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Abstract

Prospective teachers often have difficulty in linking school mathematics and university course content, which manifests itself as a lack of their understanding and the significance of university course content. This double discontinuity is experienced by future teachers in their transition from high school pupil to university student and then from university student to their school teaching career. Thus, it is necessary to improve university teaching and teacher education to try to bridge these "gaps". Using the educational context of a geometry course in the teacher education of upper secondary teachers, we explore the technical implementation and usefulness of the components of *interactive mathematical maps*. Such maps comprise a supplementing didactical tool that shows the interrelations between mathematical discoveries and the development of particular mathematical content – starting from an initial historical problem situated in time. The research findings showed the map in its current format to be perceived as useful and mostly easy to use. Further, the map seemed to promote both a process-oriented and an application-oriented approach as well as favourable beliefs, such as mathematics being an emerging science promoting a view of *doing mathematics*, in which an open error culture can be established.

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