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The Role of Loose Parts Play in Developing Higher-Order Thinking in Inclusive Early Childhood Education

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Abstract

Play is widely recognised as a fundamental approach to learning in early childhood education, supporting and enhancing children's social, cognitive, emotional, and communication development. Loose parts play provides a flexible learning environment through the use of open-ended materials and a wide range of resources, offering rich opportunities for children to investigate, explore, research, experiment, and construct knowledge through active engagement. However, limited research has examined the role of loose parts play in supporting the development of higher-order thinking skills within inclusive early childhood settings.

This paper investigates the role and value of loose parts play as a responsive and inclusive pedagogical approach for developing higher-order thinking skills in early childhood classrooms. A qualitative literature review was conducted to analyse existing research on play-based learning and inclusive practices applicable to both individual and group contexts. The study explores how flexible resources and open-ended materials enhance children's creativity, critical thinking, social and emotional development, communication, problem-solving abilities, and self-regulation.

The findings suggest that loose parts play creates rich and flexible learning environments that promote children's agency, equitable participation, cooperation, confidence, and responsiveness to diverse learning needs. This includes children with advanced learning abilities, those experiencing learning difficulties, and children affected by trauma. The open-ended nature of materials provides multiple entry points, enabling children to engage at their own level and express understanding in diverse ways while developing social and emotional skills.

The paper positions loose parts play as a powerful pedagogical approach that supports holistic

development and fosters inclusive and responsive learning environments where each child's voice and abilities are valued. It highlights the role of educators in designing meaningful learning experiences, scaffolding critical thinking and creativity, and maximising children's engagement and learning outcomes. This study contributes to understanding how play-based approaches can create inclusive, collaborative, and cognitively rich early childhood learning environments.

Keywords: Loose Parts Play; Inclusive Early Childhood Education; Higher-Order Thinking Skills; Play-Based Learning; Diverse Learners; Scaffolding; Responsive Pedagogy