

The Adolescent Brain & Student Success

A professional learning session for K-12 educators and school counselors on brain-aligned practices that transform student outcomes.



Session Roadmap

1

Orient & Engage

10 min — Brain Myth vs. Fact

2

Explore & Apply

20 min — The BUILD™ Model in action

3

Connect to Systems

15 min — Brain science meets school structures

4

Implement & Take Action

15 min — Tools you can use tomorrow



By the end, you will be able to...

3

Explain three principles

Connect adolescent brain development to behavior and learning.

2

Select two responses

Apply BUILD™ to a realistic classroom or discipline scenario.

1

Commit to one tool

Create an immediate implementation plan for your setting.

The Developing Adolescent Brain: What Science Tells Us



- The **prefrontal cortex** — responsible for planning, impulse control, and decision-making — matures last, completing development around age 25 (Insel & Cohen, 2025)
- The **limbic system** (emotion, reward) is highly active during adolescence, creating a fundamental developmental imbalance between emotion and reason
- **Chronic stress** disrupts self-regulation processes over time, compounding behavioral challenges in school settings (Halliburton, Murray & Ridenour, 2024)

Adolescence is a window of rapid adaptation— not a defect

LEARNING

The brain is highly responsive to experience, feedback, and practice.

REWARD

Immediate, social, and emotionally meaningful rewards can carry extra weight.

CONTROL

Planning, inhibition, and flexible attention keep strengthening with support.

The practical question: What environment helps the next good decision become more likely?

Behavior is data: look beneath the label

What we may see

What may be happening

Defiance



Threat, embarrassment,
autonomy need

Carelessness



Working-memory overload or
weak pause skills

Attention seeking



Belonging need or social
reward

No remorse



Flooding, shutdown, or face-
saving

Behavior Is Communication — Not Defiance

Still Under Construction

Executive functioning, impulse control, emotional regulation, and decision-making are all **still developing** during adolescence — this is biology, not bad character.

"Attitude" Is Often a Brain Signal

What looks like defiance is frequently an underdeveloped prefrontal cortex responding to stress, threat, or social pressure from peers.

Punitive → Developmental Lens

Shifting how we see behavior changes everything about how we *respond*. The lens we choose shapes the student in front of us.



BRAIN-ALIGNED BY DESIGN

BUILD™ converts a developmental lens into five moves

B

Belonging

U

**Understand
risk–reward**

I

**Impulse
buffering**

L

**Learning
through
errors**

D

**Dignity +
account-
ability**

**Support the skill. Preserve the relationship. Repair
the impact.**

B — Belonging increases access to learning

Connection is not a reward after compliance. It is a condition that makes regulation and engagement more possible.

- 1 Greet before redirecting**
- 2 Name the student's value to the group**
- 3 Separate identity from behavior**

‘How can I protect connection while addressing impact?’

U — Understand the reward from the student's view

A consequence competes with rewards such as peer status, escape, novelty, control, or emotional relief.

- 1 What happened right before?**
- 2 What did the behavior gain or avoid?**
- 3 What alternative offers a faster payoff?**

‘What made this choice worth it in that moment?’

I — Impulses Buffering (Buffer the impulse before demanding reflection)

A short pause, reduced audience, and fewer words can restore access to better decision-making.

- 1 Create space without public spectacle**
- 2 Offer two bounded choices**
- 3 Delay the problem-solving conversation**

‘What will help this student pause long enough to choose?’

L — Learning through Errors (Errors become useful when feedback leads to rehearsal)

Reflection without a next-step practice can become another lecture. Build a new response while the event is still meaningful.

- 1** **Replay the decision point**
- 2** **Rehearse one replacement behavior**
- 3** **Plan for the next trigger**

‘What skill can we practice—not merely discuss?’

D — Dignity & Accountability (Accountability works better when dignity remains intact)

Brain-aligned practice does not remove limits. It makes limits predictable, proportionate, private when possible, and linked to repair.

- 1 State the boundary calmly**
- 2 Name the impact without labeling the student**
- 3 Require repair and reconnection**

Ask: 'How can accountability teach and restore?'

BUILD™ in Action: What Brain-Aligned Responses Look Like



Swap the Script

- **Instead of:** "Go to the office" → **Try:** "Let's take 2 minutes, then problem-solve together"
- **Instead of:** Public correction → **Try:** Private, calm redirection that preserves dignity
- **Instead of:** Zero-tolerance removal → **Try:** Restorative conversation with clear accountability

Research confirms that school-based interventions focused on building resilience and self-regulation are significantly more effective than punitive approaches (Cai, Mei, Wang & Luo, 2025).

