Integrating Social, Emotional, and Academic Success: A Comprehensive Approach

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Welcome/Intro/Survey

Creating Conditions for Success
When we do not feel safe, we tend to feel fear or insecurity.

When we do not feel content, we tend to feel as though we are lacking.

When we do not feel connected, we might feel rejected or alone.
How do students belong?

1. School-based relationships and experiences.
2. Student-teacher relationships
3. Students’ general feelings about school as a whole.

Teacher support and positive personal characteristics were the strongest predictors of school belonging.

Belongingness

**Academic Outcomes**
- Less absenteeism
- Better school completion
- Less truancy
- Positive attitudes toward learning
- Academic self-efficacy

**Psychosocial Outcomes**
- Higher levels of:
  - Happiness
  - Psychological functioning
  - Adjustment
  - Self-esteem
  - Self-identity

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Which of these emotions represent best how you are feeling right now?
Welcome activity: Mindful Minute
Outline

1. Stress
   • Introduction
   • Biological Markers
     ▪ Cortisol
     ▪ Brain Structure and Function

2. Taking Advantage of Neuroplasticity
   • Cue-Centered Approach
   • Yoga and Mindfulness

3. Practicing Adaptability
   • Cognitive
   • Emotional
1. Stress

![Graph showing the relationship between stress level and performance, happiness, health, low stress, boredom, depression, high stress, anxiety, and the area of optimal stress.](image-url)
World Pandemic
Nature and Nurture

Genes $\leftrightarrow$ Environment

$\downarrow$

Stress

Vulnerability

Resilience $\rightarrow$ PTSD $\rightarrow$ ANS/DEP
100 billion neurons/trillions of synapses/pruning and myelination
HPA Axis  →  Cortisol
Trends in cortisol levels across time of day: HLM Analysis

CHECK: Weems et al, 2009 Journal of Pediatric Psychology
Processing a Traumatic Event
Carrion et al 2007 Pediatrics

Posttraumatic stress disorder symptoms and cortisol at baseline predicted hippocampal reduction over an ensuing 12- to 18-month interval.

Left and right hippocampal activation during retrieval found to be greater in the HC group compared to the PTSS group. Clusters are overlaid upon a standardized template brain in an axial view (left: z = -18) and a coronal view (right: y = -20). No areas of the left or right hippocampus were found to be display greater activation during retrieval in the PTSS group compared to the HC group.
Percentage of total voxels within the right hippocampus activated ($p < .05$) when comparing retrieval versus the control condition in the HC and PTSS group.
Approaching the Prefrontal Cortex
Amygdala Early Activation when viewing Angry Faces

Garrett et al. 2012 Depression and Anxiety
Diminished PFC activation when viewing Fearful Faces

Garrett et al 2012 Depression and Anxiety
2. Taking Advantage of Neuroplasticity
Neuroplasticity

- Most active during development
- Clear impact of traumatic stress on key regions
- Aerobic exercise promotes neurogenesis
- Best improvements: PFC and hippocampus
- Molecular and network levels
  - Strengthening/weakening of synapses
  - Strengthening/weakening of pathways
Level 1 HLM analyses indicated a significant linear, coefficient = -2.84, $t(500) = -6.72, \ p < .001$ and curvilinear (quadratic) change, coefficient = 0.13, $t(500) = 5.60, \ p < 0.001$
With CCT: Decrease Activation of Area Related to Symptoms in the PFC

Decreased activation:
- Left DLPFC
Prevention: Pure Power Curriculum
Multi-method design allows for testing of models

- Improved Sleep
- Brain Function Improvements (Emotion Regulation & Execute Functioning)
- Improved SEL
- Behavioral Change
- Academic Improvement
Increased Total Sleep Time (Minutes) Following Curriculum

(p=.04)
Increased REM Sleep (Minutes) Following Curriculum

(p=.04)
Amygdala activation is associated with emotional responses: in particular fear, anxiety, and aggression. Amygdala hyperactivity is seen in a variety of psychopathologies including PTSD and exposure to early life stress. After the mindfulness intervention, children in the intervention group showed decreased amygdala reactivity to aversive images.
3. Practicing Adaptability

Executive Function:
• The Importance of Positive Thoughts

Emotion Regulation:
• The Importance of Mindfulness

Breathing:
• An Anchor to the moment
• A link to muscle relaxation
Let’s Practice!

