

CERME11: Thematic Working Group 22
Curriculum Resources and Task Design in Mathematics Education

Leader: Birgit Pepin (Netherlands), b.e.u.pepin@tue.nl

Co-leaders: Seán Delaney (Ireland); Nataly Essonnier (France); Sebastian Rezat (Germany); Andreas Stylianides (UK)

Scope and focus of the Thematic Working Group

Teachers and students work all the time with mathematics curriculum resources, digital or traditional, inside or outside the classroom: teachers select, (re-)design, modify and interact with such resources for their lesson preparations; for student assessment; and for the design of their courses. Moreover, such resources (e.g. educative curriculum materials) are the focus of professional development sessions, where mathematics teachers design and transform curriculum resources, often blended materials, and in that process develop design capacity and valuable knowledge in/for teaching. Students also work with curriculum resources, for example, with textbooks to review the classwork or to access tasks.

The mathematics tasks used in learning environments (derived from textbooks or other sources), their sequencing and the actions performed by the teacher during the enactment of these tasks can limit or broaden, in particular, the cognitive demand of the task and students' views of the subject matter. In so doing, they can influence the opportunities afforded to students to develop mathematical concepts, skills, or habits of mind. Tasks may also influence students' motivation for learning and the extent to which they relate their school learning to their daily life. Indeed, it is well documented in the literature that tasks play a key role in effective teaching, with an upsurge of publications on various aspects of task design (e.g., on task features that can help generate specific forms of mathematical activity), methods of task analysis (e.g., analyses of the learning affordances of specific kinds of tasks), and principles for task implementation within both conventional and digital learning environments (e.g., factors influencing the fidelity of implementation of tasks in the classroom).

Call for papers and poster proposals

We welcome research papers (max. 8 pages) and poster proposals (2 pages) on:

- Teachers' and students' interactions with curriculum materials/resources/tasks and related competencies (e.g. pedagogic design capacity);
- Mathematical task analysis and typologies helpful for task design;
- Intervention studies that help, with the use of carefully designed curriculum materials/resources/tasks, to support the implementation of particular learning goals and foster the enhancement of mathematical competencies;
- Methodological issues with respect to curriculum resources and task design.

Papers and poster proposals should use the CERME template, and conform to the guidelines at the [guidelines website](#). CERME 11 uses a [submission website](#). The authors submit the initial version of their paper on the website (uploading it both as a .doc and a .pdf file, and providing the required information, in particular the TWG number).

Reviews and decisions

Each paper will be peer-reviewed by two persons from among those who submit papers to this TWG. Please expect to be asked to review up to two papers yourself. The group leaders will decide about the acceptance of posters.

Important dates

- **15th July 2018:** Early bird submission (please refer to the [early bird website](#))
- **15th September 2018:** Initial submission by authors in the submission system.
- **3rd November 2018:** Initial decisions on papers and posters sent.
- **24th November 2018:** The authors submit a revised version if needed.
- **5th December 2018:** Final decisions sent.
- **12th December 2018:** Final version uploaded.
- **13th January 2019:** Papers available on CERME 11 website.