

Einladung zur öffentlichen Defensio

## Kata Sebök

Thema der Dissertation

### **Views on subject matter – preservice mathematics teachers’ noticing of and beliefs about subject matter and its role for teaching**

#### **Abstract:**

Many preservice mathematics teachers (PSTs) have been known to struggle with the academic mathematics that is part of their university teacher training. This is often related back to educators’ impressions that PSTs underestimate the mathematical demands of their future profession and experience their subject matter preparation as too extensive and unhelpful in preparing them for the challenges of teaching which they do anticipate. As a result, many PSTs develop negative beliefs about their teacher training and sometimes experience alienation from mathematics as a subject itself.

In this dissertation, the ways in which preservice teachers perceive the subject matter inherent in typical teaching actions is conceptualised as a form of theme-specific teacher noticing, subject matter noticing. Subject matter noticing is assumed to influence and be influenced by a (preservice) teacher’s subject matter knowledge (SMK) and their beliefs about subject matter. A situated intervention based on the Four Component Instructional Design framework was designed to allow secondary PSTs to practice consciously applying their SMK to effectively handle typical teacher tasks. Results of the quasi-experiment suggest that the intervention was highly effective in training PSTs’ subject matter noticing but had no discernible impact on their subject matter beliefs. Additionally gathered qualitative data opens up new questions as to how PSTs’ problematised beliefs about subject matter can be most usefully conceptualised and measured.

**Prüfungssenat**

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**Zeit und Ort:**

Dienstag, 31.10.2023, 09:00 Uhr

<https://univienna.zoom.us/j/68372067335?>

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