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<u>Cultural diversity: how can it increase the complexity of teaching</u> <u>mathematics in multicultural classes? The case of Chinese students</u>

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<u>Abstract</u>

Rethinking teacher training means to study the problematic that today School puts in evidence in the UE context more than in the past. One of these is certainly the multiethnicity that teachers and students face every day in their respective didactical practice. The problematic that can arise from the simultaneous presence in classroom of students of subcultures, different from the main one, are linked to students who speak different languages, students that often manifest different didactical needs, students that reveal cognitive styles that are distant fro the typical epistemology of the classroom, etc. These are just some of the situations "feared" by teachers to develop an effectively didactic work for all students.

The scientific problematic that is hidden behind the training of mathematics teachers in an intercultural prospective has clearly very large proportions involving aspects related to mathematical knowledge, teaching practices, pedagogical aspect and political and cultural ones. The article, after a construction of a general framework of the discussed problematic, examining specifically the growing presence of Chinese students in UE classes, presents, from a historical and linguistic cultural approaches, a possible "comparison" between East (China, Korea and Japan) and West cultures. Some paradigmatic experimental evidence of analogies and differences between the cognitive styles of Chinese and Italian students in mathematics problem solving are also presented as paradigmatic examples to show the complexity of teaching mathematics in multicultural classroom and to put in evidence the important to rethink teacher training according to the different cultural reality of classroom.