

# PRE-SERVICE TEACHERS' PLANNING OF CLASSROOM ACTIVITIES BASED ON THEIR REFLECTION ON STUDENTS' LEARNING NEEDS – A VIGNETTE-BASED STUDY

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Teachers' planning of classroom activities can occur on the base of the teacher's reflection on the students' learning needs and their prior knowledge. In this context, pre-service teachers' knowledge of a students' hypothetical learning trajectory (Ivars et al., 2020), related to a mathematical content area, can play a role, as in the analysis processes connected with the teacher's planning of classroom activities, both the mathematical content and characteristics of the learners have to be considered. The content structure, the learners' specific needs, and content-related goals have to be considered and balanced, supported by a criteria-based argumentation, which precedes the planning decision(s). Despite the high relevance, little is known empirically about teachers' analysis in this context and about the role the criteria-based argumentation plays for a pre-service teacher's decision-making related to the planning of classroom activities. Consequently, this study aims at exploring (1) how pre-service teachers analyse the needs of learners, (2) how they respond to these needs in their planning of classroom activities and (3) to what extent they support these planning decisions by criteria-based argumentation.

The sample of this study consists of 73 Spanish pre-service teachers (PTs) who have been asked to plan classroom activities based on a vignette showing a classroom situation that supports PTs' reflection on the learners' needs. In a parallel study, more than 22 German pre-service teachers have responded to the same planning and analysis tasks (this data set is currently being coded). The results from the first sample indicate that a successful reflection on the learners' needs did not warrant coherent planning of classroom activities and that criteria-based argumentation in this context was often a challenge to the pre-service teachers when planning the activities.

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## References

Ivars, P., Fernández, C., & Llinares, S. (2020). A learning trajectory as a scaffold for pre-service teachers' noticing of students' mathematical understanding. *International Journal of Science and Mathematics Education*, 18(3), 529-548