Breathing:
• 1, 2, 3, 4, 5 … 5, 4, 3, 2, 1
• The Star Fish

Mindfulness:
• 5 sight; 4 sound; 3 touch; 2 taste; 1 smell
• Yoga: The Mountain Pose
Health Promotion/Prevention

Pure Power/Brain Breaks/Other PE Resources
The Corporate Athlete

The Body
The Emotions
The Mind
The Spirit

Spiritual Capacity
- Provides a powerful source of motivation, determination, and endurance.

Mental Capacity
- Focuses physical and emotional energy on the task at hand.

Emotional Capacity
- Creates the internal climate that drives the ideal performance state.

Physical Capacity
- Builds endurance and promotes mental and emotional recovery.

How do you manage your 1440 to give you maximum recovery?

The Healthy Mind Platter

Physical Time
- Focus Time
- Connecting Time
- Time In
- Down Time
- Play Time
- Sleep Time

Six Critical Healing Factors

Sleep
Nutrition
Mental Health
Exercise
Mindfulness
Healthy Relationships

The Big 7

- Mindful breathing
- Sleep
- Nutrition
- Exercise
- Building and maintaining positive relationships
- Doing things that are meaningful to you (hobbies/entertainment)
- Positive self-talk, including self- and other-compassion, acceptance, reappraisal, visualization, and problem-solving.

Breathe  Move  Rest
1 - 5 minute activities for any classroom:
- Breathing
- Mindful movement
- Mindfulness breaks

Ideal for:
- Start and end of day
- Transition times
- Before testing

Brain Breaks align to:
- 4 out of 5 National PE overstandards for 6-12
- All 5 National PE overstandards for K-5
- 20 of the 98 standards for 6-12
- 13 of the 48 standards for K-5
**Pure Brain Breaks**

Pure Brain Breaks are simple and effective strategies to alleviate stress and to calm over-stimulated minds. The exercises, 1 to 5 minutes in length, are designed for easy classroom implementation. Participants can perform these seated or standing, at desks or on the floor.

**Pre-K**
- Implementation Guide
- 3x5 Cards

**3-5**
- Training Manual
- Implementation Guide
- 3x5 Cards
- Videos

**K-2**
- Training Manual
- Implementation Guide
- 3x5 Cards
- Videos

**6-12**
- Training Manual
- Implementation Guide
- Videos
Brain Breaks Resources
Cue Centered Therapy for Youth Experiencing Posttraumatic Stress Symptoms (CCT)

- Tier 3 intervention: psychotherapy for youth with clinically significant traumatic stress and related functional impairment
- For delivery by trained mental health professionals
- Integrative approach: impact maximized through consultation and collaboration with teachers, administrators, and school support staff
- Evidence-based & empirically validated in school settings
CCT includes core components of trauma intervention:

- Psychoeducation
- Skill development
  - Emotion identification
  - Emotion expression
  - Emotion regulation
- Approach & exposure
- Trauma experience integration
- Youth empowerment
Why CCT?

