The Activated Brain

Communicating Well During Stressful Times

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Cindy is a youth worker, and advocate for human rights and for professional childcare and youth workers, and a trainer/facilitator. She serves as the Director of Training for Youth Catalytics, a non-profit organization specializing in research, providing training, technical assistance, strategic development and fund development support to child, youth and family serving organizations. Cindy is a member of the training cadre for the Innovation Center for Community, Youth Development and a certified trainer from the Academy for Educational Development and is a certified trainer of facilitators for Wyman's Teen Outreach Program. She has a master’s degree in psychology from Duquesne University.

Before becoming a full-time trainer, Cindy worked in direct service with children, youth and families. She was a counselor at an intensive treatment unit for boys, a mental health therapist, a program director for a crisis nursery and youth shelter and a program director of a crisis intervention department in a youth shelter. Cindy provides training on a variety of topics ranging from positive youth development approaches, to working with LGBTQ youth, stress management and self-care to facilitating strategic planning meetings and providing strength-based supervision. Cindy sits on the Board of Directors for the Child and Youth Care Certification Board, which provides a national Child and Youth Care professional level certification. She is a comprehensively trained, PMA Certified Pilates Teacher and in her free time practices Pilates, hikes with her two Siberian Huskies and sea kayaks.

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As we experience higher levels of stress, our brain becomes activated. Different states may be induced in different situations and may be a result of situations that others do not find threatening at all.

As we move on the activation scale from calm to alert, to alarm, to fear and then to terror, our brains become regulated or governed by different areas. In the calm state, we are able to access our cortex, which allows us to engage in abstract thought, planning, goal related decision making, analysis and interpretation of information, etc.

In the alert phase, we have less ability to engage in abstract thought. We are still taking in concrete information and have relatively easy access to the higher executive functions. We are also still able to relate to other people and our relationships with decision-makers are helpful in getting our messages across, especially if we are positioned as in affiliation with the decision-maker (known supporter, constituent, or connected to the decision-maker in some way.

When we kick into the alarm phase, our brains shift down into the limbic system. This is where the amygdalae live. This is a very emotionally reactive area of the brain so when we are governed in this region, we become much more emotional. We are not necessarily processing the communications we are hearing from the logical and more thoughtful cortical region. We are both more emotionally reactive and more receptive to emotional cues from others.

As we kick into the fear state, our midbrain comes into the forefront. This area is highly reactive. When we are in this area of our brains, communication is very difficult because our brains and bodies are preparing for a response (fight, flight, freeze or faint). This is a very reactive state and communications in this state may or may not actually be perceived at all. As a communicator, we must send messages of safety and be as soothing as possible.

In the terror state, the brain is focused in simple survival. Most communications are not heard or processed well in this state. All systems in the body are taking action to protect the life of the person, this is a very reflexive state and there is not easy connection to logical processing, planning, or complex decision-making.

What types of behaviors might you see generally from decision-makers in the four activation states above calm?

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**Brain Activation States**

consider your message and decision-maker specifically

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<th>ACTIVATION TRIGGER</th>
<th>BEHAVIORS</th>
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What Makes a Strong Message?

The best messages are delivered to as many areas of the brain as possible without triggering the brain’s defenses. This means that our work begins with knowing our audience (message box), understanding the current situations our decision-makers and other audiences are in, and how your message intersects with their values and perspectives. This means a lot of research which will help to shape a powerful message and avoid potential triggers. Once you know your message and the triggers, you focus on the delivery of the message. It is helpful to the pathway a message takes as the information enters our awareness. The meerkats are the sender and receiver. We receive the message via our five senses. The information is routed to the Thalamus and then screened by the Amygdala for potential threats and the Hypothalamus for relevance. Then the information is delivered to the Hippocampus. The experience is held in short-term memory by the Hippocampus and if the experience is interesting enough, it is sent to long-term memory. When an experience is in short-term memory, it is a complete experience and we are conscious of it. When an experience is sent to long-term memory, the Hippocampus deconstructs the experience into all of its parts and stores it in all of the areas of the brain related to each piece of information (visual goes to the visual cortex, auditory to the auditory area, metaphors go to yet another area, the interpretation goes to the cortex, and so on). When we recall a memory, the hippocampus pulls all of the pieces of data back together to create the experience. This all happens in nanoseconds! So the more pieces of brain data (not necessarily facts and figures) your message has and the more interesting or novel it is, the more robust the memory.

