OBSERVATION PROTOCOL AS A PROFESSIONAL DEVELOPMENT TOOL FOR IN-SERVICE TEACHERS

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Teacher training and its influence on student practice and learning is a priority in Mathematics Education research (Bakker et al., 2021). Classroom observation of teaching processes can influence in the quality of instruction (Bostic et al., 2021). Several instruments have been developed for classroom observation in order to improve teaching practices (CLASS – Classroom Assessment Scoring System, MQI – Mathematical Quality of Instruction, Promate, among others). In this work, we study how some in-service primary and secondary school teachers understand and implement in their classess a training about non-routine mathematics problems, look for strengths and weakness of the training, by the analysis of their discussions.

We made an interpretive analysis of the dialogues developed by ten teachers throughout four video-recorded training sessions: three sessions before implementation in the classroom, and one session afterwards. Teachers were trained about a protocol for classroom observation, which is centered in math problem solving, focusing in four dimensions: mathematical strategies and representations, mathematical thinking, mathematical productions, and mathematical learning through problem solving. We analyse the discussions during the observation protocol develop and how teachers use it to reflect what happens in the classroom.

Results show that the observation protocol allowed the teachers to observe and reflect on aspects developed in the training, and some absences or weakness. On the other hand, some teachers said that they made some adjustments to their practice trying to follow the protocol used. Therefore, the observation protocol is a powerfull tool for reflecting and improving teaching practices.

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References

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