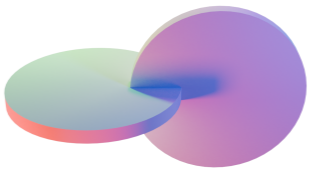

GIREP-EPEC
Transforming physics learning via Research & Practice
LEIDEN, 2025

Contribution ID: **73** Type: **Oral presentation**

How do Different Games make a Difference? Pedagogical Considerations and Teachers' Perspectives when integrating Card Games into Physics Teaching

Tuesday 1 July 2025 09:00 (20 minutes)

Five Phys-Cards games were designed and introduced over a four-year period in a national network of professional learning communities for high school physics teachers. The games consist of summative, hands-on activities that highlight physics concepts and support knowledge organization, using research-based pedagogical principles. Large-scale surveys and an analysis of teachers' classroom experiences showed that they felt the games contributed to student learning. Collaborative reflection helped the teachers find ways to incorporate the games into their lessons. Teachers' preferences for gamification elements across the five games were identified. The results pinpoint the challenges and opportunities of gamification in physics education.

Education level

Age 15-18 (Secondary education)

Physics topic

Other

Research focus

Active learning

Research method

Mixed method (qualitative & quantitative)

Organizing preference criteria

Track

Authors: LEVY, Smadar; YERUSHALMI, Edit (Weizmann institute)

Presenter: LEVY, Smadar

Session Classification: Parallel oral presentations

Track Classification: Physics teacher education & Professional learning (TEACH)