



14th International Congress on Mathematical Education

July 11 to 18, 2021 Shanghai, China



TSG 61

International Cooperation in Mathematics Education (Summary)

The 4 Focus Areas in International Cooperation in Math Education

From the presentations and submissions, we have identified 4 main areas of international cooperation in mathematics education:

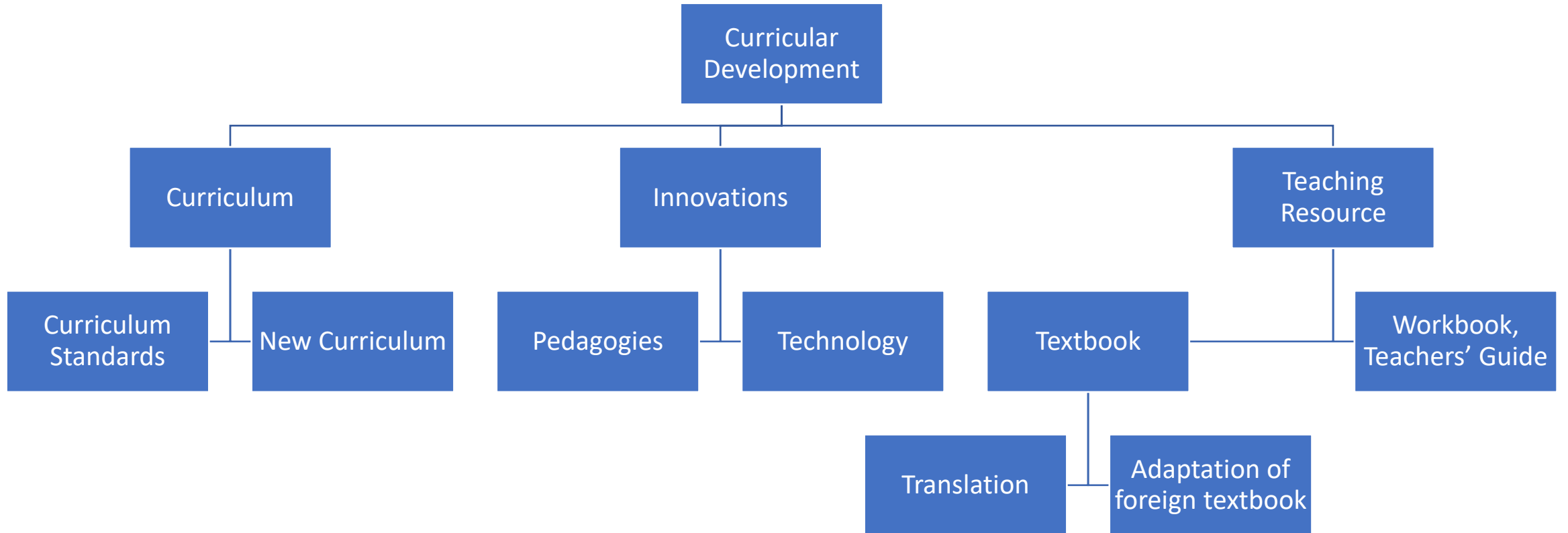
A) Curricular
Development

B) Professional
Development

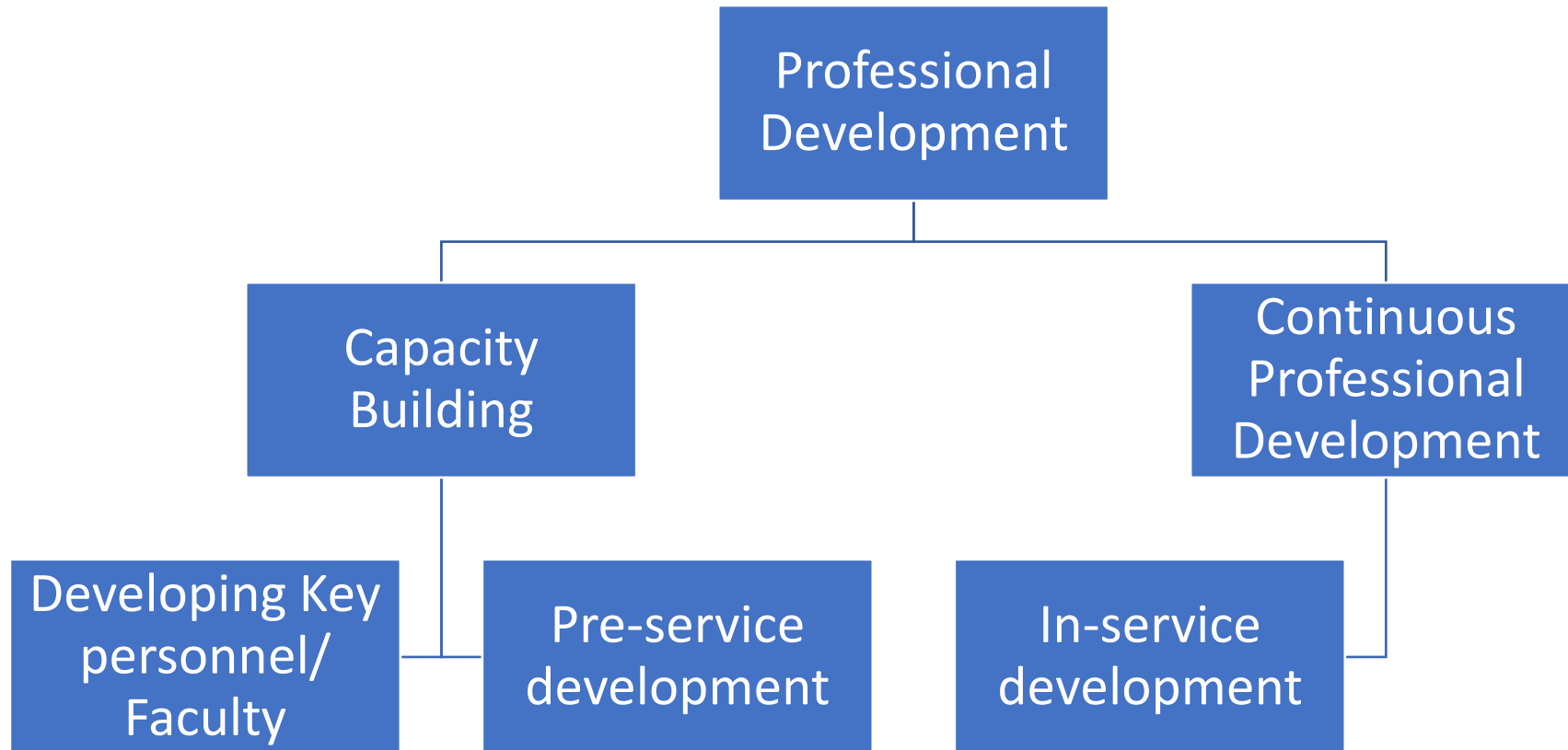
C) Developing
Communities of
Practice

D) Improving
environment
related to
mathematics

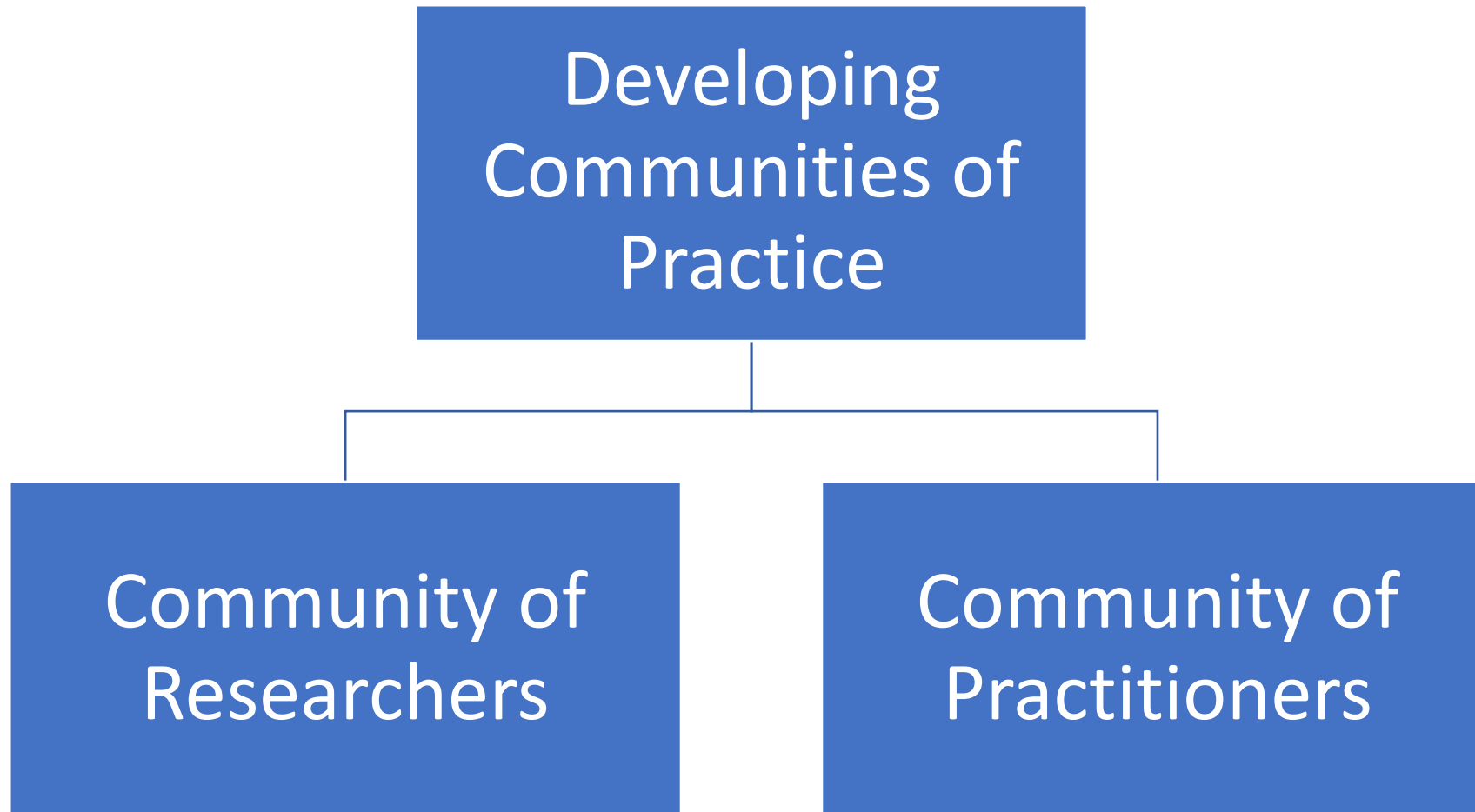
A) Areas in Curricular Development



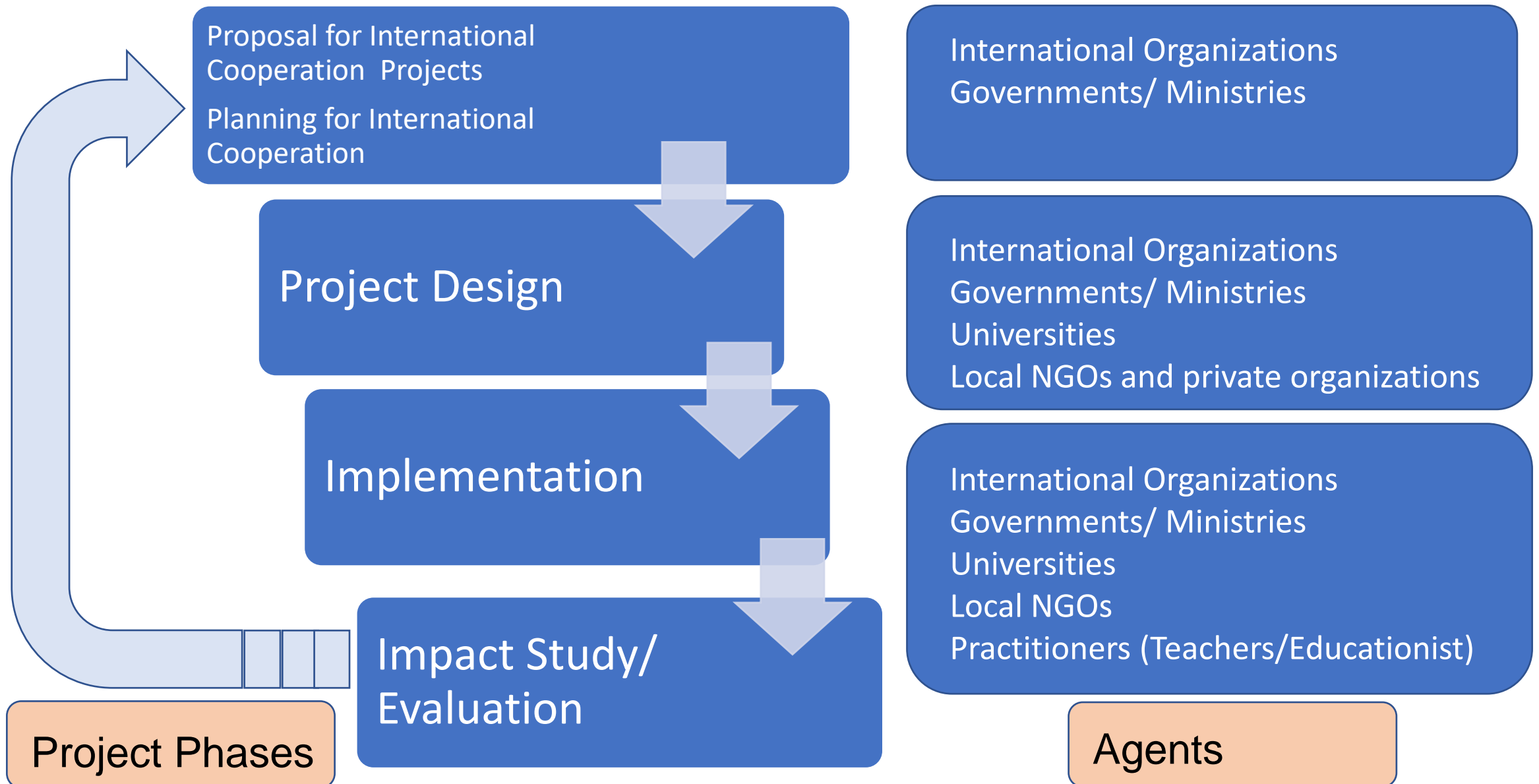
B) Areas in Professional Development



C) Areas in Development of Communities of Practice



Project Phases and Involvement of Agents



Methods in International Cooperation Projects

- Adoption and adaptation of good practice
- Development of key personnel/Faculties (Capacity building)
- Developing and incorporating local ideas
- Multilateral Dialogue among agents to develop strategic approaches
- Development of new study programs/ courses (certification)
- Development of curriculum and textbooks

