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GIREP-EPEC conference 2023
Physics learning promoting culture
and addressing societal issues

Contribution ID: 38

Type: **Oral presentation**

The influence of hypotheses before experiments on data-based conclusions after experiments

Tuesday 4 July 2023 11:20 (20 minutes)

This contribution reports the findings of a study with approximately 400 secondary school students in Germany. These students were introduced to a physics problem and had different opportunities to handle hypotheses, before analysing measurement data. First results indicate that if students have high data competencies, then the hypothesis does not influence students' data-based conclusions. However, this is not the case if students have weak data competencies. Students' confidence in their hypotheses does not seem to influence their data-based conclusions.

How would you like to present your contribution?

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

Target education level (primary)

Lower-secondary education

Target education level (secondary, optional)

Higher-secondary education

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Session Classification: Innovative strategies at school

Track Classification: Innovative strategies and pathways to improve physics education at school