

COLOURFUL MATHS: FROM FICTION TO REALITY...

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Alike many other European countries, Portugal has a growing number of ethnic and foreigner communities that are impelled to enter our educational system. However in a school that is required to be more and more inclusive, it is not possible to ignore the *leading actors* of this *movie* set in a small – though not that small – scenario that constitutes Mathematics' Education.

The nature of the tasks proposed and the didactic contract assume an extremely relevant role in pupils' performances which can be crucial to the inclusion process (César, 1998). The social marking of tasks constitute an advantage, allowing them to become truly significant to students, motivating their active participation, namely when they are rooted in their own culture (Favilli, Oliveras and César, 2003).

This study is included in *Interaction and Knowledge* project, whose main goal is to understand and promote peer interactions in classrooms. This part of the study was based on a hands-on handicraft activity – the Batiks. Basically, Batiks is a pure cotton wrap tainted with colours where a drawing is contrasted. So, this activity was also explored in other subjects. During some mathematics classes, students made batiks that were used later on to explore some 8th grade contents, namely proportionality, areas, translations and statistics. These tasks were proposed to 84 students (8th grade) from 4 different classes and schools, working collaboratively for the first time during this school year. Data were collected through participant observation, protocols, interviews, and teachers' and external observers' reports.

The students' engagement in the task, their attitudes, participation and increased interest, were strong affective responses that illuminate the potentialities of collaborative work and of these handicraft activity. Even some of the pupils that still experienced low achievement in mathematics were legitimate participants and their knowledge appropriation was better in the contents related to this task. The analysis of some video recording illustrates these phenomenon and also how inclusive ideals can be put into practice. In a multicultural and heterogeneous society it is urgent to find ways of promoting inclusivity, celebrating and respecting the diversity of *actors* that coexist in this *scenery*.

References

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