

PRAXIS MAKES PERFECT

When the Building Does Works:

How Environments Shape Processing, Behavior & Learning

Core Argument

"The physical environment is not a backdrop for behavior. It is an active participant."

Key Concepts

MONOTROPISM

The tendency to focus attention deeply into a narrow channel at any given time. When the attention tunnel is engaged, unexpected sensory events don't just distract — they rupture focus entirely.

Emphasize depth – Minimize interruption

MONOTROPIC SPLIT

Occurs during competing sensory input: buzzing light, a locker slam, an abrupt transition — forces the attention tunnel to fragment.

Result: dysregulation, anxiety, or shutdown — not misbehavior. Environmental design prevents monotropic split before it begins.

THE ECOLOGICAL FRAME

The physical school space is the most immediate layer — the microsystem — and has the most direct influence on daily behavior.

Environmental Psychology confirms people are not separate from their spaces. They are in a continuous, bidirectional relationship with them.

ENVIRONMENT AS TIER 1

MTSS framework: Tier 1 supports are universal. The physical environment operates at Tier 1 whether we design it intentionally or not.

An unexamined building is a passive Tier 1 intervention. A designed building is an active intervention.

Selected Research Sources

- Barrett, P., et al. (2015). The HEAD Project: Clever Classrooms. University of Salford. [Largest study of classroom design on learning outcomes; 73 classrooms, 3,766 students]
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- Murray, D., Lesser, M., & Lawson, W. (2005). Attention, monotropism and the diagnostic criteria for autism. *Autism*, 9(2), 136–156.
- Heasman, B., et al. (2024). Autistic flow theory: a non-pathologising approach to autistic well-being.
- Porges, S.W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.
- BSI. (2022). PAS 6463: Design for the Mind — Neurodiversity and the Built Environment. British Standards Institution.
- MDPI. (2025). Sensory and Interactive Architectural Design Strategies for Inclusive Early Childhood Learning Environments. *Buildings*, 6(1), 44.

Blueprint for Behavior: *Environment Checklist*

Use this checklist during a walkthrough of your school building. Mark each item when it is present and functioning, or leave blank to flag as an improvement opportunity. N/A for items outside your current scope. Aim to complete at least three zones: a classroom, a hallway, and a transitional space.

ZONE 1 · ACOUSTIC ENVIRONMENT

- Sound-absorbing ceiling tiles or acoustic baffles are installed in classrooms
Target reverberation time $\leq 0.6s$ in primary learning spaces
- Carpet, cork, or acoustic flooring present in at least one primary learning zone
- Hallway surfaces include acoustic treatment (panels, carpet, soft wall material)
- Designated quiet zones or acoustic pods are available and accessible to students
Access is proactive — available before crisis, not only during
- HVAC and mechanical systems do not produce audible hum or rattle in classrooms
NC-25 or better in occupied learning spaces
- Cafeteria and gym are acoustically separated from learning corridors
- Locker areas are fitted with dampening materials or positioned away from classrooms

ZONE 2 · VISUAL ENVIRONMENT & LIGHTING

- LED fixtures specified at warm color temperature (3000–4000K) with high CRI (≥ 90)
Eliminates flicker and harsh blue-white tone of standard fluorescent
- Overhead lighting is diffused rather than direct in primary learning zones
- Natural light is present with operable shading under teacher/student control
- Display systems in learning zones are organized and purposeful — not visually saturated
Busy bulletin boards at eye level in work zones increase cognitive load
- Hallway-to-classroom transition areas are visually calm, not stimulation-heavy
- Consistent, readable wayfinding cues assist spatial orientation throughout the building
- Sightlines within classrooms are managed to minimize visual exposure to corridor traffic

ZONE 3 · TRANSITION & THRESHOLD DESIGN

- A decompression zone or arrival niche exists at or near classroom entry thresholds
Even a small rug and bench constitutes a functional threshold
- Sensory intensity transitions gradually between active and quiet zones
Abrupt shifts from loud to silent are particularly costly for monotropic students
- Visual floor or wall cues signal entry into a different sensory context

- Individuals can exit for regulation and return to class without a disruptive re-entry
- Common areas near high-sensory zones (cafeteria, gym) include calming design features
- Hallway width and layout prevent sensory overwhelm during passing periods
- At least one quiet or low-stimulation hallway zone is accessible to all classroom clusters

ZONE 4 · SPATIAL ZONING FOR FOCUS & DEPTH

- At least one semi-enclosed individual focus zone exists per classroom or cluster
Partial visual enclosure via shelves, curtains, or panels — not necessarily a separate room
- Zones are differentiated for depth of work, not just noise level
- Movement paths or pacing corridors are designated for learners who regulate through motion
- Breakout spaces enable small-group or solo work without full removal from the learning environment
- Spatial layout is consistent and predictable — individuals navigate independently without re-learning
- Floor plan avoids open-plan configurations without acoustic and visual subdivision

ZONE 5 · USER AGENCY & ENVIRONMENTAL CONTROL

- Individual task lighting (desk lamps, adjustable fixtures) is available in work zones
- Operable window shades are under occupant control, not centrally managed
- Seating variety is present: standing, perching, kneeling, and standard options available
- Personalization of workstations is permitted — students can arrange and claim space
- Sensory tools (headphones, fidgets) are accessible and normalized, not stigmatized
- Furniture rearrangement involves student input and does not occur without notice
- A proactive regulation space is available to all learners by choice, not only by referral

ZONE 6 · HALLWAY AS REGULATION INFRASTRUCTURE

- Hallways include at least one embedded sensory regulation feature
Examples: textured wall panel, balance element, vertical fidget surface, visual interest trail
- Acoustic treatment is applied to hallway surfaces to reduce reverberation
- Hallway visual environment is calm: organized displays, muted palette near classroom entries
- A structured re-entry space exists where individuals can pause and regulate before returning to class

- Learner depth of knowledge or expertise is honored in hallway displays
Signals that going deep is valued, not pathologized
- Hallway features are visible to classroom teachers for passive supervision
- A quiet corridor or alcove is within short walking distance of every classroom cluster

Reading Your Score

Total the checkmarks across all six zones (40 items). Use the guide below to identify your school's current stage and plan next steps.

0–10 checked	11–20 checked	21–30 checked	31–40 checked
Early awareness Significant redesign opportunity	Emerging Targeted quick wins available	Developing Strong foundation, refine details	Neuroaffirming Model and share with others

Using This Audit

- Complete the walkthrough with your MTSS or behavior team — multiple perspectives surface more findings.
- Prioritize items that cost nothing: furniture rearrangement, shade access, display reduction, proactive quiet zone access.
- Tie audit findings to your existing PBIS action plan or MTSS data cycle. Unchecked items are root-cause hypotheses.
- Bring audit results to a facilities conversation with data: connect unchecked items to referral rates, dysregulation incidents, or attendance patterns.
- Repeat the audit after implementing changes to track movement. A 5-item shift in a single zone is a meaningful improvement.