

Why the Everbright Works

Research & Rationale for
Libraries, Literacy Leaders, and
Public Spaces



BOARD BRIEFING - JANUARY 2026

The Everbright
art you make art with

**The Everbright: A modern,
analog, multisensory light wall
designed for public use by all
ages and abilities.**



1. What the Everbright Is

The Everbright is an interactive light wall made of hundreds of illuminated color dials. Visitors turn each dial to create patterns, gradients, and collaborative designs. There are no pegs, no screens, and nothing to lose or break. It resets itself throughout the day and runs gentle light sequences when idle, drawing visitors in without staff involvement.

Since 2018, the Everbright has been installed in hundreds of public libraries, children's museums, clinics, community centers, and university environments. Across these diverse settings, the pattern is remarkably consistent:

It gathers people, holds their attention, and supports developmental, sensory, and literacy-aligned behaviors—without instructions or supervision.

This document explains why.

2. Early Childhood Development

Why It Works for Babies, Toddlers, and Young Children

Hands-on motor development

Turning a dial mirrors early fine-motor patterns linked to pre-writing. Research in early childhood motor development shows that rotational grasp, bilateral coordination, and isolated finger movements directly support handwriting readiness (Case-Smith, 2000; Marr & Dimeo, 2006). The Everbright naturally evokes these motions.

Children stabilize with one hand and rotate with the other — a classic bilateral integration pattern that occupational therapists use to build emergent writing skills.

Cause-and-effect learning

Young children learn through predictable sensory consequences. Studies on early cognition (Baillargeon, 2004; Gopnik et al., 1999) show that immediate, visible feedback loops are key drivers of curiosity, experimentation, and problem-solving.

Every dial turn creates a clear color change — exactly the kind of contingent feedback that accelerates learning.

Sustained attention

Libraries report that toddlers and preschoolers frequently return to the Everbright multiple times in a single visit. This mirrors research showing that tactile, open-ended materials produce longer engagement than screens or toys with prescriptive outcomes (Hassing-Das et al., 2020).

Caregiver–child interaction

The ALA’s early literacy research is unequivocal: children learn language through shared attention and adult narration. Open-ended play invites adults to label colors, shapes, and patterns — strengthening expressive and receptive vocabulary (Neuman & Roskos, 1993; Every Child Ready to Read®).

Field Observation Example

Libraries routinely report that even very young children — including pre-verbal toddlers and babies held in a caregiver’s arms — intuitively reach for the Everbright’s dials. Staff consistently note that the wall attracts early learners immediately, often becoming the first stop (and the longest stop) of their visit.

3. Early Literacy Foundations

Aligned With Every Child Ready to Read® Principles

Research on early literacy emphasizes talking, singing, reading, writing, and playing as the foundations of reading readiness. The Everbright strengthens these behaviors through play:

Talking

Shared visual focus increases conversational turns — one of the strongest predictors of later literacy (Hart & Risley; Romeo et al., 2018, MIT Neuroscience).

Playing

Open-ended, imaginative play builds symbolic reasoning — the precursor to reading comprehension (Bergen, 2004).

Writing

Rotational fine-motor work correlates with early mark-making and later writing fluency (Feder & Majnemer, 2007).

Reading

Pattern recognition, sequencing, visual tracking — all strengthened through tactile pattern-building — are foundational early literacy skills (National Reading Panel, 2000).

Observed examples:

Families spontaneously narrate what they're building ("Let's make a sunrise"), take turns ("You do the next one"), and build vocabulary ("Which blue is this?"). This is literacy disguised as play, which is exactly what ECRR recommends.

4. Sensory Regulation & Neurodiversity

Why It Works for Autism, ADHD, Sensory Seekers, and Sensory-Avoidant Visitors

Research on early literacy emphasizes talking, singing, reading, writing, and playing as the foundations of reading readiness. The Everbright strengthens these behaviors through play:

Predictable Proprioceptive Input

Proprioceptive input — pushing, pulling, rotating — is one of the most regulating sensory modalities for autistic learners (Schaaf & Mailloux, 2015). Everbright dials offer steady resistance, creating a calming, organizing effect.

Tactile satisfaction without overstimulation

Research on sensory regulation shows that environments offering predictable, user-controlled input reduce behavioral stress and support self-regulation (Dunn, 1997; Schaaf et al., 2014). The Everbright was designed for exactly this kind of sensory predictability.

