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Opportunities for learning given to prospective mathematics teachers: between ritual and explorative instruction.

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Summary: The mathematics education field, including prospective teacher education program, has seen a continuous effort to change teaching practices to be more cognitively demanding, conceptually oriented and student centred. Our goal in this study was to examine how certain underlying assumptions about mathematical learning, as reflected in a skilled instructor's discourse, align with opportunities to learn. The data included a set of fully transcribed 11 lessons from an introductory algebra course. The method of analysis was built upon the communicational (commognitive) framework and included discerning between the instructor's mathematizing and identifying talk. This framework was extended to quantify the instructor's identifying talk over the whole set of lessons. Our findings showed that at the surface level, the instruction in the class seemed to align with "explorative" goals. On a deeper level, however, it was more aligned with "ritual" goals that are concerned with producing narratives about people, not about mathematics.

Classification: D39 D49

Keywords: communicational (commognitive) framework; opportunities to learn; prospective teachers; explorative learning; ritual learning; identity

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