Anatomy of a Sticky Message

What are the most interesting parts of your message as you currently have it designed? How can you make it more interesting to create a robust memory?
Engaging the Amazing Brain!

1. ______________________
2. ______________________
3. ______________________

1. ______________________
2. ______________________
3. ______________________

The 5

Thalamus

Amygdala

Hypothalamus

Hippocampus

Corpus Callosum

Short-Term

FORGET!

Long-Term

Left Hemisphere

Right Hemisphere

Cerebellum

Frontal Lobes
Youth Catalytics’ trainers from Spitfire Strategies introduced the Message Box during the virtual learning opportunity on messaging. You were asked to complete the message box for one or two conversations. Let’s take a look at the message box from a brain perspective.

Brain in the Message Box

Each of the quadrants of the Message Box, value, barrier, ask and vision has a brain area associated with it. This is an artificial division of brain function and in actuality, the quadrants of the message box are important for many brain areas. For our work, we are focusing in on the areas we have listed here.

For example, if we were to take the message of the guide dogs for Royal Dutch Guide Dog Foundation, we could say that their value is about wanting to have vets who are healthy both in body and mind. A barrier might be ‘Yes, but the vets can go to counseling at the VA hospital’. The ask might be we need a way to help them with their PTSD during times when they are not in counseling and specifically when they are asleep and their unconscious minds become very active. Our vision is that the guide dogs interrupt the dreams of these vets so that eventually, they will be able to come out of the dreams on their own and be able to process the trauma they experienced as a result of completing their duty to our country. The value tells the decision-maker’s hypothalamus that the guide dogs are important because they will help the vets to be healthy enough to hold jobs and participate in our communities. We soothe the amygdala by saying that the vets will participate in therapy and during the times when they are home, in their communities and asleep, the dogs will ensure that the nightmares or flashbacks are interrupted so the vet is not overwhelmed and so the vet can consciously process the trauma. We tell their frontal lobes that the guide dogs are available and the breeding and training of the dogs is cost efficient when compared to more intensive mental health outpatient or inpatient treatment and will enable the vet to stay home with their families and friends. Our message uses the corpus callosum to switch the viewer from the visual story of the vet’s experience in the dream state to the waking state (right side functions of story and metaphor) over to the simple solution of guide dogs trained to wake the vet from the nightmare. The hardest part of this message is providing enough activation in the vets dream state to emphasize how necessary the intervention is without tipping the viewer over into a higher activation state. We want them at attention, not alarm, fear or terror.

Use the information in this presentation and workbook to analyze how well your message box speaks to the different areas of the brain. Consider also the areas not specifically mentioned in the message box above, such as the cerebellum, the thalamus, and the hippocampus.
The Brain Learns Best

1. Through Movement
2. Through Talking
3. From Images
4. By Writing
5. In Shorter Segments
6. Through Different Approaches

~ From Frank Kros, Upside Down Organization

NOTES

We learn best when information is delivered in segments or smaller chunks.

Offer information for about 12 minutes. Then provide an opportunity to move or process the information in some way for 2 minutes. Then provide more information.

We remember better this way!

Movement Strategies

1. Walking Meetings
2. Hand manipulatives/ fiddles
3. Turning and Talking
4. Standing and Stretching
5. Bending and Writing
6. Rolling Heads and Shoulders
7. "Dominant Eye" (group capacity building)
8. "The Cerebellum Challenge"
9. "Crossing the Line"
10. "Stand if You’ve Ever…"
11. Carousel

12. _____________________________________________

13. _____________________________________________
Listener/Audience Participation is KEY

Get Your AUDIENCE Talking!

- Make space for your decision-maker to ask you questions
- Listen closely to questions and statements - reflect what you heard
- In groups, offer brief pair, triad, table, or group discussion opportunities
- Ask participants to share something they learned
- Ask your decision-maker to tell you one point that resonated with them
- Discuss how they might use the information
- Quiz each other about information
- Combine with a movement activity
- As short as 1 minute or as long as time allows (3 minutes is REALLY long!)

When asked by his teacher to summarize the life of Socrates in 4 sentences, the student said:

"Socrates lived a long time ago. He was very intelligent. Socrates gave long speeches. His listeners poisoned him."

~Anonymous

Avoid becoming a Talking Head!

