

The Brain in the Palm of the Hand

Preparing the Ground: Self-regulation

Brain in the hand is based on work by Daniel J. Siegel, MD

Objective:	Directions:
<ul style="list-style-type: none">To teach students and teachers about the need to self-calm and re-gather.To invite students to think about self-regulation pro-actively.To create a positive time out space. <p>Materials: Board</p> <p>Comments for teachers:</p> <ul style="list-style-type: none">This activity looks long, but can be done quickly. We recommend you do steps 1-7 one day and come back, review the brain in the hand and move on to step 8 the next day.We function best when we have access to all parts of our brain. Under stress the prefrontal cortex doesn't work well and we lose our problem solving skills.When the part of our brain that allows us to think and respond respectfully is not functioning well, we can help ourselves and others by taking some time to "come back into ourselves."To watch Dr. Daniel Siegel demonstrating this click here: http://www.youtube.com/watch?v=G0T_2NNnC68For further details on this model for the brain, study <i>Parenting from the Inside Out</i> by Daniel J. Siegel, MD & Mary Hartzell, New York: Jeremy P. Tarcher/Putnam, 2003, p. 171 - 183.	<ol style="list-style-type: none">Setting the stage. Invite students to think of a time that they got really upset. List a few examples on the board of things that are upsetting to them (no names).<ul style="list-style-type: none">Ask them if they can remember if it felt like they had a choice about what they did? !Did it matter to them what the other person was feeling or thinking?Introducing the "brain in the palm of the hand".<ul style="list-style-type: none">Explain that you will use your hand to model a brain. (See drawings next page.)Point to your wrist. The part that is closest to your spine and near the base of your skull is called the <i>brain stem</i>. It keeps you awake or asleep, makes sure you breathe and makes sure your heart keeps beating. It also keeps you safe.Fold your thumb across your palm. The middle part of your brain is where you process emotions and store your memories (<i>limbic area</i>). It is also where you have your "safety radar" (your <i>amygdala</i>).Fold your fingers over your thumb so you have a fist. The outer layer of your brain is called the <i>cortex</i>. It is where your thinking and planning happens.Point to your fingernails. The area of the cortex that is right up front is <i>Hit prefrontal cortex</i>. It is where the brain processes information about how we relate to others:<ul style="list-style-type: none">Understanding others' feelingsAbility to calm ourselvesAbility to make choicesMoralityAbility to sense what is going on for others (read body language)Flipping our lid. When we are really stressed or upset, the prefrontal cortex shuts down and no longer works with the rest of our brain.<ul style="list-style-type: none">Lift the fingers up so they are straight and the thumb is still across the palm.We say, "We flip our lid."Explain that we "flip our lid" when the thinking part (prefrontal cortex) of our brain isn't working. It becomes hard to use our problem solving skills.

Brainstem:



Midbrain:



Prefrontal cortex:



Flipped lid:



4. **Reflection.**

Ask students:

- "Do you sometimes flip your lid or have you ever been with someone who flipped their lid?" Invite students to share (no names). "What did that look like?" "Feel like?"
- "When you are really upset, have you ever done something and later thought, 'Why did I do that?' or 'I really wish I hadn't done that!' or 'What in the world was I thinking when I did that?'" (Allow some thought about why that might happen if the pre-frontal cortex is not working at that time.)
- Explain, when you are "flipped" (hand with fingers straight), you can't learn very well either. It really helps to calm back down so that you can solve problems.

5. **A little more brain science: *Mirror neurons*.**

Our brains are built so that we learn by copying. When you see someone yawn do you notice that sometimes you feel like yawning? Even babies copy what they see. Our brains also mirror feelings. When we are with other people who are sad, we can feel their sadness. The nerves (neurons) that do this are called *mirror neurons*.

- Holding up one hand as a "flipped lid" ask students what might happen to someone near that person because of mirror neurons. (They are likely to flip their lid too.)
- Holding both hands in the "flipped lid" positions, ask students what might happen if two people approach each other like this. (They might get into a fight.)
- What might students need to do to find their thinking brains and solve their problem? (Move away, calm down, unflip their lids).

6. **Exploring self-regulation.**

- Invite the students to share what they have found helpful to calm or re-gather themselves. Make a list of some of the tools.

7. **Designing a space.**

- Explain that sometimes it is helpful in a classroom to have a place to calm down, to sort out feelings and to re-gather. This is not a place where students go as a punishment, but a place to calm down until the student feels better.
- Either as a class or in small groups, invite students to brainstorm what kind of calming- down place could be created in the classroom. Ask them to think of some possible names for the area. (Common names include: the alone zone, Hawaii, Antarctica, the chill spot, calming quarter.)
- Make a list of the ideas from the class (or from different groups). Invite students to think about the list for a day.

	<p>8. Deciding on the space and setting up agreements. The next day, as a class:</p> <ul style="list-style-type: none"> • Pick ideas from the list that are doable and practical for making a time out area. • Establish a plan for how it will be created. • Vote on or choose a name for the area. • Decide if any guidelines are needed about using this calming down place. If the students suggest guidelines, have them select 3 or 4 from the list that can be made into a poster as a reminder.
--	--

Tips:

- It can be helpful to post a list of things that are useful when you or someone else has a "flipped lid." When I have a "flipped lid" I could: Take 3 slow deep breaths, go to our cool-down zone, put my head down for 30 seconds, etc. When a friend has a flipped lid, I could: Not take it personally, invite them to breathe deeply, give them space, etc.
- Some teachers are worried students will go to the cool-down spot just to play or to avoid doing their work. If this is one of your concerns bring it up as students are setting the guidelines. It is better to *ask* instead of *tell*. For example, "Do you think that this will be a space to use to play?*" "What would happen if you use the space during work time? When would you get your work done?" When a problem develops, it is a great opportunity to review guidelines and focus on solutions. Let the class share how they feel about the space being used this way, as well as their ideas for correcting the problem. When only one student is consistently misusing the space, consider individual problem solving.
- A frequent question from teachers is, "What happens when the student won't go to the cool down spot?" One reason students refuse to go is that they associate going to "time out" with being bad, or being punished. Another reason is that when someone has "flipped" they are not totally in their thinking brain. Some strategies that have worked for others are:
 - Offer a choice." _____, you seem upset. Do you think you can cool down at your desk, or would it be helpful to go to the cool-down spot?"
 - Offer an ear." _____, I can tell you are upset I'd be glad to listen to what is going on for you after I _____. Do you want to wait at your desk or would it be more helpful to go to the cool down spot?"
- Some teams of teachers invite students to use the calming down space in the other classroom, so that they are not as near the incident or people that were the trigger. It is best to do this only in extreme situations. When students are able to stay in the same room they:
 - Miss less class
 - Do not risk being embarrassed by having to leave class or show up in another class
 - Students see how peers can transition from feeling upset to becoming self-regulated.

*"The Brain in the Palm of the Hand" is the work of Daniel J. Siegel, M.D., first published in his book, *Parenting from the Inside Out* (2003) and more recently published in *The Whole-Brain Child* (2011). Dr. Siegel is not associated and/or affiliated with, and does not endorse and/or sponsor the Positive Discipline Association and/or its activities.