

Opening IRMEC: Implementation, replication, and an emerging research community

Mario Sánchez Aguilar ¹

Morten Misfeldt ²



The first Implementation and Replication Studies in Mathematics Education Conference (IRMEC) was held at CICATA Unidad Legaria of the Instituto Politécnico Nacional (CICATA-IPN) in Mexico City, from 3 to 7 November 2025. The conference brought together students and researchers interested in questions that are becoming increasingly important for mathematics education: what happens when research findings, theoretical ideas, educational designs, and innovations are taken into new settings; under what conditions research-based innovations can be successfully implemented; and how previous studies and findings can be replicated, extended, reconsidered, or better understood across different contexts.

IRMEC emerged in close connection with the community surrounding the journal *Implementation and Replication Studies in Mathematics Education* (IRME). While IRME provides a dedicated publication venue for research concerned with implementation and replication, IRMEC was conceived as an international working conference: a space for presenting and discussing ongoing research, receiving feedback, developing conceptual and methodological tools, and strengthening an international community inter-

¹ mosanchez@ipn.mx

Instituto Politécnico Nacional, Mexico

² misfeldt@ind.ku.dk

University of Copenhagen, Denmark

ested in these areas of mathematics education research. In this respect, the conference and the journal share a concern with what happens to research knowledge beyond the setting in which it was initially produced—how it is implemented, adapted, tested, reconsidered, and developed in different educational contexts.

The first IRMEC brought together 44 participants from Austria, Denmark, Israel, Sweden, and Mexico. Mexican participants came from several regions of the country, including Mexico City, Colima, Durango, Guadalajara, Hidalgo, Puebla, Sonora, and Yucatán. The institutional diversity was equally significant, with participants from Aarhus University, the University of Copenhagen, Johannes Kepler University, the University of Gothenburg, the Weizmann Institute of Science, Instituto Politécnico Nacional, Benemérita Universidad Autónoma de Puebla, Universidad de Colima, Universidad de Guadalajara, CINVESTAV, Universidad Autónoma de Yucatán, Universidad Juárez del Estado de Durango, Universidad Pedagógica Nacional, Centro Regional de Formación Profesional Docente de Sonora, and Universidad de Sonora.

The academic program combined two plenary lectures, five workshops, and 28 individual research presentations. The workshops addressed matters closely connected to the development and communication of implementation and replication research, including reporting implementation and replication studies, academic writing with artificial intelligence, and the writing of introductions and discussions. This format reflected the working nature of IRMEC: rather than serving only as a venue for presenting completed studies, the conference was designed to provide opportunities for participants to discuss research in development and to learn from one another.

The academic work of the conference was supported by the International Program Committee (IPC), composed of Morten Misfeldt (University of Copenhagen), Uffe Thomas Jankvist (Aarhus University), Boris Koichu (Weizmann Institute of Science), and Mario Sánchez Aguilar (Instituto Politécnico Nacional). Morten Misfeldt served as Chair of the IPC, while Mario Sánchez Aguilar served as IPC liaison, facilitating coordination between the IPC and the Local Organizing Committee. We gratefully acknowledge their work in shaping the academic program and supporting the review and development of the contributions presented at the conference.

We are equally grateful to the members of the Local Organizing Committee: Martha Leticia García Rodríguez, Ana Luisa Gómez Blancarte, Clara Mayo Juárez, Juan Gabriel Herrera Alva, Apolo Castañeda Alonso, Cristian Nava Guzmán, and Ulises Xolocotzin Eligio. Their work before and throughout the conference was essential to making this first

IRMEC possible. We also wish to thank CICATA Unidad Legaria and its Director, Isaias Miranda Viramontes, for hosting the event. Special thanks to the Secretaría de Investigación y Posgrado of the Instituto Politécnico Nacional for the financial support that made the conference possible.

The present proceedings bring together 33 contributions arising from the scholarly work presented and discussed at IRMEC 2025. Collectively, they illustrate the diversity of questions, theoretical perspectives, methodological approaches, and educational contexts informing implementation and replication research in mathematics education. Rather than imposing a single understanding of these areas of research, the volume reflects a field that continues to be shaped through empirical studies, theoretical developments, methodological reflection, and dialogue across research traditions and contexts.

As editors, we hope that these proceedings will serve not only as a record of the first IRMEC, but also as a point of departure for further research and collaboration. The questions addressed by implementation and replication studies concern the capacity of mathematics education research to examine the robustness of its findings, understand the role of context, and investigate how research knowledge changes as it moves across settings and into practice. We therefore hope that the conversations initiated in Mexico City will continue through new studies, collaborations, publications, and future IRMEC meetings.

We are pleased to present this first collection of contributions from the IRMEC community.

Mario Sánchez Aguilar
Instituto Politécnico Nacional, Mexico

Morten Misfeldt
University of Copenhagen, Denmark

Editors of the IRMEC 2025 Proceedings

