



TSG 49

DISTANCE LEARNING, E-LEARNING, AND BLENDED LEARNING OF MATHEMATICS

The Organizing Team

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In Topic Study Group 49 we build on current and emerging research in distance learning, e-learning and blended learning. Specifically, we will push the boundaries of what is known through a deeper examination and discussion of recent research and development in teaching and learning through these modalities, with a focus on primary, secondary and higher education. We invite contributions (practical or research papers) that addressed some of the following subthemes:

1. The emerging work on the usage of such mobile technologies, as cell phones and tablets, for distance learning or blended instruction.
2. Incorporation of social media in online (or blended) technologically mediated courses.
3. Flipped classroom.
4. Developing the role of the faculty/moderator/tutor in online mathematics education.
5. Exploration of the emergence and sustainability of communities of practice in online environments of collaboration and co-construction of resources.
6. Utilization (Web 2.0, Web 3.0, etc.) and designing tasks, resources or environment in e-learning, blended learning, and distance education modalities.
7. Enabling mathematical collaboration in online mathematics education and orchestrating productive mathematical conversations in an online or in a blended setting.
8. Using distance learning, e-learning and/or blended learning in the professional development (of pre-service teachers', of mathematics teachers or of mathematics education researchers).
9. Assessment and evaluating the effectiveness of distance education, e-learning, and bi-learning.
10. Research methodologies and paradigms for studying online and blended mathematics education.

Expert invitees around previously accepted thematic papers will lead discussions. Crossover questions will lead each session, for instance, where the specificity of online (or blended) technologically mediated courses are related with support for their development, exposing how their design results from a research point of view, and finally how social media are incorporated in them.