PEER INTERACTION IN AN UNUSUAL STATISTICAL TASK

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Since the first introductory studies by Doise, Mugny and Perret-Clermont (1975, 1976) social interaction has been pointed out as one of the main facilitator factors for pupils’ performances and for the implementation of their cognitive and learning progresses. Peer interaction is one of the modalities of social interaction that has been more extensively studied in the last decades. When they interact pupils are able to find out new solving strategies and to learn from the centration/descentration process they must be able to do in order to understand and discuss the other one’s points of view.

This research is part of a wider project which main goal is to study the role of peer interaction in knowledge apprehension and skills acquisition and to promote peer interactions in Maths class. The main goals are to study the role of the task in their performance and the learning process of the pupils. The sample is composed by 72 pupils from a secondary school in Lisbon, attending three classes from the 7th grade. They had to solve an unusual task (described as not typical by teachers) related to their curriculum (Statistics). We were concerned with students’ understanding of data handling. The students worked in dyads, outside the classroom, in order to tape all their interactions for future transcription and deep content analysis.

The analysis of protocols showed a great variety of solving strategies and different performance levels. A deep analysis of the interactions made us understand how fruitful they can be in order to promote pupils’ socio-cognitive development and statistical knowledge. These results made us believe that the study of the tasks, instructions and solving strategies are essential to the comprehension of the way pupils apprehend their knowledge and acquire mathematical skills.