

**ZMATH 2014a.00095**

**Krainer, Konrad; Zehetmeier, Stefan**

**Inquiry-based learning for students, teachers, researchers, and representatives of educational administration and policy: reflections on a nation-wide initiative fostering educational innovations.**

ZDM, Int. J. Math. Educ. 45, No. 6, 875-886 (2013).

Summary: International comparative studies such as TIMSS and PISA have had a considerable influence on the national educational policy in many countries. In Austria, as a reaction to the disappointing TIMSS 1995 results at the upper secondary level, a national initiative with the aim to foster mathematics and science education was launched in 1998: the IMST project. Due to specific challenges of the Austrian educational system, it has undergone several adaptations, but is still running. One of the project's basic interventions is to promote teachers' investigation into their own work. It is assumed that this supports the teachers' critical stance towards innovation and inquiry, which in turn is an important basis for disseminating inquiry-based learning. A general look at the whole project and a specific look into one research project of IMST are used as opportunities to reflect on the complex interconnection and natural tension between the goal of promoting students' IBL and its sustainable dissemination on a large scale. The paper introduces the project's theoretical framework and genesis, provides exemplary research results, and reflects on its impact. The paper finishes with five "lessons learnt" from IMST.

*Classification:* B50 D20 D40 A40

*Keywords:* action research; educational policy; innovations in mathematics and science teaching; inquiry-based learning; reform project; theory and practice

doi:10.1007/s11858-013-0537-z