

# Brain-Based Behavior Response

Neuroscience-informed intervention strategies

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## The Brain Under Stress

When students feel threatened (physically or emotionally), the brain's alarm system (amygdala) activates, reducing access to the thinking brain (prefrontal cortex). This is why reasoning doesn't work during escalation.

## Brain States & Responses

Brain State	Student Behavior	Adult Response
Regulated (Green)	Calm, engaged, learning	Teach, reinforce, connect
Dysregulated (Yellow)	Anxious, distracted, fidgety	Co-regulate, reduce demands
Survival Mode (Red)	Fight, flight, freeze	Ensure safety, minimize input

## Co-Regulation Strategies

Students learn to regulate by being regulated WITH a calm adult.

- Model calm body language and voice
- Match energy slightly below student's level
- Use rhythmic activities (breathing, walking)
- Reduce verbal input during escalation
- Offer physical space while staying present
- Use predictable, soothing routines

## The Upstairs/Downstairs Brain

### Downstairs Brain (Survival)

- Amygdala: Threat detection, fear response
- Brain stem: Fight, flight, freeze reactions
- Activated during stress and perceived danger

### Upstairs Brain (Thinking)

- Prefrontal cortex: Reasoning, planning, impulse control
- Requires feeling safe to fully engage
- Still developing until mid-20s

## What This Means for Intervention

### Pro Tip

You cannot reason with a brain in survival mode. First, help the student feel safe. Then, once regulated, address the behavior.

- Prioritize safety and connection over consequences in the moment
- Wait for regulation before problem-solving

- Teach coping skills when calm, not during crisis
- Use visual supports to reduce verbal processing demands
- Create predictable environments that feel safe

## Recovery & Repair

- Allow full recovery time (varies by student)
- Re-establish connection before correction
- Avoid shame or lengthy discussions
- Reteach expected behavior briefly
- Plan for prevention of future incidents

## Implementation Ideas

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## Track Regulation Patterns

Classroom Pulse helps identify triggers and patterns in dysregulation, informing brain-based interventions.

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