Where in your presentation to decision-makers or in capacity building do you open the space for questions? There are a variety of ways to invite active participation in the conversation. Some people prepare an agenda and send it to the group/person ahead of time. Others create Frequently Asked Questions handouts to answer some questions and trigger others. In your research, you will explore the values that are important to your decision-maker or training/capacity building group. You offer your presentation and ask participants how your information or programming fits into their values or connects to initiatives that are important to them.

What are other ways to actively involve others in the conversation?
Using Images and Imagery

The brain’s capacity for remembering images is virtually unlimited when compared to remembering numbers and words. Images open the space for deep connection to messages and for personal interpretation of materials and their meaning to that person. Even in one on one meeting, we can offer images rather they are literal images in print or online material or images that we create through our story telling. When we combine powerful images with emotion our image and message evokes, then we get far deeper engagement in the content of our message whether it is a capacity building training or a one-on-one meeting with a decision maker.

Whether the image is static or video, powerful images share four important qualities.

1. Authenticity. The viewer of the image can believe that the image is real. The people are real people existing in the context in the image or story. The things they are doing reflect real and current expectation of behavior. Unless you are intentionally going for a retro feel to your message, you must stay on top of what is current.

2. Cultural relevance. The image you select must be relevant to the audience you are speaking to. It can be challenging to find images that reflect all cultures, but you want to get the closest match you can to your decision-maker, your program participants or other audiences. When viewers see themselves doing something in an image, they can more easily connect with that person and empathy helps them to understand and resonate with your message.

3. Sensory Currency. Another important element is what producers at Getty Images call sensory currency. This means that the image reflects sensory input that the person is experiencing and that you may experience as a viewer. In some cases, it might be images of really human contact, people creating traditional crafts by hand, or images that trigger memories in you of when your senses were stimulated, for example an image of a deep, green, foggy forest might remind you of the smell of moss and dirt, the feel of moisture on your skin, and the relaxation you felt as you walked along a trail among the redwoods.


In storytelling, we create images by providing enough detail to frame the subject and often will use character archetypes to do this, such as the hero, the caregiver or even the villain. The images associated with these archetypes shift overtime and represent changes in culture. For example traditionally, the caregiver was female, but more and more we are seeing images or nurturing fathers. A graphic representing classic archetypes is to the right. As you are building your stories, consider which archetype your main characters are fulfilling and consider the impact these archetypes might have on our brains. The villain archetype my create anxiety and trigger a person, portrayal of an innocent, especially if that innocent is at risk, might trigger and alert activation response as the person seeks to defend the innocent, etc. You images can tie into the facts you are providing in your story and give those facts deeper meaning by tapping into the emotional and creative parts of the brain.

Presenting with Images

- Images provide space for metaphor
- Images reframe perspectives
- Images activate the right brain
- Images can be in the mind only
- The brain can remember unlimited images!
What images are you creating in your messages/stories?

**USES**
- whole brain
- patterns
- connected ideas

**FEATURES**
- print
- color
- symbols
- patterns

**WHAT**
- thinking
- discovery
- memory/recall
- test prep

**HOW**
- center topic
- branches
- details
- personalize

In his book, *Informal Learning*, Jay Cross writes, "Most learners will remember content that they write longer than the content they hear, or the content they read. Thus, taking notes of some kind is a valuable form of processing information... known to increase the likelihood of understanding and remembering material."

**WRITING** is tactile, kinesthetic, and visual-spatial. We process information a second time when we write it! When writing, it is very difficult to be thinking about something else at the same time.
Allow Time for Writing (or Drawing)
- Summary of learning
- 3 facts about content
- A question they have
- An important point you prompt
- An opinion
- A quiz question
- A mind map
- An implementation plan
- Think, Write, Pair, Share

On what…?
- Post-It notes
- Colored paper
- In a workbook
- On placemats
- Flip Chart Paper
- Wrapping or Butcher Paper
- Electronic devices
- Whiteboards
- Index cards

NOTES

Introduce Novelty into Your Capacity Building!
- Use different instructional methods and activities
- Include interactive technology
- Vary the environment
- Use your space, don’t pace but don’t stand still either, use the "well"
- Dress up!
- Offer role plays or simulations

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"Memorable moments are repeated and retransmitted so they can cover longer distances."
~Nancy Duarte, Resonate

"Intelligence building is enhanced by managing two key state variables: CONTINUITY (strength and persistence of previous, useful states) and FLEXIBILITY (capacity for variability and responsiveness to context demands)."
~Eric Jensen, Tools for Engagement