

**A SET OF INSTRUMENTS TO INVESTIGATE THE PROFESSIONAL
PRACTICE OF MATHEMATICS TEACHERS: LIMITS AND
POSSIBILITIES**

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The purpose of this poster is to present and discuss a set of protocols and research instruments developed based on the Model of Semantic Fields (LINS, 2001, 2006) with aimed at probing professional practices of mathematics teachers, including lesson preparation. This set of instruments was shown to be reliable in Linardi (2006), as support for investigating the impact of previous mathematical preparation, on the actual professional practice.

DESIGN, DEVELOPMENT AND USE OF A SET OF RESEARCH TOOLS

The initial training of mathematics teachers to work in Brazilian secondary education is offered at college level, in full degree courses, average duration of four years. In general, courses' curricula are characterized by offering mathematical and pedagogical disciplines (curriculum 3 + 1 or, recently, 2 + 2). The key question of how the initial training impact in professional practice math teachers remained open at the beginning of this century (Wilson et al, 2001). Sigma-t research group led by Romulo Campos Lins sought to answer this question through Linardi is research (2006) that aimed at eliciting the impact of mathematics preparation on the professional practices of math teachers. We deliberately want to avoid on approach that depended on a large load of observation in the teacher's classrooms, in order to offer, instead, an approach that could be reliably used by teacher educators. For this, a set of protocols and research tools were developed, based on theoretical notions of MSF (Lins, 2001, 2006). In this poster, we present the process of design and development of this toolkit, discussing its limits and possibilities of use for: (1) informing decision-making and choice of actions by math teacher educators without resorting to ethnographic approaches and (2) suggesting that research on the the impact of the mathematical preparation of teachers on their actual professional practice must take into account not only the training received and the analysis of student performance, but also *a study of how teachers organize their professional practice and why.*

References

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