

CHALLENGING YOU - STATISTICS LEARNING IN PEER INTERACTION

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During many years Maths Portuguese teachers believed that computation was a most relevant issue when they were teaching statistics. The tasks they proposed to their students were what we may call “traditional” as they were a way of practising some computations related to statistics: means, standard deviation, etc. When pupils learn statistics within such approach there are some typical errors we find as they mechanize procedures that they do not always understand and so they tend to use formulas without asking themselves what they are really doing. In the last years a deep educational reform took place and one of the main concerns was to implement more active practices and innovating ways of teaching. The educational goals were defined no longer as merely related to contents but also to abilities and attitudes and values. Statistics are now part of the curricula since the 5th grade and teachers discovered that they are quite appreciated by pupils.

In the last three school years we have been doing a research-action project in order to implement peer interactions in Maths classes. We follow classes from the 5th to the 11th grade, in five different schools, from rural and urban environment. We work both with teachers with a long teaching experience and with trainees. In this project we had to establish a new didactic contract and to promote pupils’ autonomy and participation. We adapted and constructed innovative statistical tasks and we taped some of the interactions in order to analyze them deeply and to understand the role of those interactions in the apprehension of statistical knowledge and in the acquisition of new competencies. The analysis of some parts of these interactions illustrate the facilitating role they play in pupils’ statistical performances and in their school achievement.