TEG-Blue Interactive Tools — Translating Emotional Theory into Measurable Practice

Scientific overview of the interactive emotional technology system, its functions, and links to the TEG-Blue™ frameworks.

1. Introduction — From Theory to Interaction

The **TEG-Blue™ Interactive Tools** translate the core theories of *The Emotional Gradient Blueprint* into **visual, measurable, and trauma-informed interfaces**.

They are not apps or diagnostics; they are **interactive research instruments** that help users observe, name, and regulate emotional states in real time.

Each tool converts the conceptual layers of TEG-Blue™—connection and protection modes, inner layers, and relational dynamics—into **data structures that can be studied, validated, and standardized** for education, psychology, and AI safety.

2. Scientific Basis

Every tool is grounded in three principles derived from the frameworks:

1. **Recognition** — Emotions are *data*, not defects. Tools help users identify whether they are in Connect–Belonging or Protect–Defense states.

2. **Reflection** — Self-awareness emerges through observing internal logic, not judgment. Tools visualize emotional loops, roles, and triggers.

3. **Navigation** — Regulation requires state change, not suppression. Tools guide users toward safety and repair through gradual gradient movement.

Core Theoretical Links

Scientific Foundation	Contribution
Polyvagal Theory (Porges)	Connect–Protect logic and nervous-system mapping
Internal Family Systems (Schwartz)	Layered parts logic and internal dialogue
Systems Thinking	Feedback loops between self, relationship, and society
Trauma-Informed Care	Safety, consent, and non-pathologizing design
Bias & Capital Frameworks	How social context shapes emotional data and access

3. Tool Taxonomy and Framework Mapping

Tool Name	Linked Framework(s)	Primary Research Function
Self-Reflection Table	F1 – Emotional Gradient · F2 – Ego Persona Construct · F3 – Three Inner Layers	Identifies active emotional modes and self-protective patterns
Relationship Reflection Tool	F1 · F2 · F4 – False Models of Society	Tracks relational projections and empathic accuracy
Accountability Gradient Scale	F1 · F5 – Capital Filter · F6 – Bias Architecture	Distinguishes discomfort, harm, and manipulation
Three Roots of Emotional Pain Tool	F1 · F9 – Our True Self	Helps categorize pain sources: neglect, rejection, betrayal
Role Mask Gradient Scale (in development)	F2 · F3	Maps how protective identities evolve and loosen during healing
Empathy Gradient Tool (prototype)	F1 · F3 · F6	Tracks empathic resonance and emotional saturation
Emotional Circuit Board (research prototype)	All maps	Visual system for tracking the flow of emotion across states

4. Validation and Data Design

Each interaction generates **anonymized pattern data** describing:

- Mode shifts (Connect → Protect → Manipulation → Tyranny)

- Emotional gradient movement (color-coded intensity)

- Reflection loops (internal vs. relational insight)

These outputs inform:

- **Human validation studies** (accuracy, emotional literacy, repair outcomes)

- **AI benchmarking** through **TEG-Code** (structured intent/context data) and **EMLU** (Emotional Multitask Language Understanding tests)

The architecture prioritizes **ethical, non-extractive data collection**, ensuring emotional information is used only for research, education, and safety modeling.

5. Current and Upcoming Tools (2025 – 2026)

Status	Tool Type	Count	Examples / Focus
🟢 **Live**	Core interactive tools	**4**	Self-Reflection · Relationship Reflection · Accountability Gradient · Three Roots of Pain
🟡 **In development**	Advanced research tools	**16**	Role Mask · Empathy Gradient · Repair Cycle Tracker · Collective Bias Map...
⚪ **Planned (design stage)**	Immersive learning tools	**6**	Emotional Circuit Board · Nervous System Explorer · Repair Pathway Simulator

Each prototype undergoes iterative testing through qualitative feedback and pattern-consistency scoring.

The long-term aim is to establish **standardized emotional metrics** compatible with both psychological research and AI datasets.

6. Research Applications

- **Educational validation:** Testing whether visual emotional tools improve regulation and empathy in classrooms.

- **Clinical collaboration:** Supplementing therapy and trauma-informed care with measurable feedback loops.

- **Organizational studies:** Assessing accountability and relational health within teams.

- **AI safety research:** Teaching models to distinguish *distress, defense, and manipulation* through ethically gathered human data.

7. Summary Table — Overview

Tool	Category	Target Population	Data Type	Status
Self-Reflection Table	Diagnostic / Educational	Individuals	Gradient / Qualitative	Live
Relationship Reflection	Relational / Educational	Individuals / Pairs / Teams	Gradient / Comparative	Live
Accountability Gradient	Ethical / Systemic	Institutions	Quantitative / Qualitative	Live
Three Roots of Emotional Pain	Therapeutic / Self-study	Individuals	Categoric / Gradient	Live
Role Mask Gradient	Identity / Healing	Therapy / Education	Gradient / Visual	Development