- Exposure to chronic adversity and complex trauma is a standard
- Insight-oriented approaches are needed to:
  - Develop awareness of experience (interoception)
  - Improve understanding of the impact of life events
  - Facilitate integration and empowerment
- Address common obstacles in child trauma treatment:
  - Difficulty identifying circumscribed “trauma events”
  - Challenges to caregiver participation
- Multiple therapeutic techniques are relevant
CCT Structure

- Multimodal + integrative approach
- 15 sessions + flexibility
- Primarily individual + 3-4 conjoint child/caregiver sessions
- Ages 8 and above
- Focus on chronic, ongoing, or complex trauma
- Suitable for any trauma type
CCT is based in trauma neuroscience

- PFC - Limbic interplay and fight/flight/freeze/cling reactions
- Physiological alarm & sympathetic activation
- Allostatic load
- Trauma & development
- Classical conditioning (Hebb’s rule)
Trauma cue conditioning

**US:** Trauma experience

**UR:** Trauma response (thoughts, phys/feelings, behavior, emotions)

**CS:** Trauma cue

**CR:** Trauma symptom
Aims of CCT

• Gain empowerment through knowledge, skills, and experience
• Identify and address trauma cues
• Approach trauma history (express and process thoughts and feelings)
• Increase flexibility in responding to adversity and trauma (and reminders): Cognition, behavior, physiology, and emotion
• Strengthen the children’s connection with themselves, their caregivers, and surrounding systems
CCT Phase 1:
Psychoeducation and Coping Skills Development
CCT Phase 2: 
Processing Chronic Traumatic Stress History

Life Timeline

Trauma Narrative & Processing

Positive

Negative

← Age →
## CCT Phase 3: Cue Processing and Exposure

### Cue Response Chart

<table>
<thead>
<tr>
<th>Cue</th>
<th>Thought</th>
<th>Body Feeling</th>
<th>Emotion</th>
<th>Behavior</th>
<th>Possible New Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disinfectant</td>
<td>My mom is in the hospital. She may die. I will never see her again. I could have prevented it.</td>
<td>Sick in the stomach, nausea, vomiting.</td>
<td>'Worry, fear, guilt.'</td>
<td>I leave the classroom. I run away.</td>
<td>Listening to music. Deep breathing. Coloring my back.</td>
</tr>
<tr>
<td>Ambulance siren</td>
<td>Will they arrive in time?</td>
<td>‘upset’ ‘angry and worried’</td>
<td></td>
<td>Cover ears with my hands.</td>
<td>Listening to music, coloring.</td>
</tr>
<tr>
<td>Social media</td>
<td>I am missing out.</td>
<td>Strong feeling in body, hard to describe or name.</td>
<td>‘upset’ ‘mad, lonely’</td>
<td>I don’t see it.</td>
<td>Imaging Sprinkles or puppy videos. Bringing with Sprinkle, special pajamas, slippers and a blanket.</td>
</tr>
<tr>
<td>School restroom</td>
<td>My brain is empty. I am like a black cloud, it is hard to think. I am so weak. What if it happens again? It is so humiliating.</td>
<td>Strong feeling in the body, hard to describe or name.</td>
<td>‘Scared, disgusted’</td>
<td>Avoid going to restroom while in school. Freeze.</td>
<td>Bring a picture of Sprinkle or Sprinkle’s teddy bear. Listen to music. Bring Sprinkle if possible.</td>
</tr>
</tbody>
</table>

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*Stanford Medicine Early Life Stress and Resilience Program*
CCT Phase 4: Integration and Closure

Re-visit the narrative
Highlight strengths
Assess current needs
Anticipate future stress
Celebrate!
Case Study - Presentation

Sammy, an 11-year-old boy, was brought to our clinic because of increased aggression toward his siblings. Mom reported that this was very uncharacteristic of Sammy’s previous demeanor. She also reported decreased academic performance. Feeling guilty and confused, she reported to the authorities that Sammy’s father had regularly abused her and the children physically and emotionally for a number of years. Sammy had been hit numerous times with metal bars, wooden rods and bamboo sticks. Sammy’s mother felt the boy’s behavior was directed at her for “breaking the family up”; mom and kids were now living in a new apartment after the father had been arrested and deported. Sammy had nightmares and difficulty sleeping. He scored 32 in his PTSD RI (moderate PTSD).
Case Study - Sessions 1-5

