

## Investigating Students' Engagement with Teach-first and Task-first Lesson Structures Incorporating Challenging Mathematical Tasks

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The focus of this study is on how variation in the structure of lessons (Task-first and Teach-first) that incorporate challenging tasks impacts student engagement and learning of mathematics, from the students' perspective. This intervention study will adopt a qualitative, exploratory design with multiple data sources including questionnaires, lesson observations, survey methods and post-lesson semi-structured interviews with two classes of Year 3 and 4 students (approx. 2 groups of 25 students aged 8–10 years) from one primary school in NSW. The practical implication of gauging students' reactions to different lesson structures includes assisting teachers broaden their choice of pedagogy to suit various student characteristics, including learner preferences for enhanced mathematical engagement and achievement. Theoretically, findings from this study will extend existing theories of learning and of instruction by deepening our understanding of how students effectively learn challenging mathematics. In this presentation, we give an overview of the research project and highlight the potential the findings have for deepening our understanding of how students learn mathematics.