

13th International Congress on Mathematical Education  
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### **HUMOR IN MATHEMATICS TEACHING**

Luís Menezes\*, António Ribeiro\*, Ana P. Martins\*, Helena Gomes\*, Veronique Delplancq\*, João P. Balula\*, Isabel A. Matos\*, Ana M. Oliveira\*, Floriano Viseu\*\*, Pablo Flores\*\*\*

(\* Higher School of Education Viseu (PT) (\*\*) University of Minho (PT) (\*\*\*) University of Granada (SP)

*We are starting a research project with a strong curriculum development component, which is focused on the use of humor in mathematics teaching. We start by assessing the situation in Portugal (practices of primary teachers and textbooks), and then designing and evaluating proposals for the teaching of mathematics.*

### **HUMOR: OUR VIEW FOR MATHEMATICS TEACHING**

***Our assumptions and context.*** Process humor and be able to produce is clearly a sign of intelligence, revealing, when done well, complex reasoning. Humor has an important social role, assuming as a cognitive experience that as well as creating a sense of well-being, predisposes people to work and can improve the productivity of that work. Mathematics is a discipline in which the reasoning occupies a very prominent place, both as a science as a school area. At the same time, students' interest for mathematics is not always the same and some have initially not very favorable feelings (Toh, 2009; Wanzer, Frymier & Irwin, 2010).

Recent curriculum changes to the teaching of mathematics have been, in most countries of the world, showing the need for students to develop skills of critical nature, such as communication, thinking and problem solving along with the acquisition of mathematical knowledge. Also in Portugal, it is claimed the importance of promoting learning that combine the construction of mathematical knowledge with its use, when performing mathematical tasks and communicating mathematical ideas and mathematical reasoning. In the early years of schooling, corresponding to primary education in many countries, the use of texts such as short stories or comics, from which we can develop challenging mathematical tasks, is reported in the literature as having potential to promote learning specified in curricular documents (Wanzer, Frymier., & Irwin, 2010). In particular, some texts focus on mathematical topics in a humorous way and to be understood, students must develop their mathematical competence. The development of mathematical tasks from stories and other humorous presents big challenges to teachers (Flores & Moreno, 2011).

***Our questions.*** In this context, we put some questions: Primary teachers use in their classes tasks or situations that present, in a humorous way, mathematical ideas? What resources do they use? Also: How to select, adapt or build texts and tasks which have, in a humorous way, mathematical ideas with didactic potential for education in the early years of schooling? If the resources for this purpose have been produced and if teachers have been sensitized for their use, are they able to integrate them in their classes?

***Our intentions.*** This research project seeks to address these questions, focused on: (i) assessment of teachers' practices and underlying knowledge, resources available for the use of texts with mathematical ideas presented in a humorous way; (ii) selection, adaptation and construction of mathematical tasks from texts that present, in a humorous way, mathematical ideas with didactic potential in education for the early years of schooling; and (iii) integration and use, by primary school teachers, of texts that present, in a humorous way, contexts for the teaching of mathematics. So, the project is organized into three tasks and as a methodological design that combines qualitative elements with quantitative elements, the first one prevailing.

### **References**

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