**Sessions 1-5:** Education into PTSD symptoms enabled mom to manage Sammy’s nighttime episodes. Despite initial resistance, Sammy found relaxation exercises gave him a sense of control and a feeling of calmness. With support, guidance, and a structured mean to avoid suggestion, Sammy told his story (Narrative). He now felt safe (his sense of security increased further as Mom learned not to avoid him), but he also missed his father. During the aggressive episodes he felt confused, as in a daze and his heart rate would accelerate. After taking out his feelings on his siblings, he would feel guilty and ashamed.
Case Study - Sessions 6-10

**Sessions 6-10**: Sammy and his mother were introduced to the Concept of Traumatic Cues. His father’s violence was explored as a fearful event. Cues surrounding this event were most commonly neutral (not good or bad), but were reminders to his brain of the traumatic event. Sammy stated that when mom came home, the slamming of the car door reminded him of his father coming home. His brain associated these cues to aggression (classical conditioning). When exposed to the cue, an aggressive response would result. Sammy and his mother were taught how responses are characterized by four components: cognitive, physical, emotional and behavioral. We concentrated on changing any of these components as a means to develop appropriate responses (generalization).
Case Study - Sessions 7-15

Sessions 7-15: Although impossible to identify all pertinent cues, our ability to address some cues helped Sammy make a connection between history and behavior. The goal was not to get rid of the cues, but to be able to tolerate them as non-threatening. Behavioral desensitization with gradual cue exposure (first; imagining, later; in-session and later; in-vivo) helped Sammy develop new responses and strengthen his self-efficacy. He learned to process discordant emotions. By termination, Sammy was doing better at school, not arguing with his mother, not hitting his siblings and feeling better about his accomplishments. He scored 5 in his PTSD Reaction Score (sub-clinical).
Cue-Centered Therapy Online Course

https://mededucation.stanford.edu/courses/cue-centered-therapy/
SURVEY: 3 Multiple Choice Questions

Q1

What items are true regarding cues:
A. Cues can trigger physiological reactions.
B. We should be able to identify all cues associated with a traumatic event.
C. Therapists anchor on cues for exposure treatment.
D. A and C are correct
E. All of the above

Correct Answer: D
Q2

Regarding Coping Tools:
A. These should be limited to the ones we teach children.
B. Children can identify their own coping tools.
C. Children below the age of 8 cannot engage in deep breathing exercises.
D. A tool-box provides a concrete way for children to remember their coping tools.
E. Both B and D are correct.

Correct Answer: E
In Sammy’s case, the fact that her Mom brought him to therapy demonstrated that she is doing well and did not need support for herself.

Correct Answer: False
What to do:

- Take time to talk
- Reassure Safety
- Limit exposure
- Structure; regular routines
- Be a role model of self-care

The Pure Power Curriculum: https://pureedgeinc.org/curriculum/
How to safeguard our people and ourselves:

**LISTEN**
- With attention and non-judgement (mindfulness)
- Stay informed
- When enforcing guidelines, be sensitive about anxiety, anger or frustration about not being in control of one’s safety and health.

**Promote**

**Self care**
- Exercise
  - Yoga (combines exercise with mindfulness)
- Diet
- Social Interactions

**Protect**

Communicate safety and security
How to safeguard our people and ourselves:

**MODEL**
- Self-compassion
- Self-care

**GET INVOLVED**
- Responsive together – community
- Sense of control – taking action
- Ask for help
- Connect

People with pre-existing MH conditions should continue with their treatment and be aware of new or worsening symptoms.
Self-Care

Take breaks from watching, listening or reading news

Time to unwind: activities you enjoy

Connect with others

Call your health care provider if stress gets in the way of your daily activities for several days in a row
Overview

- Motivation in schools
- Developing a Social, Emotional, and Cultural (SEC) Lens
- Academic life coaching
- Invitation to pilot project
“...humans have evolved to be inherently curious, physically active, and deeply social beings.”

