4th World Conference on Physics Education

EMBRACING CHANGES TOGETHER

Contribution ID: **124** Type: **Poster**

Support models for simulation-based inquiry learning of the photoelectric effect

Wednesday, 28 August 2024 12:50 (10 minutes)

This practitioner inquiry study evaluates two support models, Model Order Progression (MOP) and Concept Maps (CM), for inquiry-based learning of the photoelectric effect. The support models were evaluated on their impact on cognitive load, knowledge, retention, and scientific literacy. Results did not show a significant difference between the two models; however, the effect size showed a modest difference: MOP resulted in a smaller cognitive load, and CM showed better knowledge retention. In a follow-up study, the findings were used in combination with modeling instruction. This integrated approach offered a more effective way to support students in inquiry-based learning.

How would you like to present your contribution?

Live in Kraków (time slot to be allotted based on the programme)

Target education level

Secondary

Category

Formal Education

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Session Classification: Poster session

Track Classification: Teaching and Learning Physics Concepts