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Prospective teachers' specialized content knowledge on derivative.

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Summary: Mathematics teacher knowledge has been widely studied, and recently a remarkable advancement has been reached with the proposal of the “Mathematical Knowledge for Teaching” (MKT) model for describing the complex of knowledge that a teacher should have to teach a specific mathematics topic. Nonetheless there are still questions to be addressed, such as, how or under what criteria can the MKT be assessed? How can the teacher educators help the prospective teacher to develop the different components of the MKT? How are related the different components of MKT? In this report, we have tackled, though partially, such questions, by advancing specific criteria to explore the prospective teachers' knowledge about the notion of derivative: common, specialized and extended knowledge. In this report we inform specifically on the specialized content knowledge.

Classification: D39 I49

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