

**12th International Congress on Mathematical Education
(ICME 12), to be held
JULY 8-15, 2012, Coex, Seoul, Korea¹**

Discussion Group DG 2:

Creativity in Mathematics Education

Call for contributions

Description and Aims

Mathematical Creativity and Mathematical Giftedness are two main strands in mathematics education. They overlap and interrelate, but they still have their particular issues and frameworks. The work of the International Group for Mathematical Creativity and Giftedness (MCG), an ICMI Affiliate Organization, centers its work around these two strands and we are happy that ICME 12 will offer the opportunity for an exchange of experiences in this Discussion Group DG 2 on *Creativity in Mathematics Education* and in the Topic Study Group TSG 3 on *Activities and Programs for Gifted Students*.

In Discussion Group DG 2 on *Creativity in Mathematics Education* we will continue the work from Discussion Group DG 9 on *Promoting Creativity for All Students in Mathematics Education* which took place at ICME 11 in Monterrey, Mexico. To prepare DG 2 in a genuinely interactive way, ICME has established a special DG 2 website to provide information to prospective participants, and to offer possibilities for paper contributions (*Presentation by Distribution*). In the DG sessions there will be no oral paper presentations. Participants will be expected to read the papers in advance.

Key Questions

We will focus on the following questions:

- (1) What does creativity mean in the process of teaching and learning mathematics?
 - How might creativity be defined, recognized, and/or assessed?
 - Is creativity an unconscious or intuitive component of doing mathematics?
 - Is creativity something that all students can develop or must students be gifted to be creative?
- (2) How can we develop or stimulate creative activities in and beyond the mathematics classroom?
 - Is mathematical creativity something that can be taught?

¹ For general congress information see <http://www.icme12.org/>

- What can teachers do to foster creativity?
 - How can we use technology to promote mathematical creativity?
 - What mathematics activities outside the classroom might be used to develop mathematical creativity?
 - What is the role of creativity in assessment, curricula, mathematics competitions, and other aspects of mathematics education?
- (3) How might we balance mathematical skill training and mathematical creativity?
- (4) What should be done in teacher training programs at the preservice and inservice levels to foster creativity in the classroom?

The list of questions may be changed or amended according to pre-conference inputs from prospective DG 2 participants.

Call for Contributions

Since effective discussions need a strong input and a broad spectrum of expertise, prospective participants are invited to, as soon as possible or

at the latest till February 29, 2012,

send individual contributions, or raise questions, or submit ideas, or offer background information to the Organizing Team (OT) via email with a copy to each OT member. Your contribution should closely relate to the key questions listed above and consists of no more than 4 pages, using the template given via

<http://wwwmath.uni-muenster.de/didaktik/u/meissne/WWW/TempIDG2.doc>.

Papers accepted by the OT will be made available to all DG participants on the ICME DG 2 website (*Presentation by Distribution*) before the conference, and will be printed in the DG 2 Proceedings after the conference, similar to the DG 9 Proceedings from Mexico. For details see <http://dg.icme11.org/tsg/show/10>.

A final program for the two DG 2 sessions will be developed after the individual contributions of prospective participants have been received.

Organizing Team (OT)

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