

International Journal of Serious Games

Special issue on digital games for learning mathematics

The acquisition of mathematical skills is crucial for today's society. It has been argued that in individual level, insufficient mathematical competencies may be even more harmful to career prospects than reading or spelling deficiencies. This is to say, that in society level mathematical deficiencies can lead to immense costs. Thus, it is important to develop more engaging and effective methods that can be used to enhance children's conceptual understanding of mathematics, develop mathematical thinking processes and improve arithmetical skills. Digital games provide interesting possibilities to support these goals and one can easily find great deal of online games and apps targeted for learning mathematics. Unfortunately, only a fraction of existing mathematics learning games is founded on theoretically sound principles, relies on good pedagogical practices and really utilizes the possibilities that game technologies provide for learning.

Therefore, the aim of this special issue is to shed light on usefulness of mathematics learning games and provide knowledge that support development of high quality mathematics learning games. In particular, we seek contributions that provide knowledge about effectiveness of mathematics learning games, show innovative technological or pedagogical solutions that facilitate learning of mathematics with games, provide empirically grounded design principles for mathematics learning games, and/or consider mathematics learning games as assessment tools. Empirical studies are preferred and strongly encouraged.

Topics of interest include but are not limited to:

- Learning effectiveness of mathematics learning games
- Observations of using mathematics learning games in the classroom
- Evaluation of learners' or teachers' attitudes about mathematical learning games
- Embodied cognition in mathematics learning games
- Learning analytics in mathematics learning games
- User interface solutions in mathematics learning games
- Mapping mathematics to game mechanics
- Game design principles for mathematics learning games
- Cultural and genre issues in mathematics learning games
- User generated content in mathematics learning games
- Adaptation in mathematics learning games
- Using mathematics learning games as assessment tools

Important dates and manuscript guidelines

All submissions have to follow manuscript guidelines of International Journal of Serious Games and should be submitted via journal's electronic submission system at <http://journal.seriousgamesociety.org>. All submissions must be original and may not be under review by another publication. All submitted papers will be reviewed on a double-blind, peer review basis.

- Submission deadline: May 31, 2015
- Review result notification: August 30, 2015
- Revised manuscript submission deadline: September 30, 2015
- Acceptance notification: October 30, 2015
- Final manuscript deadline: November 30, 2015
- Estimated publication date: January, 2016

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