ICM 1998, Berlin, Aug. 18–27

Abstracts of Plenary and Invited Lectures

Section:

18. Teaching and Popularization of Mathematics

1991 MS Classification:

Stigler, Jim, UCLA Psychology Department, Los Angeles, USA

Classroom Mathematics Instruction in Three Cultures: An Introduction to the TIMSS Video Study

Classroom Mathematics Instruction in Three Cultures: An Introduction to the TIMSS Video Study
This talk will introduce the methods and findings of a unique and unprecedented video survey of eighth-grade mathematics instruction in Germany, Japan, and the United States. Part of the Third International Mathematics and Science Study (TIMSS), this study marks the first time that videotaped records of classroom instruction–in any subject–have been collected from nationally representative samples of teachers. Methods for overcoming the considerable logistical challenges posed by the study will be discussed. Then, teaching practices in each culture will be described using both quantitative indicators and video examples. Finally, implications of the study for improving classroom mathematics instruction will be discussed.