Connecting Brain Science to School Systems

Classroom Management

Practices rooted in fear or shame **activate the threat response**, literally shutting down the brain's capacity for learning. Safety is not optional; it's neurological.

MTSS Supports

Multi-Tiered System of Supports works best when **Tier 1 practices are developmentally responsive** for all students, not just those at Tier 2 or 3.

Disciplinary Policies

Policies that ignore brain development **widen equity gaps** and undermine student well-being. Team science underscores the importance of multi-system supports (Zanolie et al., 2022).

Brain-Aligned by Design: Wellness Together

Ready-to-Use Tools for Educators





Your 3 Ready-to-Use Tools



Decision-Making Delay Tool

A structured pause protocol that gives students time to engage their prefrontal cortex **before** responding, interrupting the impulsive threat reaction.



Risk-vs.-Reward Interview Guide

Conversation prompts that help students examine their own risk-reward thinking, turning behavioral moments into **coaching opportunities**.



Brain-Aligned Discipline Planning Sheet

A planning template for designing responses that **balance accountability with dignity**, ready for your next team meeting.





Tool 1 — Decision-Making Delay

Use when emotion, audience, or urgency is narrowing choices.

1

PAUSE

Lower voice · reduce words · create space

2

BUFFER

Offer two safe choices · remove the audience

3

RETURN

Name a specific time to revisit the decision

4

REFLECT

Identify trigger · reward · impact · next move

Tool 2 — Risk–Reward Interview



BEFORE

What was happening right before the choice?

REWARD

What did the choice help you get, avoid, or change?

COST

Who or what was affected—now and later?

ALTERNATIVE

What could meet the same need with less cost?

PLAN

What cue and support will help next time?



Tool 3 — Brain-Aligned Discipline Plan

Behavior + Impact

Describe observable actions; avoid character labels

Developmental Hypothesis

What skill, context, reward, stressor, or belonging need may matter?

Boundary + Safety

What limit must remain clear and non-negotiable?

Teach + Rehearse

What replacement response will be modeled and practiced?

Repair + Reconnect

How will harm be repaired and belonging restored?

Monitor

What will adults and the student look for next time?

One move, one setting, one next step

Within the next 7 days, I will...

BUILD™ Move

[your chosen move]

Setting / Team

[where you'll apply it]

Evidence I'll Notice

[what change you'll observe]



Accountability and development do not compete.

When adults design for belonging, buffering, practice, and repair, students gain more chances to make the next good decision.

Support the Skill

Build capacity through intentional practice and scaffolded opportunities for growth.

Preserve the Relationship

Maintain trust and connection as the foundation for lasting behavioral change.

Repair the Impact

Create structured pathways for students to acknowledge harm and restore community.



Selected resources for continued learning

Practice Guides

- **CDC** — School Connectedness Helps Students Thrive
- **Harvard** — Guide to Executive Function
- **Harvard** — Activities to Practice Executive Function
- **IES** — Alternatives to Exclusionary Discipline

Research

- **Insel & Cohen (2025)** — Adolescence as a window
- **Halliburton et al. (2024)** — Self-regulation under chronic stress
- **Zanolie et al. (2022)** — Developing adolescent brain
- **Cai et al. (2025)** — School-based resilience interventions

Key Takeaways & Commitments

Developmental, Not Defiant

Adolescent behavior is a brain story — our response shapes the outcome more than the behavior itself.

BUILD™ Every Day

The BUILD™ Model is a brain-aligned framework for every interaction — Belonging, Risk-Reward, Impulse Buffering, Learning from Errors, Dignity-Preserving Accountability.

One at a Time

Change starts with **one classroom, one conversation, one commitment.** Remember that word from the start — how has your thinking shifted?

References

- Cai, C., Mei, Z., Wang, Z., & Luo, S. (2025). School-based interventions for resilience in children and adolescents: A systematic review and meta-analysis of randomized controlled trials. *Frontiers in Psychiatry*, 16, 1594658. <https://doi.org/10.3389/fpsy.2025.1594658>
- Halliburton, A. E., Murray, D. W., & Ridenour, T. A. (2024). Interplay among self-regulation processes over time for adolescents in the context of chronic stress. *Journal of Cognition and Development*, 25(3), 386–407. <https://doi.org/10.1080/15248372.2023.2295894>
- Insel, C., & Cohen, A. O. (2025). More than just a phase: Adolescence as a window into how the brain generates behavior. *Current Directions in Psychological Science*, 34(3), 149–156. <https://doi.org/10.1177/09637214251313733>
- Zanolie, K., et al. (2022). Understanding the dynamics of the developing adolescent brain through team science. *Frontiers in Integrative Neuroscience*, 16, 827097. <https://doi.org/10.3389/fnint.2022.827097>