(Ryan & Deci, 2018)
Motivation is what gives purpose or direction to our behavior. In other words, motivation concerns what moves people to act, both consciously and unconsciously.
When we think about motivation, it’s often in terms of *amotivation*, or a state in which a student finds no value, reward, or meaning in learning, and demonstrates a lack of intention to engage in typical learning behaviors.
Modern schooling often requires teaching mandated curricula to large groups of diverse students based not upon an individual student’s naturally developing interests and abilities, but rather upon a “prescribed age-graded schedule” reflecting common notions about college and career readiness.

The behavior of students is highly constrained through the use of various rewards and punishments, including a prominent and often public grading system that encourages strong social comparisons and may evoke feelings of inadequacy, shame, and resentment.
Kids Under Pressure

56% of students report their stress about school has increased.

Only 35% of students report they are quite or very confident in their ability to cope with stress. This percentage is even lower for females (24%) and Hispanic/Latinx students (31%).

43% say the amount of sleep they get has decreased since the time before the pandemic.

(Challenge Success, February 2021)
17% of youth (6-17 years old) experience a mental health disorder (NAMI, n.d.)
Mental Health & Motivation

ACEs
- Experiencing/Witnessing violence, abuse, or neglect
- Death in family/community
- Divorce/Parental separation

Mood
A low intensity emotional state that may persist hours, days, or even weeks

Dissociation
Behavior such as spacing out or not remembering

Argument with a friend or relative

ADHD
- Impulsivity
- Attention difficulties
- Fidgeting
- Frequent interruptions
- Changing topics
- Messy work
- Difficulty starting/stopping work
46% of teachers in K-12 settings report high levels of daily stress during the school year.

10% of teachers leave after one year.
17% of teachers leave within five years.
70% of teachers in urban districts leave within the first year.

When compared to 12 different occupational groups, teachers are the least likely to state they agree with the statement: ‘At work, my opinions seem to count.’

(Lever, Mathis & Mayworm, 2017)
"...wellness is better described in terms of thriving or being fully functioning rather than merely by the presence of positive and absence of negative feelings. Thriving is characterized by vitality, awareness, access to, and exercise of one’s human capacities and true self-regulation..."

(Ryan & Deci, 2018)
What moves people to act?
**AUTONOMY**

Regulation by one’s self rather than feeling controlled and pressured by either external or internal forces. Autonomy is the need of individuals to experience a sense of volition, willingness, *self-endorsement*, and ownership of their actions. Autonomous actions are congruent with one’s *authentic* interests and values.

**COMPETENCE**

Feeling *effectance*, or the natural tendency to put forth effort to influence our environment.

**RELATEDNESS**

Feeling that we are able to care and support others, *and* feeling that others care and support us.
The autonomy-control continuum differentiates types of motivation based on the extent to which an individual’s behavior is perceived to be autonomous versus controlled, pressured, or coerced.
Does this activity, lesson, practice, or policy support **or** hinder autonomy, competence, and belonging?
**Autonomy-Hindering**

- **Uncaring**: Does not greet students and rarely inquires about their well-being.
- **Lack of Choice**: Rarely offers students choice in how or when to complete assignments.
- **Silence**: Discourages classroom dialogue, delivers extended didactic instruction, and monitors students’ silent, independent work.
- **Control**: Demands compliance and rarely states rationale behind decisions and requests.
- **Discouragement**: Criticizes students’ abilities, effort, or performance. Makes positive attention dependent on compliance.

**Autonomy-Supporting**

- **Caring**: Greets students with a smile and asks how they are feeling.
- **Choice**: Frequently offers students a degree of choice within the parameters of each lesson.
- **Dialogue**: Encourages students to engage in structured academic and social conversations.
- **Rationales**: Generally provides explicit rationales for requests and decisions.
- **Encouragement**: Communicates high expectations for students, praises students’ growth on tasks, and encourages progress.
“These practices are not separate from pedagogy in math and science; they anchor that pedagogy in the kinds of interactions and environments students need to learn everything else.”

