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## Implementing Differentiated Mathematics Instruction: A Self-Study

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Poster Presentation ES P1.1

## **IMPLEMENTING DIFFERENTIATED MATHEMATICS INSTRUCTION: A SELF-STUDY**

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Designed to meet the diverse needs of heterogeneous classrooms and aid students in meeting their full academic potential, differentiated instruction (DI) is commonly viewed as an effective method of tailoring instruction to students' needs. A review of relevant literature exposes a shortage of empirical research on this educational trend, leading to debate regarding the implementation and effectiveness of differentiated mathematics instruction. In an attempt to address this void, this research includes a systematic review of the literature, qualitative analysis of data (i.e., lesson plans, field notes, student work) gleaned from a teacher's self-study, and a discussion of the results and implications. This self-study was conducted with the purpose of implementing various differentiated strategies and observing their effectiveness within a third grade classroom. Research focuses on the content and process of differentiated mathematics instruction (as laid out in Tomlinson's framework) based on student interest, readiness, and learning style, emphasizing conceptual understanding and mathematical reasoning (Tomlinson et al., 2003). Preliminary findings indicate DI strategies (i.e., parallel tasks, incorporating choice) foster an environment in which students persevere and take ownership of their learning. Ultimately, this study provides insight into the implementation of differentiated mathematics instruction and shows teachers how DI may impact their students' mathematical understanding.

