

Loose Parts Play as an Inclusive Pedagogical Approach: Advancing Higher-Order Thinking in Early Childhood Education – A Structured Literature Review

Jagriti Samaniya

Australian Catholic University, Australia

Abstract

Inclusive early childhood education requires pedagogical approaches that respond to children's diverse abilities, cultural backgrounds, interests, and learning needs while ensuring equitable participation and high-quality learning outcomes. Loose parts play, characterised by the use of open-ended, flexible, and non-prescriptive materials, is increasingly recognised as a pedagogical approach that fosters creativity, inquiry, agency, and higher-order thinking in young children.

This structured literature review examines how loose parts play contributes to higher-order thinking within inclusive early childhood education settings. A systematic search was conducted across ERIC, Scopus, and Web of Science databases, identifying 42 peer-reviewed studies published between 2015 and 2026. Studies were screened using predefined inclusion and exclusion criteria and analysed through thematic synthesis.

Findings indicate that loose parts play supports higher-order thinking by enabling sustained inquiry, problem-solving, hypothesis generation, symbolic representation, and creative transformation of materials. The literature further highlights its contribution to executive functioning, emotional regulation, collaboration, and adaptive learning behaviours. Importantly, loose parts environments provide multiple entry points for diverse learners, including children with disabilities, gifted learners, and those requiring additional support, thereby enhancing inclusion and participation.

The review emphasises the role of intentional teaching in scaffolding inquiry, extending thinking, and maximising the pedagogical value of open-ended materials. Implications for teacher education highlight the need to prepare educators to design inclusive, inquiry-rich environments aligned with contemporary curriculum frameworks.

Overall, loose parts play is identified as a high-impact inclusive pedagogy that strengthens equity, engagement, and higher-order thinking in early childhood education.

Keywords: Loose Parts Pedagogy; Inclusive Early Childhood Settings; Cognitive Development; Critical Thinking; Emergent Curriculum; Child Agency; Exploratory Learning; Intentional