

Inquiry-Based Mathematics Teaching: The Case of Célia

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Abstract This chapter discusses the instructional practice of a primary school teacher. It is based on a framework that we developed in the project “Professional Practices of Mathematics Teachers”, which relates the teacher’s intentions to her actions in an inquiry-based mathematics classroom. The framework covers the promotion of mathematics learning as well as the class management. It details the instructional actions of the teacher in terms of the launching of the mathematical task to the students, the support of the students’ work, the orchestration of the discussion of the task and the systematization of the mathematical learning process.

Introduction

The curriculum transformations that occurred in several countries have inspired many teachers to seek for more-demanding learning objectives to integrate into their practice. Teachers aim for classrooms where students are encouraged to perform challenging tasks such as to communicate, to question, to reflect and to collaborate (Chapman and Heater 2010). Denominated as “inquiry-based teaching”, this practice quite often poses significant and diverse challenges to teachers, as reported by the research (Cengiz et al. 2011; Franke et al. 2007; Oliveira 2009). However, there has been an evolution in how this practice is understood (Stein et al.

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