



IMPACT OF LEARNER-CENTERED FACILITATION ON TEACHERS PROFESSIONAL DEVELOPMENT DURING A LS



IMPACT OF LEARNER-CENTERED FACILITATION

Presentation Outline

- ❖ Conceptual framework & Research question
- ❖ General information on data collection methods
- ❖ Preliminary results
- ❖ Conclusions and perspectives



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❖ Literature on the impact of LS facilitation on teachers is scarce:

- ❖ Amador & Weiland (2015)
- ❖ Amador et al. (2018)
- ❖ Cady et al. (2008)
- ❖ Carlson et al (2007)
- ❖ Lewis & Hurt (2011)
- ❖ Lewis (2016)
- ❖ Khokhotva (2018)
- ❖ Morago & Grigioni-Baur (2017, Wals 2017)
- ❖ Mynott (2018, 2018a)
- ❖ Rock & Wilson (2005)
- ❖ Takahashi & Yoshida (2005)



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Research question:

- ❖ Pupils learn through learner-centered, inquiry-based opportunities
- ❖ Can teachers also learn through inquiry-based situations?
- ❖ Facilitator provides learner-centered questions



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Examples of Learner-centered facilitation questions:

- ❖ You have a learning outcome, it is a disciplinary one. Do you have any other outcomes? If you don't, think about it, no need to answer now.
- ❖ What are you expecting to see with the tasks you plan?
- ❖ What were the modalities of the diagnostic assessment you gave the class? What was your aim, what sort of data were you planning on getting?
- ❖ How are you going to anticipate, assess and tackle pupils' learning needs and impediments?
- ❖ What do you want to observe during the research lesson?



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- ❖ Can teachers also learn through inquiry-based situations?
- ❖ Facilitator provides learner-centered questions
- ❖ **Impact of learner-centered facilitation on teachers professional development during a LS**



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Conceptual framework:

- ❖ Self determination
- ❖ Guided autonomy

- ❖ Desimone (2009) => conceptual framework for studying the effects of professional development.
- ❖ Borko et al (2010) => characteristics of effective professional development.

- ❖ Miles et al. (2014) => data analysis



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General information:

- ❖ 6 mathematics and natural science teachers
- ❖ 2 facilitators
 - ❖ Pedagogic
 - ❖ Subject Didactic (teaching methods)
- ❖ 2 Knots (Knowledgeable others)
 - ❖ Overview of the entire process, research
 - ❖ Lesson, final debriefing



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Data Collection:

- ❖ 1 LS Cycle
- ❖ 9 Meetings (6 months)
- ❖ 1 Lesson
- ❖ 1 Debriefing

- ❖ Survey (initial & final)
 - ❖ => cross-check with meeting recordings

- ❖ Qualitative analysis: according to Miles et al (2014)



Preliminary Results: questionnaire

❖ Q1: What is your definition of LS?

- ❖ design a 'good' lesson, think for yourself and learn a lot about the subject discussed
- ❖ reflection on a teaching sequence, take into account as many parameters as possible

❖ Q2: What is your definition of LS?

- ❖ a study of student learning
- ❖ preparation of a lesson, identification of learning objectives, definition of student learning steps

❖ Q1: Expectations from Facilitators

- ❖ coaching, guiding
- ❖ refocusing on the fundamentals of teaching (assessment, differentiation, obj.) that can be lost sight of in the heat of the moment

❖ Q2: Expectations from Facilitators

- ❖ I don't know how to say it, it oriented my thoughts 'in the shower',... But I think that this time of reflection is the most important
- ❖ Allow the group to question itself and take into account the students, find some confidence in students' abilities



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Preliminary Results: questionnaire

❖ Initial Questionnaire

- ❖ Due to prior LS experience it was expected that 50% of the teachers would have had a clear idea of the LS process and the role of facilitators during LS (actual results - 0% in both cases)
- ❖ Results show that teachers expect reflection, guidance, advice and analysis from the facilitator
- ❖ Teachers show an attitude equivalent to what they assume in all in-service training (i.e. passivity to the process, they expect to be given knowledge, showed a lack of autonomy of thought)

❖ Final Questionnaire

- ❖ Teachers are more closely analysing the role of facilitators (i.e. facilitators are a support, not a director)
- ❖ Teachers analyse more closely the effects of the LS on their "gaps" (i.e. more independent thought)
- ❖ Teachers analyse more closely the effects of the LS on their professional practices (i.e. thinking more of pupil needs)



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Conclusions:

- ❖ During an LS cycle facilitated through learner-centered questions, teachers improve:
 - ❖ Their metacognition
 - ❖ Their reflective practice
 - ❖ Their focus on student needs



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Conclusions:

❖ Next cycle 2019-2020

- ❖ Re-plan a learner-centered facilitation with a new group
- ❖ Improve and complete data collection

1. Adding DASTT-C and TSC

1. Hoznour, Grigioni Baur, Didier, 2019. **How to Represent Thought Through Drawing: a Study of the DASTT-C in Switzerland - a Work in Progress**, Manuscript submitted
2. Morago & Grigioni-Baur(Wals 2017)
3. Hoznour & Grigioni Baur **LS as a tool for developing reflective thinking in science pre-service teachers**, Wals2019

2. Adding a case survey on preconceptions about lesson planning

3. If necessary adding a demonstration lesson (Grigioni Baur & Morago, Wals 2017)

