



GIREP-EPEC

Transforming physics learning via Research & Practice
LEIDEN, 2025

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Type: **Oral presentation**

The Meaning of Energy in Physics Teaching in France (grades 7 to 9): an Analysis of Official Documents.

Wednesday 2 July 2025 10:00 (20 minutes)

In France, one of the four parts of the Cycle 4 (grades 7 to 9) physics curriculum deals with energy. Teachers are asked to clarify the meaning of the words used to talk about energy, in order to link the concept of energy in physics with that of everyday life. Through a lexicographical analysis, we question the meaning given to these words by the authors of textbooks and official documents. We show that transfers and forms of energy are often undifferentiated. Yet this distinction is a prerequisite for a proper understanding of the social issues surrounding energy.

Education level

Age 12-15 (Secondary education)

Physics topic

Thermodynamics and Energy

Research focus

Other

Research method

Educational design research (Qualitative research)

Organizing preference criteria

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Session Classification: Parallel oral presentations

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