

CERME 9: Thematic Working Group 16

Students' Learning Mathematics with Resources and Technology

Leaders

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Scope and focus of the Thematic Working Group

Discussions within the CERME-technology-group in the last years 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 non-digital tools like ruler and compass and resources such as textbooks and worksheets. The scope of this working group is to address opportunities and possibilities, as well as challenges and limits of resources and technology for students' learning. Our TWG 16 topic is closely related to that of TWG 15, which focuses more on teachers and the teaching aspect. In TWG 16 we will focus on (empirical) results obtained over the last years and decades concerning e.g. the introduction of new learning methods and concepts, the improvement of learning in the frame of old concepts or new forms of exercises in the whole range of mathematics education. Moreover, we are interested in a view towards the future, thinking about general conclusions for mathematics education, and the required up-coming research and implications for the classroom. Some topics of interest are among others also personalization and individualization of learning, personalization of learning resources, influence of BYOD (bring your own device), peer learning, new forms of e-textbooks, influence and use of social media in students' perception of learning mathematics, etc.

Call for papers and poster proposals

TWG16 particularly welcomes theoretical, methodological, empirical or developmental papers (10 pages maximum) and poster proposals (2 pages) on these and other issues, such as: The design and/or use of present software and technologies concerning student formal and informal learning, at school and out of school. The design of teaching experiments with software and technologies concerning student learning. The influence of computers, notebooks, tablets or handheld-technology on the learning of mathematical concepts and the construction of learning environments. Results of empirical studies and investigations especially concerning long-term learning with ICT, massive courses, national programmes of teachers' professional development. Possibilities of present and up-coming mobile communication and representation tools like tablets, smartphones. Possibilities of different kinds of assessment with ICT. The influence of web-resources and online courses for the learning of mathematics. Examples of "best practices" in the classroom. Examples of the use of technologies devoted to the support of students with disabilities.

However any paper/poster of relevance to the overall focus of the group will be considered.

Papers and poster proposals should use the CERME word template, and conform to the guidelines at <http://www.cerme9.org/guidelines/guidelines-for-authors/>. To submit it, you need to email your paper as a WORD document to **Hans-Georg Weigand**, AND at the same time to the conference secretariat at [<submission@cerme9.org>](mailto:submission@cerme9.org). If possible please also send a pdf version in addition to the WORD document.

Reviews and decisions

Each paper will be peer-reviewed by two persons from among those who submit papers to this Thematic Working Group. Please expect to be asked to review up to three papers yourself. It may be necessary for you to revise your paper before final acceptance. The group leaders will decide about the acceptance of posters.

Important dates

September 15, 2014: Deadline for submission of papers
October 1, 2014: Deadline for submission of poster proposals
November 25, 2014: Deadline for reviewers to submit their reviews
December 5, 2014: Decisions about paper or poster acceptance
December 20, 2014: Reduced fee registration deadline
January 10, 2015: Deadline for revisions of papers
January 20, 2015: Papers for presentation at the congress available on the CERME website