

Einladung zum wissenschaftlichen Kolloquium des IDMI

Roza Leikin
(University of Haifa, Israel)

Developing mathematical performance at high level with structuring and opening mathematical tasks

In this presentation, I will argue that structuring and opening mathematical tasks are essential for development of mathematical talents. Although mathematical expertise is usually linked to the deep understanding of structures of mathematical problems and the choice of efficient problem-solving strategies, creativity is linked to the ability of coping successfully with open questions and solve problems in multiple ways. At the same time, creativity and expertise associated with problem solving in mathematics can be considered as two sides of a coin. Creativity-directed activities in mathematics lead to development of feeling of mathematical structures while problem-solving expertise supports creative problems solving. Based on a series of explorative studies, I suggest a theoretical underpinning of the power of opening and structuring of mathematical tasks in the development of high mathematical performance.

Bio

Dr. Roza Leikin is a Professor of Mathematics Education and Education of Gifted at the Faculty of Education, University of Haifa. Her research and practice embrace mathematical creativity and ability; teachers' professional potential and integration of neuro-cognitive tools in mathematics education research. She is the Dean of the Faculty of Education and the Establishing Director of the Interdisciplinary Center for the Research and Advancement of Giftedness and Excellence (RANGE) in the University of Haifa. She served as the President of the International Group for Mathematical Creativity and Giftedness (<http://igmcg.org/>; 2012-2017) and edited 11 volumes related to research in mathematics education and the education of gifted, published more than 150 papers and chapters in peer reviewed research journals, books, and refereed conference proceedings.

Dienstag, den 25. Januar, um 17 Uhr c.t. via Zoom

Vorgespräch mit dem Gast: um 16:45

Zoom-Meeting: <https://wwu.zoom.us/j/69003775171>

Meeting-ID: 690 0377 5171 Kenncode: 021271

<https://wwu.zoom.us/j/69003775171?pwd=KzZRYnRaUTVmT1VydXd0OUg1eURQZz09>

Kontakt: Stanislaw Schukajlow, schukajlow@uni-muenster.de