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**The study of a scenario and its implementation in the classes of two different teachers. Comparison of in-class events and the effects on the work of students in exams.**

Vandebrouck, Fabrice (ed.), Mathematics classrooms. Students' activities and teachers' practices. Rotterdam: Sense Publishers (ISBN 978-94-6209-279-2/pbk; 978-94-6209-280-8/hbk; 978-94-6209-281-5/ebook). 151-166 (2013).

Introduction: We compare the implementation of a same teaching scenario about orthogonal symmetry by two experienced teachers (we will name them Martine and Denis in what follows) in their respective grade six classes, Denis being a teacher in an education action zone. The study we present here fits into the general theoretical framework exposed at the beginning of this book. Our specific aim is to contribute to the study of regularities and variability of practices between teachers, as well as to the one regarding the relationship between teaching practices and student learning. We also try to link these elements with the logic underlying the teachers' practices from traces that we perceive in the analyses. We begin by specifying the methodological elements that we have retained for our study. Next, we present the characteristics of orthogonal symmetry that we have retained for the study of the scenario, before we present the latter. We then compare the events in the classrooms of Denis and Martine, during the implementation of this scenario. Analyzing student works in exams and linking them to the analysis of the class activities allows us to explore the effects of the practices on the learning of students.

*Classification:* C70 C30

*Keywords:* teachers' practice; teaching-learning process; classroom events; students' learning; achievement; effects