Student teachers in primary education using videos from their own lessons for learning mathematics teaching.

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Research Problem:
While student teachers gain much theoretical knowledge at the university, it is difficult for their teacher educators to see the impact of this knowledge in the classroom. Therefore, this study investigates how videos of their teaching during mathematics lessons at their practice school can be helpful for student teachers to apply theory in practice? What are design criteria for using video for learning to teach mathematics in a teacher education curriculum for primary education? How can such videos be used in (student) groups for reflection and improvement of practice (mathematics teaching) as well as for improving the self-efficacy of these students?

Summary:
The proposed investigation has the intention to discover the added value of recording and editing videotapes of student teachers and the reflection and discussion on these videos afterwards at the teacher education institute. The first part of the investigation focusses on the existing situation of video use in teacher education programs. Also the self-efficacy of students, their pedagogical content knowledge for teaching mathematics and the alignment of this knowledge with their teaching will be investigated. The second part of the PhD project focusses on the added value of using video with a quasi-experimental setting, in which insight will be obtained via using two interventions using video (reflection) in experimental conditions and one control group (following the regular teacher education program).