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

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Bridging Sports and Physics: Exploring Experiential Learning, Motivation, and Conceptual Gains among Indian Student Community in Qatar

Wednesday 2 July 2025 09:20 (20 minutes)

This study explores the impact of sports-integrated physics instruction on high school students from diverse cultural backgrounds, such as the Indian community in Qatar. A study with 120 students in grades 11 and 12 across three schools revealed that integrating sports into physics instruction greatly enhanced students' comprehension of physics concepts, boosted their motivation, and fostered a more positive attitude towards learning the subject. The research suggests that incorporating sports into physics education enhances students' understanding and enthusiasm, which is particularly beneficial for high school classes; the findings suggest a move towards interdisciplinary teaching techniques, focusing on active and student-centred learning.

Education level

Age 15-18 (Secondary education)

Physics topic

Interdisciplinary topics

Research focus

Innovative instructional strategies and pathways

Research method

Mixed method (qualitative & quantitative)

Organizing preference criteria

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Session Classification: Parallel oral presentations

Track Classification: Interdisciplinary topics (INTER)