

Mathematicians and Math Educators



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Alicia Dickenstein

IMU Vice-President and Liaison person IMU-ICMI

What we have in common

- ***Love for mathematics***
- ***Social responsibility to “mathematize” the society***

“Mathematize”, develop “math literacy”

- **Mathematics is a human activity (and so, very democratic: we all have the same circuits in our brains)**
- **It provides a rigorous structure to common sense –so as not to be wrong (J. Ellenberg)... “Knowing mathematics is like wearing a pair of X-ray glasses that reveal hidden structures underneath the messy and chaotic surface of the world”.**

“Mathematize”, develop “math literacy”

- **EDITORIAL in last ICMI Newsletter – by A. ARCAVI**
“Mathematics should be taught to be fully integrated by the learner, which means that he [or she] should enjoy it and know how to use it if need be. ... Mathematics should not be taught to fit a minority, but to everybody, and they should learn, not only mathematics but also what to do with mathematics. This ... [means] creating ... the attitude of discovering mathematics wherever it applies.”
- Mathematics for all, the enjoyment of learning it and knowing how to use it wisely seems to be at the core of the everlasting, timeless and consensual aims of mathematics education worldwide. These wise thoughts, so relevant today, were eloquently expressed by **Hans Freudenthal** in his inaugural address to ICME1, held in Lyon, France, on August 24-31, 1969 – exactly 47 years and 11 months before ICME13 in Hamburg.

What might (but should not) set us apart

- **Lack of knowledge/understanding of the other discipline (mathematics education vs mathematics), which might lead to lack of trust/recognition.**
 - **“Problem” has a different meaning, measurement of original contributions is different, etc.**
- **Transformation of disciplinary knowledge to knowledge as it is to be taught + Distance between the taught and the new, as in no other living science (J. P. Kahane, '90)**

A main challenge

We expect teachers to stimulate creativity in our children and young people but, in general, their own creativity is not stimulated...

A harmonious cooperation: IMU and ICMI

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A main challenge

How to collect and share/disseminate useful information, facing the diversity of languages (and resources)?

Summarizing

- We have different roles (but not disjoint)
- There is room for all of us!
- Let's work/collaborate up-bottom and bottom-up!

Thank you for your attention!

