

## MATHEMATICS TEACHER NOTICING: EXPANDING THE TERRAINS OF THIS HIDDEN SKILL OF TEACHING

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

*Research on what and how mathematics teachers notice in the classrooms has gathered momentum in the last decade, with an emphasis to develop noticing expertise in mathematics teachers. This DG aims to explore and expand the terrains of research on teacher noticing in three aspects: conceptualizations of noticing, methodologies for studying noticing, and the study of noticing in different contexts. Three sets of key questions will frame the discussions:*

*Question Set 1: What conceptualizations of noticing have been used? How do these various conceptualizations inform our understanding of the processes of noticing? How are these conceptualizations related? Are there other new ways of conceptualizing noticing? Whether it is possible to assess teacher noticing expertise, and if so, how?*

*Question Set 2: What methodologies have been used for studying noticing? What other ways of studying noticing can we consider? How do we capture the different processes of noticing? How do we document the growth in a teacher's noticing expertise?*

*Question Set 3: What are the different contexts in which the study of noticing can be situated? How context specific is noticing? What is the relationship between teacher noticing and student learning?*

### Planned structure:

Tuesday, 16.30-18.00:	Topic	Material / Working format / presenter
16.30 to 16.40	<b>Setting the scene:</b>	The organizers will introduce the aim and rationale of the discussion group.
16.40 to 17.20	<b>Exploring the scene:</b>  Question Set 1, 2 and 3	Participants will select one of the three sets of questions to explore the chosen question set. They will then prepare a 10 min presentation to summarize the key ideas discussed.
17.20 to 17.50	<b>Presenting the scene:</b>  Question Set 1, 2 and 3	Each group will present their discussion for the question set assigned.
17.50 to 18.00	<b>Gathering our thoughts:</b>	Invited speakers will synthesize the ideas shared to set the agenda for the next session.

Friday, 16.30-18.00:	Topic	Material / Working format / presenter
16.30 – 17.25	<b>Exploring new territories:</b> Question Set 1, 2 and 3	Participants will form groups, facilitated by one of the organizers, according to the three main questions. Each participant will then have about 5 minutes of silent time to consider their responses to the ideas discussed in the previous session. Each participant will then have 3 minutes of uninterrupted time to share their ideas. Other members may react to the comments that have been expressed. The organizers will then attempt to summarize the conversations on a large sheet of paper.
17.25 – 17.45	<b>World Café Sharing:</b> Question Set 1, 2 and 3	The organizer in charge of the group will stay behind to share the key ideas presented by the group. The other participants are then given the opportunity to visit every group in the room. At each group’s sharing, participants can share their responses, ask questions, and add their comments using the post-it notes provided. At this time, they may also want to add their names to indicate their interest in the topics presented. This is to facilitate the formation of an online discussion group or email list for future research collaborations.
17.45 – 18.00	<b>Looking back:</b>	The invited speakers will highlight the key ideas shared by each group and seek suggestions from the participants about future research possibilities. This includes plans for the next steps to further the research agenda and generate a few focused research ideas to pursue.

Invited Speakers include: Prof. Randolph Philipp, Prof. John Mason, Assoc. Prof. Sergiy Klymchuk, and Asst. Prof. Julie Amador.