

Johann, L. (2024, June 20). *Exploring the relationship between teachers' type of questions and the quality of primary students' responses in dialogues about STEM topics*, [Conference Presentation]. Cedir (Cambridge Educational Dialogue Research Group) Annual Review Day, Cambridge, UK.

*Teachers' questions are a key factor of dialogic interaction to foster students' conceptual understanding as well as argumentative abilities about science. However, engaging in scientific dialogues is challenging. This seems to be particular the case for younger students who often are assumed to possess limited conceptual knowledge and scientific reasoning abilities necessary to engage in scientific practices. In this presentation, I aim to discuss methods and preliminary results from a case study where we used video recordings to, mainly, qualitatively explore the relationship between two STEM teachers' questions and their primary students' responses when they talk about fractions, and insects respectively, in whole- classroom and small group learning situations in so- called Newton Rooms . To operationalise the quality of the dialogues and teachers' role in them, we employed the frameworks of Pimentel & McNeill (2013) , Anderson & Bloom , (2001), and Scott & Mortimer (2005) to classify the type of teachers' questions and the quality of students' responses.*

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