## MEI 7

# Mathematical Literacy, throughout and beyond education



7th Conference on Research in Mathematics Education in Ireland

October 11th and 12th, 2019 Institute of Education, DCU, Dublin

http://www.dcu.ie/IoE/MEI

### First Announcement

### Conference Theme

Our conference theme *Mathematical Literacy, throughout and beyond education* aims to foreground learners' engagement with mathematics at all stages of the education system, and their development of mathematical proficiency within and beyond formal classroom settings.

Mathematical literacy encompasses a learner's proficiency to engage fluently with mathematical concepts, and to apply mathematical thinking in non-routine and novel situations. Mathematically literate children and adults recognise the mathematics in a situation, and understand how to mathematise a scenario in order to problem solve. Equally, mathematical literacy includes the capacity to interpret and analyse scenarios presented through mathematics. Mathematically literate individuals are thus less vulnerable to being convinced by inaccurate interpretations of data and mathematics. A key aspect of mathematical literacy is fluency in expressing one's mathematical thinking clearly in a variety of contexts.

The notion of what it means to be mathematically literate is to a large extent dependent on the context in which mathematics is used. Some consider performance in examinations to be a determinant of level of mathematical literacy. However, successfully completing daily activities and routines such as traveling and cooking all rely on fundamental mathematical literacy, for example, knowledge of distance, time, weight and temperature. For educators, mathematical literacy encompases far more than an ability to do mathematics oneself, but also to be able to ascertain where the learner is at in their mathematical understanding and to scaffold and extend that learning.

The education system in Ireland plays a key role in developing the mathematical literacy of all learners, to support full engagement with 21st century society. Central to such active citizenship is the propensity to apply mathematical concepts beyond the walls of the various classrooms where mathematics is taught, early childhood settings, primary, secondary and third levels. At MEI7 we will engage in dialogue about a broad variety of current mathematical research, and collectively we will seek to solidify and collaboratively progress the research field of mathematics.

### Keynotes and Symposium

We are delighted to inform you of the following speakers who will deliver keynote addresses at MEI 7:

- Dr. Paola Valero, Stockholm University https://www.su.se/english/profiles/pvale-1.261854
- Dr. Natthapoj Vincent Trakulphadetkrai, University of Reading, (<u>http://www.mathsthroughstories.org/</u>)

We will also host a **Symposium on Efficacy Beliefs of Teachers of Mathematics**, welcoming Dr Mark Morgan, who has conducted extensive research in the areas of teacher motivation and job satisfaction and Dr Siún Nic Mhuirí, who will present results from an Irish study with student teachers.

Additional information will be posted to the website as it becomes available.

### Registration and Paper Submission

#### REGISTRATIONS

All registrations for MEI7 will be carried out online using the ConfTool conference registration system. Registration will close for all delegates on October 1, 2019. Authors of papers for the proceedings must have registered fully by June 9, 2019.

#### **SUBMISSION OF PAPERS**

We invite the submission of research papers in the field of mathematics education. Papers must be submitted on the MEI7 template, which is available through the website, <u>http://www.dcu.ie/IoE/MEI</u>. Submissions will be through ConfTool. All papers will be blind peer-reviewed by two delegates, and decisions will be shared with authors by the end of May 2019. **Submission of a paper includes a commitment to review one or two papers.** Please see the website for further details on the review process. Some accepted papers will require revisions, and final submission of revised papers will be required by the June 9, 2019.

For accepted papers to be included in the proceedings, the presenting author is required to make a full registration by June 9, 2019 at the latest.

#### **REGISTRATION FEES**

The total registration fee is €90. A concessionary fee of €45 is available for full-time students, retired colleagues or delegates who are not currently employed.

The registration fee includes attendance at the conference plus lunches and teas/coffees. At registration you will also be asked to select parking for 0/1/2 days on the St Patrick's campus, and attendance at the conference dinner. It is very important to note that **parking on the St Patrick's campus is very limited.** The conference will take place during the teaching term and we strongly advise using public transport. Local information will be provided through the website.

#### **Conference Dinner**

On the evening of Friday, October 11, we will gather in Il Corvo to mark the conference socially.