

Discussion Panel

DM

Didactics of Mathematics

MODERATOR:

Ryszard Pawlak (Uniwersytet Łódzki)

PANELISTS:

Marianna Bosch (Universitat de Barcelona)

Piotr Błaszczak (Uniwersytet Pedagogiczny w Krakowie)

Nuria do los Angles Climent Rodriguez (Universidad de Huelva)

Edyta Juskowiak (Uniwersytet Adama Mickiewicza w Poznaniu)

Ewa Swoboda (PWSTE Jarosław)

Tomasz Szemberg (Uniwersytet Pedagogiczny w Krakowie)

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- Wednesday – September 6th

12:00–13:30

DESCRIPTION

A panel discussion is titled *How to Overcome Barriers in Teaching and Learning Mathematics*. In the field of mathematics education, both students and teachers encounter various barriers that need to be overcome. Therefore, it is valuable to explore the perspectives of renowned experts in mathematics didactics on this matter.

While waiting for the discussion among renowned specialists, it is possible to get a preliminary insight into how artificial intelligence (ChatGPT) "expresses itself" on this topic:

Overcoming barriers in teaching and learning mathematics requires a multifaceted approach. Firstly, fostering a positive and supportive learning environment is crucial. Teachers can create an inclusive classroom where students feel safe to ask questions and make mistakes without fear of judgment.

Secondly, employing diverse instructional strategies can help address individual learning styles and cater to the needs of different students. This may involve incorporating hands-on activities, visual aids, technology, and collaborative learning opportunities to engage students and enhance their understanding of mathematical concepts.

Furthermore, providing personalized feedback and targeted interventions can assist students in identifying and addressing their specific challenges. Teachers can offer one-on-one support, extra practice exercises, or additional resources to reinforce learning and bridge knowledge gaps.

Effective communication and collaboration between teachers, students, and parents also play a significant role. Regular progress updates, open lines of communication, and involving parents in their child's mathematical education can create a supportive network that encourages growth and persistence.

Lastly, promoting a growth mindset is essential. Encouraging students to embrace challenges, view mistakes as opportunities for learning, and develop a resilient attitude towards mathematics can foster a positive mindset and empower them to overcome obstacles. By implementing these strategies, educators can help students navigate and overcome barriers in teaching and learning mathematics, promoting a deeper understanding and appreciation for the subject.