## USING REPRESENTATIONS OF PRACTICE FOR TEACHER EDUCATION AND RESEARCH – OPPORTUNITIES AND CHALLENGES

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## Short description of the Discussion Group: aims and underlying ideas

Representations of classroom practice offer the chance of referring to the teachers' professional environment both when conceiving opportunities of professional development and when investigating aspects of teacher expertise. Representations of practice can stimulate teachers' criteria-based analysis in environments that do not bring the full pressure and action constraints of the actual classroom. This discussion group aims at collecting experiences with different forms of use of representations of practice in pre-service and in-service teacher professional development activities and research into aspects of teacher expertise and its development. On this base, the discussion group plans to include an overview of different approaches to representing practice, address key issues of case-based learning, as well as methodological issues and questions related to validity of the construct(s) researchers or facilitators aim to address.

## **Planned structure:**

The discussion group focuses on supporting and investigating aspects of teacher expertise such as components of professional knowledge of mathematics teachers, views and convictions (e.g. Shulman, 1986; Ball, Thames & Phelps, 2008; Kersting et al., 2012; Kuntze, 2012), competence facets such as "professional vision" (Sherin & van Es, 2009), "usable knowledge" (Kersting et al., 2012), "noticing" in the sense of "selective attention" (cf. e.g. Seidel et al., 2013) or in the sense of "knowledge-based reasoning" (Sherin, Jacobs & Philipp, 2011), as well as the notion of "awareness" (Mason, 2002), and specific competences of analyzing classroom situations (e.g. Kuntze, Dreher & Friesen, in press). All of these constructs can be addressed through representations of practice in case-based approaches to pre-service and in-service teacher expertise and to their professional development, as representations of practice can engage participating teachers in the analysis of teaching practice.

Used in both professional development and research contexts, representations of practice offer possibilities and present challenges, both of which will be included within the scope of this discussion group. Specific examples of empirical studies and professional development projects using representations of practice will be briefly introduced and analyzed, in order to make visible the spectrum of possibilities both on the theoretical and methodological levels. The discussion group focuses on the following key questions: How can representations of practice encourage pre-service and in-service teacher professional development, e.g. through stimuli for reflection, criteria-based analysis, or structured observation? How can representations of practice support the investigation of certain aspects of teacher expertise, such as criteria-based aspects of noticing or analyzing? What

kinds of design challenges emerge when using representations of practice for either professional learning or in research, and how can these challenges be addressed?

Tuesday, 16.30-18.00: Planned timeline	Торіс	Material / Working format / presenter
Introduction (10")	Representations of practice	presentations by Orly
Presentations (30")	and their use in pre-service	Buchbinder, Jessica Hoth, Bill
Round tables with presenters	and in-service teachers	Zahner, Sebastian Kuntze,
(30")	professional development and	Karen Skilling & Gabriel
Group reports/discussion (20")	research	Stylianides

The questions will be worked on according to the following discussion group agenda:

Friday, 16.30-18.00:	Торіс	Material / Working format /
Planned timeline		presenter
Introduction (10")	Design questions related to	presentations by Corey Webel,
Presentations (30")	different formats of	Nanette Seago, Anika Dreher,
Panel Discussion (30")	representations of practice,	Marita Friesen; panel discus-
Summary/presentation of book	methodological prospects and	sion with Rina Zazkis, Rosella
project (20")	challenges	Santagata, and Dan Chazan

## References

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