The experience is:

- fully analog
- quiet
- user-paced
- free of audio or unexpected digital effects

When idle, libraries can choose what the wall displays:

- A gentle, slow-moving light sequence designed specifically to invite, not overwhelm. These animations use soft gradients, warm palettes, and very slow transitions — nothing fast, flashing, or high-contrast.
- A static “create” canvas, where all dials start in a neutral color so patrons begin with a blank page.
- A saved feature design created by staff or community members.
- A “seed pattern” — a geometric arrangement with ample white space that encourages visitors to continue or remix the design without pressure.

Because all idle modes are optional and fully adjustable, staff can match the environment to their patrons' needs:

Quiet mornings → static canvas

High-traffic afternoons → gentle attract mode

Sensory-friendly hours → low-stimulation still patterns

This flexibility allows libraries to create a welcoming experience for sensory seekers, sensory avoidant patrons, and everyone in between.

Parallel play support

Parallel play is a core developmental stage (Parten, 1932; validated extensively since). Neurodivergent children often prefer shared-but-separate engagement. The Everbright lets them participate socially without pressure.

Field observations from public installations

Across many Everbright installations in libraries, children's museums, clinics, and family centers, staff report that the wall tends to draw in neurodivergent patrons in ways that feel supportive rather than overwhelming.

Common staff observations include:

- Children on the autism spectrum frequently remain engaged longer at the Everbright than at other interactive features.
- Nonverbal children often use gestures, shared gaze, or co-creation on the wall to communicate, creating moments of connection that feel meaningful to caregivers.
- Parents and librarians describe the Everbright as a “calming zone”—a place where children who feel overstimulated elsewhere can reset through quiet, predictable, hands-on play.

These are not guaranteed outcomes for every child, but they represent consistent patterns reported across diverse public environments.

“This special needs child visited us yesterday. She stayed at the Everbright the entire two-hour field trip. Her eyes said it all.”

— Longview World of Wonders Museum

5. Accessibility & Inclusive Design

Large-format, low-barrier interaction

The Everbright is intentionally designed at a scale that welcomes whole-hand, whole-arm movement. Research on universal design emphasizes providing “multiple means of engagement and action” (CAST, 2018). Large dials, generous spacing, and a clear visual field mean:

- No fine-pinch grasp
- No wrist-strain movements
- No small or removable parts
- No reading or instructions required
- Comfortable access across a wide range of heights

This is why toddlers, teens, adults, and older adults with arthritis or limited dexterity can all participate at the same time.

ADA alignment

When installed at the recommended mounting heights, every Everbright size falls within the ADA forward and side reach ranges (2010 ADA Standards §308).

Users in wheelchairs can comfortably access the lower half of the board, and standing users naturally engage across the full height.

Because the Everbright does not extend more than 27 inches into the circulation path, it does not create a prohibited protrusion for blind or low-vision patrons using canes (§307).

This ensures that the installation remains both tactilely rich and compliant with the spatial clearance requirements for public interiors.

In practice, this means the Everbright supports inclusive reach, safe navigation, and comfortable usability for patrons with mobility, height, or vision differences — without requiring special instructions or adaptations.

Visual accessibility

High-contrast colors on matte black enhance visibility for patrons with low vision, aligning with WCAG contrast recommendations.

6. Multigenerational Engagement

Why Libraries Call It Their “People Magnet”

Research on “third places” — public, communal gathering spaces (Oldenburg, 1999) — shows that features thrive when they support casual, multigenerational participation. The Everbright consistently functions as this kind of social anchor.

Field Observations Across Installations

In libraries and community spaces, staff repeatedly report the same pattern — and it matches what is visible in photos and videos from recent installations:

- Toddlers explore at their own height, often returning multiple times during a visit.
- Teens take over the upper range, experimenting with gradients, geometry, and pixel art.
- Adults and older adults join in once they see others creating, often collaborating spontaneously with patrons they don't know.
- Families and mixed-age groups gather around the board longer than they stay in adjacent activity areas.

These real-world observations align with research showing that shared creative activity increases dwell time, intergenerational interaction, and community connection (Falk & Dierking, 2016).

In many libraries, the Everbright has become the place where grandparents, teens, and toddlers gather — something few features achieve naturally.

7. STEAM, Creativity, & Design Thinking

Older kids and teens gravitate to the Everbright because it gives them something screens rarely do: embodied, self-directed pattern exploration. Informal learning research shows that teens develop STEM reasoning most effectively in open-ended, low-pressure environments where they can manipulate variables, iterate, and see results instantly (Bevan et al., 2015).

On the Everbright, they naturally discover color theory, gradients, symmetry, pixel art, geometry, and pattern-based problem-solving. This aligns closely with research on embodied cognition in STEM—where physical action strengthens conceptual understanding (Abrahamson & Lindgren, 2014).

