

# MPOWERME, LLC (Pediatric OT & SLP Services) Play To Do™ (Education Consulting • Toy/STEAM Design • Research) OT-Informed Project-Based Learning for Inclusive K-5 Classrooms



## Qualitative Findings: OT-Informed Project-Based Learning in K-5 Settings

This document summarizes qualitative findings from two occupational therapy-informed project-based learning (PBL) pilots conducted across diverse elementary learning environments. Findings are drawn from therapist observations, educator feedback, and student participation patterns observed across sessions. These insights complement quantitative outcomes and provide context for understanding how inclusive, multisensory PBL supports whole-child engagement.

### Pilot Context Overview

Two pilots were implemented between October and December 2025:

- Upper Elementary PBL: Hands-On Habitat Design Challenge (Zoo Pilot)
- Early Learning PBL: Story-Based Coding & Problem-Solving (Coding Adventures / Codie Blocks Pilot)

Both pilots were designed using an OT-informed framework emphasizing executive function, sensory regulation, communication, collaboration, and equitable participation.

### Zoo Pilot: Upper Elementary Qualitative Themes

- Executive Function Through Design Iteration – Students demonstrated increased planning, organization, and cognitive flexibility as they moved from initial construction attempts to revised habitat designs.
- Embodied Problem-Solving – Physical interaction with architectural materials supported spatial reasoning, sustained attention, and idea generation, particularly for students who struggled with purely abstract tasks.
- Collaboration as a Regulated Process – Group roles and shared goals reduced social friction and supported peer negotiation, even during moments of disagreement.
- Emotional Regulation During Challenge – Students increasingly tolerated frustration and setbacks, using trial-and-error strategies without disengaging from the task.

***"When students were allowed to build, move, and revise freely, engagement increased and behavioral barriers decreased across sessions."***

### **Coding Adventures Pilot: Early Learning Qualitative Themes**

- Narrative-Driven Engagement – Story-based prompts increased motivation and sustained attention, particularly for children who typically struggle to participate in structured tasks.
- Debugging as a Regulation Tool – Repeated exposure to errors normalized mistakes and supported emotional regulation, persistence, and flexible thinking.
- Whole-Body Coding – Large-scale, hands-on coding blocks encouraged movement, joint attention, and multi-sensory input, supporting diverse learning styles.
- Emergent Communication – Children demonstrated increased verbal expression, turn-taking, and shared problem-solving through collaborative storytelling.

***"Debugging became less about making mistakes and more about figuring things out together."***

### **Cross-Pilot Shared Qualitative Insights**

- Inclusive Design Increases Participation – Multisensory materials and flexible task entry points supported engagement across learners with varying motor, communication, and regulation needs.
- Process Over Product – Emphasizing iteration and exploration reduced performance pressure and increased student willingness to take risks.
- OT-Informed PBL Supports Whole-Child Outcomes – Learning experiences that integrate movement, sensory input, and collaboration foster both academic engagement and social-emotional growth.

***"Hands-on design shifted frustration into problem-solving, even for students who typically disengage."***

## **Use and Attribution**

This document provides a high-level qualitative summary. Full implementation guidance, professional learning, and data-informed consultation are available through MPOWERME, LLC and Play To Do™ professional partnerships.

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