



Contribution ID: 229

Type: **Oral presentations**

## **Flipped classroom: Effects on the conceptual understanding in electric circuit teaching**

*Tuesday 27 August 2024 10:50 (20 minutes)*

On the basis of a design-based research approach, a learning environment suitable for the application of flipped classroom was developed for teaching simple electric circuits. A large-scale assessment was used to evaluate the effects. This learning environment included diverse digital offers and various practical in-class exercises. In addition to the teaching concept, this contribution discusses the effects of flipped classroom on the development of conceptual understanding. It particularly differentiates whether the effects are caused by the underlying didactic concept and the thus created learning materials, by the flipped classroom method, or a combination of the two.

### **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:** Oral presentations

**Track Classification:** Teaching and Learning Physics Concepts