

Designing Sustainable Play Environments Through Practice-Based Research: The GreenPlay Case Study

Zahidah AbdKadir

Higher Colleges of Technology, Sharjah, United Arab Emirates

Lamis Mawafi

Higher Colleges of Technology, Sharjah, United Arab Emirates

Fatma Mohamed Sultan Rai Alheen Al Ali

Higher Colleges of Technology, Sharjah, United Arab Emirates

Mona Ibrahim Abdelrasool Ibrahim

Higher Colleges of Technology, Sharjah, United Arab Emirates

Farah Mohammed Fayes Al Herbawi

Higher Colleges of Technology, Sharjah, United Arab Emirates

Abstract

A GreenPlay case-study is a practice-based sustainable design intervention conducted by Applied Media students to transform an underutilized daycare outdoor space into an environmentally responsive play environment. Rather than approaching sustainability through theoretical instruction alone, the project positioned design practice as a method of inquiry. Students engaged in site analysis, material research, prototyping, and spatial reconfiguration using upcycled materials and non-toxic resources to develop functional learning corners aligned with sustainability principles. The intervention emphasized collaborative engagement with daycare staff to ensure contextual relevance and safety. Through iterative design development and on-site implementation, the project demonstrates how applied media practice can expand from visual communication into creative physical space and material systems design. Findings highlight the role of practice-based research in generating socially responsive design solutions, while offering students real-world experience in sustainable community engagement. The study contributes to design education discourse by illustrating how creative practice can operate as both pedagogical strategy and research methodology within sustainability-driven contexts.

Index Terms

Practice-Based Research, Sustainable Design Intervention, Applied Media Design, Design Intervention, Community-Engaged Design