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

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Work-life related exercise with vehicle experiment

Monday 30 June 2025 16:30 (1 hour)

This study explores science education methodologies, combining group-based learning, field experiments, and work-life-related exercises to enhance student engagement. The case study investigated repurposing a decommissioned tracked vehicle. Six master's students conducted a five-day field experiment encompassing planning, execution, iterative observations, and report writing. The project aimed to assess the feasibility and implications of reusing outdated equipment through AI and robotics integration. Preliminary findings suggest this hands-on approach provides valuable experience in developing innovative mobility solutions. In this study evaluation of student feedback has been analysed to see the value of the field experiment for learning.

Education level

Outreach, Informal & Non-formal learning of physics

Physics topic

Other

Research focus

Lab experiments

Research method

Innovative research strategies (Try-out) (Qualitative research)

Organizing preference criteria

Other

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