(Markowitz & Bouffard, 2020)

“After all, we cannot expect teachers to model and teach something they have not experienced themselves, and we cannot expect a safe and supportive classroom environment to blossom amid a punitive, toxic, or competitive culture among faculty or district staff. Furthermore, students are acutely aware of the adult cultures around them and, especially as they approach adolescence, they are experts at spotting hypocrisy.”

(Markowitz & Bouffard, 2020)
Bridge to Learning Online Mini Course: Understanding Motivation in Educational Contexts

- Extrinsic Contingencies and Intrinsic Motivation
- Internalization of Extrinsic Values and Goals
- Orientation Styles
- Goal Content
- Interpersonal Relationships
- Purpose Development
- Motivation Enhancing Conversations
- Mental Health Considerations
- Tips for Applying Motivation Science in the Classroom
But wait... There’s more!
Definition:
A formal or informal structured, collaborative conversation and partnership grounded in multimodal learning methods and psychological approaches for enhancing performance and well-being in personal, academic, and work domains.

• Voluntary
• Values-based
• Strengths-based
• Solutions-focused
• Goal-oriented

Techniques:
• Active listening
• Affirming strengths & past successes
• Open-ended Questioning
• Supporting goal setting & problem-solving
• Modeling skills (e.g., emotion regulation, organization, and communication)
• Providing constructive feedback
• Encouraging self-directed change
What’s wrong with you?

What happened to you?

What’s right with you?
Pilot Project

Survey Link: https://stanfordmedicine.qualtrics.com/jfe/form/SV_8eJkqU2aTKqKB9k

Email: Bridgetolearning@stanford.edu
Resources

SAMHSA HOTLINE
1-800-985-5990 OR Text “Talk With Us” to 66746

PURE EDGE (HTTP://PUREEDGEINC.ORG/)
Free self-care resources in English and Spanish
Brain Breaks, A Peek Inside the Amazing Brain, K-5 Resources, virtual PE Classes
HTTPS://WWW.DROPBOX.COM/SH/DW5H9GR4NUBW1XS/ACQL2J14O9E2JscN27-h48Pa?dl=0

VIRTUAL MEDITATION WEBINAR
Stanford’s Early Life Stress and Resilience Program in partnership with Pure Edge, Inc. will be hosting a live daily 30min guided meditation Monday - Friday from 1 PM - 1:30 PM. Link to Virtual Webinar (requires download of Zoom application)
HTTPS://STANFORD.ZOOM.US/J/755370337

STANFORD’S EARLY LIFE STRESS AND RESILIENCE PROGRAM (ELSRP)
ELSRP continues to provide resource materials related to the COVID-19 Outbreak
HTTP://MED.STANFORD.EDU/ELSPAP.HTML

DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCES:
Resources and information specifically related to COVID-19:
HTTPS://MED.STANFORD.EDU/PSYCHIATRY/INTRANET/C OVID19.HTML

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY:
HTTP://WWW.AACAP.ORG/

NATIONAL CHILD TRAUMATIC STRESS NETWORK: HTTPS://WWW.NCTSN.ORG/

STANFORD CHILDREN’S HEALTH: HTTPS://WWW.STANFORDCHILDRENS.ORG/
Optimistic closure: Future Me

- Take moment to write a note to your future self.

- What reminders of how you are feeling right now do you want to capture in writing?

- What message of encouragement do you want to send to yourself?

- If you want to share with us, please use the Q & A box!
Closure activity: Guided Rest
Final Thoughts

Observe:
  Listen
  Be open and non-judgemental

Identify:
  Who may need what
  The spectrum of interventions

Apply:
  Resources
  Tools
Conclusion/Final Survey

Some questions:

1. I feel increased competency after completing this training.
2. I am now more ready to welcome my kids to their classroom.
3. I know what to do if I need help with kids demonstrating distress.