

CERME 9: Thematic Working Group 3

Algebraic Thinking

Leaders

Jeremy Hodgen (UK) jeremy.hodgen@kcl.ac.uk

Heidi Strømskag Måsøval (Norway), Valentina Postelnicu (Romania / USA), Reinhard Oldenburg (Germany)

Scope and focus of the Thematic Working Group

Algebraic Thinking is a well-established working Group at CERME. WG3 will build on the work at previous conferences to provide a forum for international discussion and collaboration. We will consider papers that question or provide insights on existing assumptions on any aspect of algebraic thinking, teaching and learning. This working group welcomes papers from a variety of different theoretical approaches and methodological frameworks. We expect that papers will address issues at all levels from early algebra through to algebra at university and beyond.

Call for papers and poster proposals

Working Group 3 welcomes theoretical, methodological, philosophical, empirical or developmental papers (10 pages maximum) and poster proposals (2 pages) on issues related to algebraic thinking. The scope of the working group is broad and any paper/poster of relevance to the overall focus of the group will be welcomed, although we particularly welcome papers that:

- Develop interconnections with new approaches about the learning and teaching of mathematics, for example embodied mathematics
- Offer fresh insights on established research topics such as fundamental algebraic objects and processes (e.g., symbolization, generalization, proofs and justification)
- Consider the nature and contribution of teacher knowledge to algebraic thinking
- Reflect upon how different theoretical frameworks or methodological approaches influence what can be inquired into or understood about teaching and learning of algebraic thinking
- Replicate and extend existing research to new contexts and settings, particularly papers that address the influence of context and culture
- Investigate the translation of research to the classroom, particularly where this provides new insights
- Address how research can influence the teaching and learning of algebra

The focus of the research may vary from micro-level studies of individual students and classrooms, teachers and student teachers, to macro-level studies of educational systems, and may examine textbooks, teaching materials and technology. We particularly welcome papers that develop themes explored in the Algebraic Thinking Working Group at previous CERME conferences.

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 jeremy.hodgen@kcl.ac.uk, AND at the same time to the conference secretariat at 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 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