

TSG 41 Uses of technology in primary mathematics education (up to age 10)

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TSG 41 at ICME-13 will explore these issues:

- How do school and teachers around the world, and in differently advantaged communities, use technology to enrich mathematics learning at primary level?
- Which factors contribute to successful and sustained use of technology in primary settings?
- Which innovations in digital technology for education do enable primary children to inquire, problem solve and think mathematically and to share their learning?

Many types of digital technology and environments are available for primary education since before the turn of the century. Yet, individual drill and practice software and interactive tools for exposition still appear to dominate practice in primary classrooms where technology is used. Around the world today, young children bring their experience with hand-held and other technology into the classroom. Moreover, teachers are normally more comfortable using digital tools in the classroom that they use in their personal life. In recent years, these have included tools to communicate in the cloud. Are primary teachers keeping up with digital natives? And which types of technology use are emerging to enrich and foster mathematics learning at primary school?

Regarding the first two issues, we want to learn more about factors and practices that enable teachers to efficiently embed technology use in the classroom, including contexts of differently advantaged communities. These factors might involve the design of the technology, curriculum innovation, instructional leadership, collaborative teacher inquiry, or other interventions. Contributions concerning this theme will need to identify specific technology for primary mathematics teaching and learning and the context. Regarding the third question for this TSG we want to know about innovations in the design of digital technology and tasks. Contributions for the last issue will focus on the impact of innovative technology and environments on children's mathematical inquiry, problem solving and reasoning.