EMBRACING CHANGES TOGETHER

Contribution ID: 198 Type: Oral presentations

Intensive and extensive properties as a crosscutting idea: the case of teaching density

Tuesday 27 August 2024 10:30 (20 minutes)

Cross cutting concepts have been introduced formally as a set of items and are meant to bridge disciplinary borders. They can potentially provide students with an organizational framework for connecting knowledge from the various disciplines. Trying to support this direction, we introduce the Intensive and Extensive Properties as an idea that cuts across science disciplines. This study focuses on 7th grade students' preconceptions about density as an intensive concept. 241 students participated into the study. The results showed that 22% realize that density is an intensive quantity and does not depend on the amount of the system

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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