TSG61 submissions (by regions)

- Asia (6)
- Africa (4)
- South America (3)
- APEC (1 general + 1 Asia + 1 S. America)
- Indonesia/US (1) (Cross border collaboration)
- General 1

Some Challenges in International Cooperation

- Globalization (Internationalization) vs. Localization
- Link between Localization and Globalization
- Link between country and international relations
- Multiculturalism vs enculturation

Issues and Challenges

- Papers in TSG61 described the success stories in International Cooperation. Issues and challenges are not often discussed. For future projects, reports should also discuss what we can learn from inadequacies and shortcomings of the projects.
- International cooperation should also report what we can learn from different cultures. Knowledge flows both ways. For e.g. What are the differences in mathematics language, terminologies and concepts that are related to culture? What pedagogical strategies have emerged from local cultures?
- What can we do about the outcomes of International cooperation?

Questions for Reflection

- What have we learnt from TSG61?
- How can we improve the quality of International Cooperation projects in mathematics education?

Proposal: The Mathematics Education in International Cooperation Discussion Group (MEIC-DG)

Introduction

- Do different forms of international cooperation in mathematics education exist on the international scene? How can informal contacts be encouraged and established in a sustainable way? What additional formal means of cooperation should be established or developed in mathematics education? Our French “Commission Internationale Inter-IREM” has organized a monthly seminar in French in France <https://www.univ-irem.fr/spip.php?article1316>

The proposal:

- What do you think about organizing a seminar twice a year among the members of an “International group” we would create together, to be held in English?

Response to the proposal

TSG 61 will form the Mathematics Education in International Cooperation Discussion Group (MEIC-DG). The Interim Committee will discuss plans for this group and keep you informed by email.

Please contact Ui Hock CHEAH at uhcrecsam1@gmail.com for further information.

Post Conference Publication

- We have discussed the possibility of publishing a book based on the submissions of TSG61
- We would like to have your expressed commitment to participate in this publication
- Tentative Procedure:
 1. Rewrite paper (extend to about 15 pages)
 2. Review of extended paper
 3. Revise the paper following reviewers' suggestions
 4. Editing
 5. Publication
- Need volunteers for Language editors, editors

Announcement & Invitation

by Prof. Masami Isoda (University of Tsukuba)

Let's meet together on the issues of International Cooperation!

The schedule of the CRICED 20 years anniversary meeting, APEC-Tsukuba conference XVI and SEAMEO-Tsukuba international Symposium X is Feb. 8-11, 2022 driven by the Center for Research on International Cooperation in Educational Development (CRICED), the University of Tsukuba, Japan.

Themes:

- CRICED 20 years anniversary meeting: International Cooperation
- APEC-Tsukuba conference XVI: Computational Thinking
- SEAMEO-Tsukuba international symposium X: Teacher Education

Further Information: <https://www.criced.tsukuba.ac.jp/en/>

contact: criced@un.tsukuba.ac.jp

Many Thanks

- The International Program Committee of ICME14 and Prof. Tom Lowrie (IPC Liaison person)
- The Committee of TSG61: Prof. Masami Isoda, Prof. Arne Jakobsen, Prof. Bernadette Denys, Prof. Jiwei Han and (IPC Liaison)
- All the presenters and participants
- The Local Organizing Committee and the technical support team for TSG61