CERME8: Working Group 15
Technologies and resources in mathematics education

Leaders
Jana Trgalova (France) jana.trgalova@univ-lyon1.fr
Mirko Maracci (Italy). Giorgos Psycharis (Greece), Hans-Georg Weigand (Germany)

Scope and Focus of WG15
Discussions within this group in the last two CERME conferences confirmed the relevance of considering information and communication technology (ICT) in mathematics education within a range of various resources, such as software, hand-held devices, online classroom activities, but also more traditional geometry tools or textbooks. A number of important issues related to the design of technologies and resources and their use by students, teachers and teacher educators emerged from these discussions. Among them e. g. a strong interconnectedness of mathematical and technological knowledge in student-tool interactions, or the necessity of including the users' feedback in the ICT and resource design processes. Concerning teacher education questions appeared about the complexity of ICT and resource integration in teachers' practices due to a double instrumental genesis, both personal and professional one. The idea of teachers' communities sharing resources and practices in using ICT emerged as a powerful means to favour teachers' professional development. These issues require further theoretical and methodological development.

Call for papers and poster proposals
WG15 welcomes theoretical, methodological, empirical or developmental paper (10 pages maximum) and poster proposals (2 pages) on these and other perspectives that aim at deeper understanding of the role of ICT and resources in mathematics education at all levels, from primary school to university, including out of school learning. Contributions addressing the following issues are particularly welcome, however any paper/poster of relevance to the overall focus of the group will be considered:

Theme 1 - Design and use of technologies and resources:
- technology tool and resource quality issues
- design and use of innovative technologies such as Web 2.0 or mobile technologies
- technologies and resources for learners with special educational needs

Theme 2 - Students' learning with technologies:
- impact of using technologies on students' learning
- empirical investigations especially about long-term learning with ICT
- assessment of students' achievement with ICT

Theme 3 - Technologies, resources and teachers' professional development:
- teacher education to the use of technologies and resources in mathematics classes
- communities of practice investigating math teaching/learning with ICT or other resources
- best practices in using technologies and resources

Papers should use the CERME8 WORD template, and conform to the guidelines at http://www.cerme8.metu.edu.tr. To submit it, you must email your paper as a WORD document to Jana Trgalová at jana.trgalova@univ-lyon1.fr AND at the same time to the conference secretariat at accerme8@metu.edu.tr. If possible please also send a pdf version *in addition* to the WORD document.

Reviews and Decisions
Each paper will be peer-reviewed by three persons from among those who submit papers to this Working Group. Please expect to be asked to review up to three papers yourself between 15th September and 22nd October 2012. It may be necessary for you to revise your paper before final acceptance. Please reserve some time to do this in the second half of November. The group leaders will decide about the acceptance of posters.

Important dates
15th September 2012:   Deadline for submission of papers.
1st October 2012:   Deadline for submission of poster proposals
22nd October 2012:   Deadline for reviewers to submit their reviews.
1st December 2012:   Deadline for revisions to papers.