



# Einladung

zum Forschungskolloquium im Sommersemester 2025

## **Designing lesson plans to support inquiry-based teaching:**

How prospective secondary teachers plan tasks and units to support this teaching approach

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The research conducted in this doctoral dissertation aims to investigate how prospective teachers understand inquiry-based learning by analyzing the decisions they make when planning lessons aligned with inquiry-based teaching. Especially, this presentation focuses on how prospective teachers interpret the principles of inquiry-based teaching and how these interpretations are reflected in the different types of lesson plans they create. Since the new Spanish curricular reform encourages teachers to design mathematics lessons that foster secondary students' mathematical thinking through challenging situations, inquiry-based teaching (Artigue & Blomhøj, 2013) has become more relevant. Therefore, it is essential to train prospective teachers to implement this teaching approach from the early stages of their education. The research was carried out with 25 prospective teachers enrolled in a practice-based teaching course titled "Teaching Mathematics" at the University of Alicante. We conducted a qualitative analysis of the lesson plans submitted by the participants as part of the course. Our results revealed three main types of lesson plans: non-exploratory, incipient-exploratory, and exploratory. These different types allowed us to identify different uses of inquiry-based teaching principles. These results contribute to provide insights into how prospective teachers interpret this pedagogical approach and aim to provide meaningful implications for teaching programmes and research.

**Donnerstag, 5. Juni 2025, 12:30 – 14:00 Uhr**

**Pädagogische Hochschule Heidelberg, INF 561, Raum A206**