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An Exploration of the Integration of Guided Play With Explicit Instruction in Early Childhood Mathematics

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Abstract : Play has always been a prominent pedagogy in early childhood. However, there is growing evidence of success in students' learning using explicit instruction, especially in literacy in the early years. There is also limited research using explicit instruction in early childhood mathematics, and play is usually prominently mentioned. This proposed research aims to investigate the possibilities and benefits of integrating guided play with explicit instruction in early childhood mathematics education. While play has traditionally been a prominent pedagogy in early childhood, there is growing evidence of success in student learning through explicit instruction, particularly in literacy. However, limited research exists on the integration of explicit instruction in early childhood mathematics, where play remains prominently mentioned. This study utilises a multiple case study methodology to gather data and provide immediate opportunities for curriculum improvement. The research will commence with semi-structured interviews to gain insights into educators' background knowledge. Highly structured observations will be conducted to record the frequency and manner in which guided play is integrated with specific elements of explicit instruction during mathematics teaching in early childhood. To enhance the observations, video recordings will be made using cameras with video settings and Microsoft Teams meeting recordings. In addition to interviews and observations, educators will maintain journals and use the Microsoft Teams platform for self-reflection on the integration of guided play and explicit instruction in their classroom practices and experiences. The study participants will include educators with early childhood degrees and students in years one and two. The primary goal of this research is to inform the benefits of integrating two high-impact pedagogies, guided play, and explicit instruction, for enhancing student learning outcomes in mathematics education. By exploring the integration of these pedagogical approaches, this study aims to contribute to the development of effective instructional strategies in early childhood mathematics education.

Keywords : early childhood, early childhood mathematics, early childhood numbers, guided play, play-based learning, explicit instruction
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