



**NTNU – Trondheim**  
Norwegian University of  
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# **The Contribution of Video as a Tool in Mentoring – Student Teachers' Experiences**

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# LaUDiM

- an intervention study within a sociocultural framework

Pre-lesson mentoring



Whole class dialogs in mathematics



Post-lesson mentoring

# Previous research

## Research within three areas guides the project

- Pre-service teachers and mathematical dialog

PTs pose questions quickly with few follow-ups, giving little time for the pupils to expand their answers (Henning & Lockhart, 2003).

PTs have difficulties responding to unexpected responses from the pupils (Nilssen, Gudmundsdottir, & Wangsmo-Cappelen, 1995).

Orchestrating whole-class dialog in mathematics are pointed to as an example of core practices in teacher education (Grossman, Hammerness, & McDonald, 2009).

- Mentoring conversations

MCs in field practice tend to be emotional support focusing more on classroom management and less on subject matter (Helgevold, Næsheim-Bjørkvik, & Østrem, 2015).

- Use of video in teacher education

Focus mostly on watching professional teaching

In some studies PTs watch videos of their own teaching, either peer teaching or video clips of student teaching during field practice.

However, we find that the discussions around these videos mainly take place in courses at the university (review study by Gaudin & Chaliès, 2015).

# Research question for this presentation

How did use of video benefit the post-lesson mentoring according to the pre-service teachers' experiences?

# Methodology

Data sources: Student teachers' reflective logs written daily

Analysis inspired by constant comparative method/grounded theory (Corbin & Strauss, 1998)

- Analytical tools: Open coding, tables, comparisons, questions

Use of video

- refreshes the memory of teaching situations individually and collectively
- makes their own contributions in the whole class dialogs visible
- centers the mentoring around experienced challenges

# Refreshes the memory of teaching situations individually and collectively

The video helps to establish intersubjectivity, or a shared definition of the situations (Wertsch, 1984), which can be seen as a presupposition to the discussion of the other two categories.

Watching video made us see exactly the same at the same time. Thus we knew that we were talking about the same thing and that it actually happened in that way.

We could easily go into a situation and be specific. Looking at the video we had a common point of departure for our discussion. We were able to discuss specific utterances from the pupils in a way that would have been impossible if we had to rely on what we remembered.

# Makes their own contributions in the whole class dialogs visible

Watching the video the pre-service teachers realized that the way they expressed themselves and posed questions “ruined the conversation”.

My perception was that the pupils were tired and disengaged due to the length of the conversation. After watching the video I was fully aware that this wasn't the whole reason why I «lost» the pupils. It could be difficult for them to understand what I was asking for.

It was easier to hear whether my utterances were understandable and good, or not.

# Centers the mentoring around experienced challenges

Distanced from the in-the-moment decision-making, looking back at the situation and hearing exactly what the pupils said, they were able to dwell on pupils' explanations and discuss alternative choices with their peers and the two mentors.

When I stood there, in the classroom, I remember thinking: 'How on earth can I elucidate this pupil's idea?'

It was so difficult to interpret the pupils' utterances and to decide how to respond based on that interpretation. Some answers comprised elements which I hadn't considered. It was difficult to respond offhand.



# Significance

- Sustains previous research, orchestrating whole-class dialogues are challenging for inexperienced teachers.
- Our study implicates that pre-service teachers need to learn these skills in authentic teaching situations.
- The university and the primary school mentors can be a fruitful team scaffolding such learning processes based on video-clips from the student teaching.
  - Decomposed the complexity of the situation
  - Addressed key practices in whole class dialogs (questions and representations)
  - Developed a common language for discussing such practices.



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# Thanks for your attention!

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