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Curriculum enactment patterns and associated factors from teachers' perspectives.

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Summary: As part of a larger effort to improve teacher capacity for high-quality mathematics instruction, we investigated the factors that are associated with different enactment patterns at three levels: contextual (e.g., type and quality of textbook), individual (e.g., teacher knowledge), and teachers' opportunity-to-learn (e.g., professional development experiences). Analysis of 183 teachers' self-reports on their practices revealed three notable findings. First, the factors at the three levels were all found to be significantly related to the different patterns of enacted curriculum. However, the use of quality textbooks and the alignment of teachers' views and instructional goals with curriculum goals were found to be the two factors that are most strongly associated with the enactment pattern of high-level problems and high-level teacher questions in instruction. Furthermore, teachers with the enactment pattern of increasing lower cognitive demand of problems into higher ones tended to rate their curriculum knowledge higher than teachers with the enactment pattern of using low-level problems and teacher questions in their teaching. In particular, deviation from and dissatisfaction with their assigned low-quality textbooks were found to be critical factors that are associated with the enactment pattern of increasing lower cognitive demands of problems in instruction.

Classification: D40 C39 C29 D30

Keywords: mathematics curriculum; curriculum enactment; cognitive demand of mathematical tasks; teacher questions

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