



15th International Congress on Mathematical Education

7-14 July 2024 • ICC Sydney, Australia
Come and be counted

Topic Study Group 5.11: International cooperation in mathematics education

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Team details

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Overview

Mathematics is a vital skill needed to tackle global issues. High quality mathematics education has thus become a priority of the Education 2030 reform agenda to achieve the United Nations Sustainable Development Goals (SDGs) (United Nations, 2015). While achieving inclusive and quality education for all is a common goal (SDG4), many countries face significant challenges in improving their mathematics education. To address these challenges and achieve the SDGs there is a need for international cooperation among countries and agents on different levels, as indicated in SDG17—partnership for the goals.

International cooperation in mathematics educations can take many forms:





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1. Curriculum development, including curriculum reviews and textbook resource development.
2. Meaningful teaching and assessment approaches.
3. Professional development of both in-service and pre-service teachers.
4. Improvement of teacher education.

The goal is to ensure that teacher educators and teachers develop the skills and knowledge to support students in achieving their full potential.

The development of communities to improve mathematics education is an important aspect of international cooperation. This can involve stakeholders at various levels, whether local, international, institutional or personal. Projects can also vary in scope, from nationwide to provincial, and vary by school level to cater for the demands of different groups of students. Despite ongoing efforts, there remain many issues and challenges in international cooperation in mathematics education (Atweh et al., 2008; Cheah et al., 2023). These challenges include lack of resources, varying levels of education system, and cultural and linguistic barriers. The COVID19-pandemic also had an impact on the ways in which international cooperation projects could be implemented. However, by working together and sharing knowledge and expertise, countries, agencies, and individuals can continue to make progress for the aim of improving mathematics education around the world.

Emerging trends in response to these concerns include:

- Renewed emphasis on pre-primary and basic education up to the secondary level.
- Reaching out to groups with special needs (e.g., disabled, poor and gender groups).
- Re-establishment of higher education as an agenda.
- Emphasis on assessment for accountability.
- Inclusive involvement and expansion of the roles of new partners, donor countries and agencies, and non-governmental organizations.
- International cooperation during the COVID-19 pandemic.

Areas of interest

TSG 5.11 aims to establish an international community of scholars, teachers, government officials and consultants to serve as a platform for further exchange of views and insights on issues related to research and development in international cooperation in mathematics education.

Mindful that some issues of international cooperation in mathematics education may overlap with those of other Topic Study Groups at ICME15, the discussion in this group shall be guided, though not exclusively, by the following questions:





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1. What were the roles of the cooperating agents in the project?
2. What were the challenges, and the subsequent methods/solutions/strategies and good practices used to overcome these challenges?
3. What were the views of the various cooperating agents in overcoming these challenges? How were differing views about teaching and learning mathematics resolved?
4. How did the project impact on the quality of teaching and learning of mathematics?
5. How did the project plan for sustainability and expansion?
6. How was teaching and learning supported in international cooperation during the COVID-19 pandemic?

This group aims to include regular presentations, short communications as well as poster presentations from a variety of perspectives.

How to make a submission to this Topic Study Group

Submissions for Topic Study Group Papers and proposals for Posters open 28 April 2023 via the official ICME-15 website, icme15.org. The website also contains a timeline of dates for the activity of the Topic Study Groups in the lead up to the Congress.

For questions about this TSG, please contact the Co-Chairs using the email addresses provided.

