

A Pattern for Innovations in Mathematics Education with ICT via Teacher Education

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In many contexts the hope has been expressed that ICT may serve as a catalyst for innovations in mathematics education. By using ICT the way of teaching and learning mathematics is supposed to change in a substantial way. But such innovations do not appear automatically. It is necessary to keep the key role of teachers in mind. For developing mathematics education it is not sufficient to distribute "good" software or "good" learning environments. One should aim at the meta-level of teachers' notions and beliefs of teaching and learning processes. But for such changes on that meta-level it is necessary to work with teachers for a certain period of time and to relate didactic theories and new media to their everyday work with classes. In the talk a pattern for in-service teacher education activities is developed and founded theoretically. It has been realized by the European project InnoMathEd in the last two years.