

TALKING ABOUT MATHEMATICS: HOW TEACHERS CREATE AND SHAPE DIALOGIC SPACES IN THEIR CLASSROOMS

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An increasing interest in dialogic teaching and learning has been largely linked to expectations of improvements in outcomes. Opportunities for student talk are considered valuable but the form and purpose of student dialogue is shaped by the nature of the teacher talk that precedes or accompanies it (Alexander, 2018). This may result in object-level or meta-level changes in classroom discourse (Sfard, 2015) which teachers influence as they use various repertoires and create a blend of dialogic forms within existing contextual frames, lessons and activities (Alexander, 2018).

In our research in England, 130 mathematics teachers in post-16 education are taking part in a nationwide randomised control trial of the use of a ‘teaching for mastery approach’, which provides a range of opportunities for classroom dialogue. Teachers develop the approach with the support of carefully designed lessons and professional development. Impact is analysed from student achievement and self-efficacy measures, whilst implementation is evaluated from teacher surveys and case studies. The case study data allows us to explore the research question of how teachers use opportunities in the lesson designs to develop dialogic spaces in their classrooms, and the reasons for ‘in the moment’ decisions as they teach.

Two contrasting cases are used to illustrate findings. Detailed observation notes and transcripts of teacher interviews are coded to Alexander’s (2018) framework of repertoires and examined further using an iterative grounded approach. Early findings indicate that teachers adapt the opportunities for dialogue embedded into the lesson designs to develop dialogic spaces in different ways but retain a dominant form of teacher talk that orchestrates and influences outcomes. This analysis adds to understanding of how teachers interpret and use dialogic principles to create their own blend of dialogic spaces and indicates how carefully designed ‘teaching for mastery’ lessons might be used to bring about changes in teacher practice.

References

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- Sfard, A. (2015). Why all this talk about talking classrooms? Theorizing the relation between talking and learning. In L. Resnick, C. Asterhan, & S. Clarke (Eds.), *Socializing intelligence through academic talk and dialogue* (pp. 245-253). AERA.