

Theory of Change Appendix

EmberWood: Invisibility & Inclusion Curriculum (Grades 1–5)

A Trauma-Informed, Neurodiversity-Affirming, Story-Based SEL & STEAM System

CONTEXT & PROBLEM STATEMENT

The Post-2020 Childhood Development Crisis

Between **2020–2025**, children experienced an unprecedented global disruption to:

- Face-to-face peer contact
- Play-based social learning
- Intergenerational connection
- Emotional regulation development
- School-based relational safety

Current national data confirms:

- Youth loneliness has reached **public-health crisis levels** (U.S. Surgeon General, 2023)
- Anxiety and internalizing disorders are rising in elementary-aged students
- Screen-mediated relationships have overtaken unstructured peer play
- Discipline systems remain predominantly punitive rather than restorative

Traditional Social-Emotional Learning (SEL) frameworks alone have proven **insufficient** to address:

- Nervous-system dysregulation
- Technoference
- Identity masking
- Quiet distress
- Relational invisibility
- Post-pandemic attachment disruption

THEORETICAL FOUNDATIONS

1. Trauma-Informed & Nervous-System Education

Grounded in:

- Perry & Szalavitz (2017)
- Siegel (2012)
- Porges (2011)
- Levine (2010)

Key Constructs:

- Co-regulation before self-regulation
- Window of tolerance
- Felt safety
- State-dependent learning
- Stress-response completion

Instructional Implication: Students cannot access higher-order cognition while in active dysregulation.

2. Social-Emotional Learning & Belonging Science

Aligned with:

- CASEL Framework (2020)
- Walton & Cohen (2011)
- Brown (2010)

Key Constructs:

- Belonging vs fitting in
- Emotional attunement
- Perspective taking
- Relational trust

3. Neurodiversity & Executive Function

Grounded in:

- Barkley (2012)
- Armstrong (2010)
- Aron (2013)

Key Constructs:

- Executive function
- Sensory processing sensitivity
- Cognitive load
- Difference without deficit

EmberWood uses non-pathologizing developmental lens.

Behavior is framed as information, not defiance.

MOTIVATION, PURPOSE & DIGITAL CULTURE

4. Motivation, Skill & Purpose Development

Grounded in:

- Deci & Ryan (2000)
- Bandura (1997)
- Dweck (2006)
- Csikszentmihalyi (1990)
- Eyer & Giles (1999)

Key Constructs:

- Intrinsic motivation
- Self-efficacy
- Growth mindset
- Flow state
- Service learning

The JOY Framework (Effort–Openness–You) aligns directly with these motivational systems.

5. Invisibility, Isolation & Public Health

Grounded in:

- U.S. Surgeon General (2023)
- Putnam (2000)
- Hawkley & Cacioppo (2010)

Key Constructs:

- Loneliness as health risk

- Relational neglect
- Emotional invisibility
- Quiet distress

The **Invisible Elephant** functions as both:

- A metaphorical learning device
- A validated representation of early internalized isolation risk

6. Technoference & Digital Ethics

Grounded in:

- McDaniel & Radesky (2018)
- Twenge (2017)
- Alter (2017)

Key Constructs:

- Technoference
- Attention fragmentation
- Digital disembodiment
- Performative connection

EmberWood introduces narrative-based digital literacy, not restriction-based screen policy.

RESTORATIVE JUSTICE, UDL & MTSS

7. Restorative Justice in School Discipline

Grounded in:

- Morrison & Vaandering (2012)
- Gregory et al. (2016)
- Darling-Hammond (2014)

Key Constructs:

- Repair over punishment
- Accountability without shame
- Reintegration after conflict
- Relationship-centered discipline

EmberWood replaces: Suspension → Regulation → Repair → Restoration

8. Universal Design for Learning (UDL)

Grounded in:

- CAST (2018)
- Meyer, Rose, & Gordon (2014)

UDL Principles:

- Multiple means of engagement
- Multiple means of representation
- Multiple means of action & expression

EmberWood ensures access for:

- Neurodivergent learners
- Multilingual learners
- Trauma-impacted students
- Gifted intensities

9. MTSS Tier 1 & Tier 2 Alignment

EmberWood functions as:

- Tier 1 universal prevention
- Tier 2 targeted regulation & belonging support

Used in:

- Behavior intervention plans
- Emotional regulation dashboards
- Family-school engagement models

THEORY OF CHANGE & EVALUATION

Embodied Theory of Change

If students experience:

- Felt safety
- Regulation before repair
- Authentic identity affirmation
- Purpose-linked skill development
- Belonging without performance

Then they develop:

- Emotional resilience
- Social stability
- Executive function growth
- Peer attunement
- Contribution identity

Which leads to long-term outcomes of:

- Reduced behavioral referrals
- Increased attendance
- Stronger classroom climate
- Reduced loneliness
- Higher student agency

Practice-Based Innovation Model (2020–2025)

EmberWood is positioned as:

- A **field-responsive intervention**
- A **real-time developmental pilot**
- A **practice-before-longitudinal-data solution**

Many now-standard frameworks (UDL, trauma-informed education, restorative justice) were implemented in **practice before research scaled**.

Evaluation Metrics

Districts may track:

- Office referrals
- Peer inclusion data
- Student self-report regulation scales
- Attendance trends
- Caregiver engagement
- Climate surveys

Qualitative measures include:

- Student reflection portfolios
- Repair language adoption
- Contribution artifacts
- Identity expression growth

ACADEMIC STATEMENT

EmberWood: Invisibility & Inclusion is a research-responsive, trauma-informed, neurodiversity-affirming, restorative, and purpose-driven SEL & STEAM curriculum constructed as a real-time field intervention addressing post-2020 childhood isolation, technoference, nervous-system dysregulation, and belonging deprivation.