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Teachers' conceptions of integrated mathematics curricula.

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Summary: In this qualitative research study, we sought to understand teachers' conceptions of integrated mathematics. The participants were teachers in the first year of implementation of a state-mandated, high school integrated mathematics curriculum. The primary data sources for this study included focus group and individual interviews. Through our analysis, we found that the teachers had varied conceptions of what the term integrated meant in reference to mathematics curricula. These varied conceptions led to the development of the conceptions of integrated mathematics curricula framework describing the different conceptions of integrated mathematics held by the teachers. The four conceptions – integration by strands, integration by topics, interdisciplinary integration, and contextual integration – refer to the different ideas teachers connect as well as the time frame over which these connections are emphasized. The results indicate that even when teachers use the same integrated mathematics curriculum, they may have varying conceptions of which ideas they are supposed to connect and how these connections can be emphasized. These varied conceptions of integration among teachers may lead students to experience the same adopted curriculum in very different ways.

Classification: C29 D33 D34

Keywords: secondary mathematics; integrated mathematics; curriculum; implementation; teachers' conceptions

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