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Tracing professional development to practice: connection making and content knowledge in one teacher's experience.

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Summary: In this study, we examine one teacher's opportunities to develop a coherent understanding of proportional situations through connection making in professional development (PD) and the ways in which those experiences were evidenced in her own classroom practice teaching the same task from PD. Data from both settings were analyzed using a framework for connection making that highlighted the ways in which the teacher or facilitator promoted discussion, used representations, promoted multiple approaches, and scaffolded learning. Our findings suggest that this teacher treated pedagogy and mathematical content as separable, which led to problematic implementation of the types of teaching practices that PD was intended to foster. We provide suggestions for addressing this shortcoming in future professional development.

Classification: D39 F80 D40

Keywords: teacher knowledge; professional development; proportional reasoning; middle school teachers; learning for understanding

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