For a deeper dive into how the Everbright supports STEAM learning across age groups, see the STEAM Space page at <https://theeverbright.com/industries/steam-space>

8. Sensory-Friendly, Staff-Friendly, Public-Space Durable

Built for daily use in high-traffic community environments

The Everbright was engineered specifically for public institutions — libraries, museums, clinics, and universities — where simplicity, predictability, and low staff burden are essential. Its design aligns with decades of research showing that analog, low-friction interactives outperform digital devices in long-term reliability and visitor engagement (Allen, 2004; Hohenstein & Tran, 2007).

Behaves like infrastructure, not a device

The Everbright follows the principles of robust public-space design: durable materials, a single intuitive interaction, and no software or account systems that create maintenance needs. Research in museum and library operations consistently finds that open-ended, non-digital exhibits require dramatically less staff intervention and experience fewer service interruptions than screen-based or app-mediated tools (Falk & Dierking, 2016; Bitgood, 2011).

No ongoing supervision or updates

Consistent with best practices for public interactives, the Everbright eliminates the failure points that most often burden staff:

- No loose or removable pieces
- No screens that require updates or repairs
- No logins, apps, or tablets to manage
- No daily setup or calibration

This mirrors findings from Hohenstein & Tran (2007): the most effective public interactives are those that require “little to no facilitation, no onboarding, and no reset cycle.”

Quiet, sensory-friendly design

The Everbright's analog, user-paced interaction aligns with sensory-friendly environment research (Dunn, 1997; Schaaf et al., 2014). There are:

- No sounds
- No rapid flashing
- No unpredictable digital behavior
- No overstimulating visual transitions

This creates the stable, predictable sensory environment that reduces cognitive load and increases time-on-task for both children and adults.

Optional ambient display modes

When idle, the Everbright can remain a blank creative canvas or display slow, gentle, staff-selected ambient sequences. Research on “approach behaviors” in public spaces (Bitgood, 2011) shows that subtle motion — not flashing or novelty — reliably draws visitors into shared creative zones without creating sensory fatigue.

Why this matters

Boards evaluating capital investments need confidence that a feature will:

- draw people in,
- work for all ages and abilities,
- support learning and community connection,
- and remain reliable with minimal oversight.

The Everbright meets these criteria by design. It becomes durable infrastructure: a once-installed, always-in-use asset.

9. Educational, Social, & Community Value

The Everbright increases engagement, strengthens early learning behaviors, supports neurodiverse patrons, and brings entire families together — all without adding staff burden or maintenance load.

This aligns with decades of research showing that tactile, open-ended, shared creative environments increase dwell time, social participation, and cross-age interaction in public learning spaces (Falk & Dierking, 2016; Oldenburg, 1999; Hohenstein & Tran, 2007). The Everbright functions as a “social anchor”: people approach because others are engaged, and they stay because the activity is intuitive, calming, and collaborative.

Across post-2018 installations, staff consistently report three patterns that match the literature on high-engagement public features:

1. Families stay longer and return more often.

Museums and libraries have long documented the link between hands-on creative features and increased dwell time (Falk & Dierking, 2016). Everbright installations show the same behavior: families gather, linger, and revisit the wall multiple times during a single visit.

2. Multigenerational use emerges naturally.

Research in “third place” community environments shows that shared creative activities encourage intergenerational participation (Oldenburg, 1999). Photos and videos from libraries show toddlers at the lower rows, teens designing gradients above them, and adults joining once they see others creating.

3. Neurodiverse patrons engage comfortably and without pressure.

Studies in sensory-friendly design emphasize predictable input, user-paced interaction, and low-audio environments as key to supporting autistic children and sensory-sensitive users (Dunn, 1997; Schaaf et al., 2014). The Everbright’s quiet, analog, user-controlled experience reflects these principles and is frequently cited by staff as a calming, regulation-supportive feature.

Because the Everbright requires no supervision, no instructions, and almost no upkeep, it delivers high community value without increasing operational load. It becomes a signature, always-on feature that reinforces the library’s mission as an inclusive, literacy-rich, community-centered space.

10. Why Libraries Choose the Everbright Instead of Alternatives

Libraries invest in the Everbright because it does what other popular features in children's and family spaces cannot do: deliver sustained, multigenerational, literacy-supportive engagement in a single, durable installation.

Across early childhood research, open-ended, tactile, user-paced materials consistently outperform fixed-outcome toys, loose-part play, and screens for attention, language development, and collaborative interaction (Hassinger-Das et al., 2020; White & Stoecklin, 2014; Christakis, 2016).

