

# MATHEMATICS EDUCATION IN MULTICULTURAL CONTEXTS: A CHALLENGE FOR ITALIAN TEACHING STAFF

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Multiculturalism is one of the most significant changes in many school systems. So far, some European countries, including Italy have paid little attention to mathematics education in multicultural contexts. Mathematics teachers in Italian elementary and lower secondary schools have been asking for refresher courses on mathematics education in multicultural contexts because they realize that minority pupils' culture heavily influences the teaching/learning process. It is not only a matter of language: different cultural variables play a significant role in the appropriation of mathematical concepts. In the presentation we discuss some findings from a survey carried out in the Province of Pisa, Tuscany.

The aim of the survey was mainly to uncover the attitude, vocational education and behaviour of teachers in such contexts and to get a collection of comments and remarks about their experiences which could highlight the different variables to be considered when investigating the teaching of mathematics in multicultural contexts. In this paper we refer to the analysis of answers given in the questionnaires and comments made during the interviews by 108 lower secondary school teachers. The (not so) hidden aim of the questionnaire was to promote in the teachers – step by step, item by item – the awareness of the need for different didactical methodologies, even for a subject such as mathematics (this still sounds strange to most Italian teachers), and, therefore, to ease their search for possible methodological and curricular changes in view of a more effective teaching to minority pupils.

We can point out that, mainly through the questionnaire and the interviews, almost all teachers have had to acknowledge the peculiarity of the new didactical condition, become aware of the partial effectiveness of the activities carried on to tackle that condition; have come to feel it necessary to get a specific in-service training and adequate didactical resources; realized that there is a link, requiring careful investigation, between mathematics education and the culture of foreign pupils.

As for the difficulties met by their minority pupils, teachers mainly refer to the difficulties originated by the foreign pupils' poor knowledge of the discipline and by the language, which are proved both by their poor comprehension of the Italian and an inadequate use of the Italian in mathematics.

## References:

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