Sociocultural perspectives in research on and with mathematics teachers: a zone theory approach.


Summary: Sociocultural theories view teacher learning as changing participation in social practices that develop their professional identities rather than as acquisition of new knowledge or beliefs that are internal to the individual. Although sociocultural research on mathematics teacher education has tended to focus on understanding teachers’ learning, this article argues that sociocultural perspectives can also guide more interventionist research involving changing classroom practice. The approach illustrated here uses an adaptation of Valsiner’s zone theory to analyse teacher learning and development in two separate research studies. In one study the aim was to understand how teachers incorporated digital technologies into their practice, while the other study helped teachers implement an investigative approach to working mathematically consistent with a new syllabus. In both studies, productive tensions between teachers’ beliefs, contexts, and goals were a trigger for learning and development.

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Keywords: sociocultural perspectives; zone theory; professional identities; social practices; teacher education; beliefs; goals

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