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Stability of practices: what 8th and 9th grade students with the same teacher do during a geometry class period?

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). 91-116 (2013).

From the text: We will present a comparative study examining excerpts from two geometry classes taught by the same teacher. The classes involve students in two different grades at the same junior high school. The first class contains 8th graders (quatrième in France, students age 13–14) and the second 9th graders (troisième, age 14–15). The study focuses on ordinary teaching practices at a relatively privileged establishment. The class periods we will examine cover the first non-self-evident exercises given to students after lessons (in the previous class period) on two of the most important theorems studied in junior high: The Pythagorean theorem (8th grade), and Thales' intercept theorem (9th grade). In both cases, these exercises are given to students as in-class problems, and follow the in-class correction of a simpler exercise that was given as homework. Our goal is to make progress on two research topics. The first concerns teaching practices, their stability for a given teacher, and, more specifically, the identification of intra-personal regularities, or "practice invariants." To understand these invariants, imagine if we were to enter another class taught by the same teacher. What, beyond personal characteristics (voice, gestures, etc.), could tell us that this was the same teacher? The second topic, which we will touch upon only briefly, is that of the ultimate consequences of these invariants on students' activities.

Classification: C73 G43 C53
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