

The 14th International Congress on Mathematical Education

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TSG Descriptions

TSG 30 IN-SERVICE MATHEMATICAL TEACHER EDUCATION AND MATHEMATICAL TEACHER PROFESSIONAL DEVELOPMENT AT PRIMARY LEVEL

The Organizing Team

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Aims

Topic Study Group 30 aims to provide a venue for congress participants to share research, policy, design or practice that focuses on in-service mathematical teacher education and mathematical teacher professional development at primary school level.

Focus and themes

The focus of TSG 30 is a discussion of research related to in-service mathematical teacher education and mathematical teacher professional development at primary level. In-service mathematics teacher education and professional development are integral parts of teachers' life-long learning process, and take many different formal or informal formats with various focuses and requirements within and across education systems. The situation becomes especially complex at primary school level, where teachers can be generalists in many education systems but content specialists in some other systems. Understanding and researching in-service mathematical teacher education and mathematical teacher professional development at primary level, therefore, call for special attention to policy, design and practice situated in special system and sociocultural contexts. For example, it is not difficult to notice contrasting practices in which mathematics teachers work and learn in different ways through various forms of collaborations in the East versus in the West. Efforts to understand what in-service teachers may do in and for improving their teaching and expertise have led to ever-increased interest in exploring and examining different programs, activities, and the nature of various collaborations and processes through which primary school teachers are engaged to learn. Consistently, new theoretical perspectives have also been developed and proposed about in-service teachers'

professional development (e.g., practice-based professional education of teachers, locating teacher learning in communities, lesson study in Japan and China, communities of teachers working in contact with communities of researchers and evolving in their professional practices). It is important to understand through research the nature of different programs and activities, the focus and process of various teachers' learning and professional development, the extent of teachers' learning effects, the roles of policy and administrative support, and specific system and sociocultural factors associated with different teacher education programs and activities.

With this focus, TSG 30 is intended to provide an international gathering place for all interested parties (e.g., mathematics educators, teacher educators, school teachers, educational researchers, etc.) to disseminate findings from their research on in-service mathematical teacher education and mathematical teacher professional development at primary level, with the use of various theoretical perspectives and methodologies, and to exchange ideas in research, development, and evaluation of in-service mathematical teacher education and mathematical teacher professional development at primary level.

Possible themes of TSG 30 include the following:

- 1. Theoretical perspectives and methodological advances in research on in-service mathematical teacher education and mathematical teacher professional development at primary level;
- 2. Research on the design and/or implementation process of specific programs, approaches, and practices, such as the use of video clips and IT, for in-service mathematical teacher education and mathematical teacher professional development at primary level;
- 3. Research on documenting the effectiveness of specific programs, approaches, and practices for in-service mathematical teacher education and mathematical teacher professional development at primary level;
- 4. Research on comparing and documenting system and sociocultural factors contributing to inservice mathematical teacher education and mathematical teacher professional development at primary level;
- 5. Issues concerning possible (dis)connections between research and practice in in-service mathematical teacher education and mathematical teacher professional development at primary level.