale and five on each exhale, with a slight pause between the inhale and exhale. Following the three deep breaths, we then slowly turn our heads to the right on the inhale and left on the exhale. This movement is slow and deliberate. After two times each to the left and right, we then inhale while lifting our chins to the ceiling and exhale as our heads slowly move downward, touching our chins to our chests. We can repeat these movements or add our arms, the opening or closing of our hands, or any gesture that could move with the breath.



- 2. Touch: Students close their eyes and choose a small object out of a junk box or bag. This could be a paper clip, pencil, apple core, stick, leaf, eraser, pair of glasses, sock, piece of string... or anything! For one minute or less, students keep their eyes closed and focus on the object through their other senses. Even though they might recognize the object, they should concentrate on the feel, texture, shape, angles, smell, or any aspect they notice. Following that minute of focus, the students can share the details, verbally describing what they noticed, or writing down their findings. Teachers could also throw the descriptions into a basket, and at the end of class or the day, students could select a description, guessing what the object is based on the written words.
- 3. Visualization: The brain responds to what we imagine as if it is an actual event. Feeling safe, peaceful, and connected with others are states of mind that can generate positive emotion and ease in critical thinking and problem solving. In our focused attention practices, we quiet the brain with safe place visualizations. The students sit quietly, closing their eyes as we verbally walk them into their favorite imaginative place. We then direct them to envision the sights, sounds, colors, and feel of their own safe place. They can invite anyone they choose to be with them, or they can rest and enjoy this space on their own. This has been the favorite focused attention exercise of the students who practice this skill.
- **4. Sound:** For two minutes, students close their eyes and listen for all the sounds around them. Once they have identified a sound, they capture it in their own way, such as envisioning a box around it or placing an imaginary x on it. Students then share and compare the sounds that they heard and captured.

### **Brain Breaks**

Routine lulls the brain to sleep. Depending on our age, we have a limited amount of time to stay focused and attentive. To learn, connect, memorize, and retrieve information, we must be awake and focused. The following exercises implement novelty and fun, creating the curiosity that our brains crave.

- 1. Describe your favorite food to a partner for 30 seconds using only adjectives. After your partner guesses, she describes her favorite place with adjectives, and you will do the guessing.
- 2. Write your name on a piece of paper first with your eyes closed, and then using the opposite hand. Compare the differences. Share and discuss.



- 3. With a partner, create your own secret language. You can add sounds to words, remove first letters, add "-ing" to the end of words, etc. The teacher can model this to begin the break.
- 4. A magic carpet ride awaits. This carpet will take you to the two most important people or places in your life. Who are they? What makes this ride so significant?
- 5. For 30 seconds, count as fast you can, replacing every third number with the word "pop!" Then your partner begins counting, and on every sixth number, he says "gotcha!"
- 6. Place a pair of shoes on a table at the front of the class. Students will have one minute to describe what it might be like to walk in those shoes. The owner could be someone who angers or scares the student, or someone whom she simply has a hard time understanding.

Priming the brain for learning and positive emotion is critical for continued social, emotional, and cognitive development in our students' lives. Brain states that invite novelty and quiet are instrumental to students' brain health and knowledge acquisition as we work through these practices and incorporate them into our day.







University in Indianapolis with a focus on educational neuroscience, trauma and special education. Before coming to Butler, Lori taught at the undergraduate and graduate levels at Marian University in Indianapolis, worked as a school counselor in Wayne Township in Indianapolis, was a private practice counselor and a behavioral consultant for Methodist Hospital in Indianapolis on the adolescent psychiatric unit. Lori has conducted workshops and professional development throughout the United States and in Dubai on Mind Brain Teaching and Learning. Lori holds a BS in Special Education from Butler University, an MS in counseling from Indiana University, and Ph.D. from The American Institute of Holistic Theology with an emphasis in early adolescence/ thought formation. Lori has authored two books entitled, "How May I Serve You, Revelations in Education" and her most recent, co-authored with Michael McKnight is entitled "Unwritten, The Story of a Living System," published by McKenzie Wyatt in January of 2016. Lori is a featured writer for Edutopia, an international online publication for educators.

Dr. Lori Desautels is an Assistant Professor at Butler



## **About PresenceLearning**

PresenceLearning (www.presencelearning.com) is the leading telehealth network of providers of clinical services and assessments to educational organizations. The PresenceLearning care network has provided over one million sessions of live, online speech-language therapy, occupational therapy, behavioral interventions and mental health services, diagnostic services and assessments, and early childhood services for children with special needs.

