

## TEACHERS' PRATICES AND NUMBER SENSE DEVELOPMENT IN ELEMENTARY SCHOOL

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*In the context of a collaborative setting it was carried out a study on primary teachers' practices when teaching the topic Number and Operations. This Poster presents preliminary results of two case studies, underling teachers' decisions and the challenges they face in the classroom.*

In Portugal, the official guidelines for the teaching and learning Numbers and Operations are going through significant changes. Number sense development has been emphasized, as well as new perspectives about algorithms. These ideas challenge primary teachers' practices, quite often, since they have to develop different approaches to number and operations. To achieve these curricular goals it is important that teachers reflect on the nature of the tasks they propose, and on their potentialities to develop student's understanding, and how to orchestrate whole-class discussions (Stein, Smith, Henningsen & Silver, 2009).

The first author of this proposal conducted a study in the context of collaborative setting that involved two primary teachers. This study, adopts a case study design, and focus on how teachers plan and conduct lessons, and how they construct and implement numerical tasks having as background the idea of hypothetical learning trajectories (Simon, 1995).

In this Poster we will present preliminary results from the two case studies, focusing on: (1) teachers' decisions when they prepare hypothetical learning trajectories, and (2) the challenges they face in the classroom when they propose the numerical tasks to students. The information will be presented in a graphical format including schemas to summarize the learning trajectories and the words that teachers used to explain their decisions and the challenges they faced.

### References

- Simon, M. A. (1995). Reconstructing mathematics pedagogy from a constructivist perspective. *Journal for Research in Mathematics Education*, 26(2), 114-145.
- Stein, M. K., Smith, M. S., Henningsen, M. A., & Silver, E. A. (2009). *Implementing standards-based mathematics instruction: a casebook for professional development*. New York: Teachers College.