



GIREP-EPEC

Transforming physics learning via Research & Practice
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Type: **Oral presentation**

Assessing Self-Efficacy in University Physics Laboratories: The Impact of Teacher and Peer Collaboration

Thursday 3 July 2025 09:00 (20 minutes)

This study explores student-teacher collaboration during undergraduate physics laboratory activities and its impact on self-efficacy. Using a longitudinal pre-experimental design, collaborative networks and self-efficacy regarding experimental set-up, data analysis and error handling were assessed in 4 laboratory sections (N=42). Results show an increase in the frequency of teacher assistance as the course progresses. Using multiple linear regression models, it is shown that frequent help from the teacher or peers is relevant to self-efficacy.

Education level

Age over 18 (excluding teacher education)

Physics topic

Other

Research focus

Active learning

Research method

Mixed method (qualitative & quantitative)

Organizing preference criteria

Track

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Presenter: STARI, Cecilia

Session Classification: Parallel oral presentations

Track Classification: Laboratory-based physics (LAB)