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Understanding pre-service teachers' belief change during a problem solving course.

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Summary: Different teacher programs and university courses in teacher education aim at changing the participants' beliefs towards a view of mathematics as a process and of mathematics learning as a constructivist act. They often include vivid experiences of problem solving and epistemic reflection. This paper describes a case study based on a pre-post interview design with pre-service teachers during such a course. One participant's belief system is analysed with respect to the beliefs before and after the course, the way of reasoning expressing these beliefs and the structure of the belief system. The results show amongst others that new beliefs evolve without the old ones being rejected. This leads to a more or less conscious ambiguity and to a conflict within the belief system. General results are briefly presented by describing a typology of belief change taking into account the whole sample of eight students.

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