The Everbright combines the developmental richness of open-ended play with the operational reliability of a built-in fixture. This makes it fundamentally different from:

1. Sensory activity walls and play panels

Traditional sensory walls are limited by design: each feature does one thing. Once a child has spun the wheel or slid the bead, the interaction is essentially complete.

Research on open-ended materials shows they create longer engagement, more repeat use, and richer language than fixed-outcome toys (Hassinger-Das et al., 2020).

The Everbright is open-ended for every age. It never “runs out” of possibilities—patterns, gradients, pixel art, symmetry, storytelling, sequencing—supporting both independent play and caregiver-child language interaction.

And unlike traditional sensory walls:

- it scales from toddlers to teens to adults
- the experience changes with the user's skill and curiosity
- every dial becomes a literacy-rich moment of choice, narration, and fine-motor development

2. Play kitchens, block areas, and loose-part toys

Loose parts are developmentally powerful, but in public settings they introduce unavoidable challenges:

- pieces disappear
- sanitation is labor-intensive
- mixed-age areas create safety concerns
- babies mouth objects
- staff spend time resetting

Research in public children's spaces confirms that loose-part environments require high staff vigilance and routine resetting (Nicholson, 1972; White & Stoecklin, 2014).

The Everbright delivers the creative richness of open-ended construction play without those burdens:

- nothing to lose
- nothing to sanitize piece-by-piece
- no choking hazards
- no supervision required

It offers the benefits of loose-part play in a contained, durable, wall-mounted format that requires almost zero staff involvement.

3. Screens and tablets

Screens can be engaging, but they introduce overstimulation, shortened attention span, and sensory dysregulation—especially for young children and neurodivergent learners (American Academy of Pediatrics, 2016; Christakis, 2016; Madigan et al., 2019).

The Everbright provides:

- tactile, user-paced interaction
- no sound
- no fast flashing
- no unpredictable feedback
- no addictive algorithms
- no software updates

It delivers the richness of interactive exploration without digital fatigue.

For sensory-sensitive patrons, this calm, predictable input aligns with research on proprioceptive and tactile regulation (Dunn, 1997; Schaaf et al., 2014).

4. Peg walls / giant Lite-Brite concepts

Loose pegs introduce the same operational problems librarians mention everywhere:

- mismatched pegs
- missing pegs
- sanitation concerns
- choking hazards
- scattered pieces
- time-consuming resets

Studies on early-childhood spaces note that managing loose pieces in public environments significantly reduces a feature's long-term viability (Bodrova & Leong, 2015).

The Everbright solves all of this structurally:

- nothing removes
- nothing scatters
- nothing needs replacing
- nothing requires individual sanitation

5. DIY or locally-built installations

Custom-built features often fail in high-traffic public environments because:

- components loosen
- lights fail
- repairs fall on staff
- the original builder is unavailable
- ongoing maintenance becomes a burden

Research in museum learning environments emphasizes the importance of “maintainable design”—fixtures built to withstand years of public handling without constant repair (Hohenstein & Tran, 2007).

The Everbright behaves like infrastructure, not a tech exhibit and not a toy. Once installed, it delivers consistent engagement with predictable, low-effort upkeep.

The Distinction

Each alternative solves one narrow need.

The Everbright quietly solves many at once:

It supports early childhood motor development.
It strengthens literacy-rich parent–child interaction.
It provides sensory regulation for neurodivergent learners.
It engages toddlers, teens, and adults together.
It offers STEAM exploration without screens.
It creates a signature visual anchor for the space.
It increases dwell time and repeat visits.
And it does all of this with minimal operational burden.

This combination — developmental depth, inclusive design, sustained engagement, and long-term durability — is what makes the Everbright a uniquely effective installation for public libraries and community learning environments. It is not simply another feature in the room; it is an all-ages, research-supported, staff-friendly cornerstone that elevates the entire space.

11. Summary for Board Review

The Everbright works because it...

- supports early childhood motor development
- strengthens early literacy behaviors through shared language and play
- serves neurodiverse patrons with calm, predictable sensory input
- encourages multigenerational connection in a single shared space
- provides rich STEAM exploration for older kids and teens
- requires no supervision and minimal upkeep
- is built for public-space durability
- becomes a signature feature families remember and return to

The Everbright is not a novelty.

It is a long-term, high-impact installation that elevates learning environments and brings people together.

Visit <http://theeverbright.com/industries/libraries> for real-world photos, videos, and examples to incorporate into a presentation

Next Steps

If your team would like design guidance, project budgeting, or help preparing materials for board approval, I'm happy to support your process.

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