

THE FUTURE OF MATHEMATICS EDUCATION RESEARCH: DISCUSSION OF AN INTERNATIONAL SURVEY

Arthur Bakker and Jinfa Cai

Utrecht University (the Netherlands), University of Delaware (USA)

Short description of the DG

Mathematics education research as a discipline is celebrating several milestones. *ESM* and *JRME* have recently celebrated their 50th anniversaries. To mark this auspicious occasion, this DG focuses on the future of mathematics education research. We will use an international survey (conducted before and during the pandemic) as the basis of the discussion. The survey results have been published in 2021 in *ESM* (<https://link.springer.com/article/10.1007/s10649-021-10049-w>). We aim to organize the best ideas for the future of mathematics education research into a form that ICMI members will find appropriate. In particular, we will discuss the impact of the pandemic on the shape of mathematics education and mathematics education research, including increased attention to issues such as online assessment and pedagogical considerations for virtual teaching.

Planned structure (21:30 – 23:00, July 14):

Planned timeline	Planned activity	Working format /Responsible person
Introduction and brief reflection (5 minutes)	Looking back, and plan of the discussion group	Jinfa Cai on the basis of Inglis and Foster (2018)
Summary of survey (15 min.)	What do international voices say?	Arthur Bakker on the basis of an international survey that appeared in <i>Educational Studies in Mathematics</i> in early 2021
Personal discussion (10 min.)	Relation of what has been discussed to the ICME survey from 2004	Anna Sfard (relating to Sfard, 2005)
Break-out session (30 min.)	Formulation of research questions at research program level	Moderated by all team members
Plenary discussion (15 min.)	Sharing best ideas from the break-out session	Guangming Wang
Personal discussion (10 min.)	What can ICMI learn from the discussions?	Jill Adler
Looking into the future	What is the next step?	Arthur Bakker and Jinfa Cai