



# Enjoy mathematics

The Cyprus Mathematical Society gives a new meaning to learning the subject

## Gregoris Makrides



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Many pupils as well as parents unfortunately consider mathematics as a difficult and boring subject. Instead of studying mathematics (and other subjects) many pupils prefer to spend most of their time watching TV programmes or playing electronic games or exchanging messages, pictures, videos, etc on their mobile phones. One way to bring pupils back to the 'playing field' of education is to use similar tools (weapons) like the 'opponents', that is to communicate the learning of mathematics in a non-traditional way, like a game though theatre play, competitions similar to X-Factor and other.

This project (LE-MATH: Learning Mathematics through new communication factors, funded by the European Commission) intends to develop new methodologies in learning and teaching mathematics to pupils of age nine to 18, which can be used in any school environment. These include:

**A. MATHeatre:** Teaching and learning mathematics through math theatre activities

**B. MATH-Factor:** Teaching and learning mathematics through mathematics communication activities

Method A includes the development of specimen teaching material and methodology for teaching mathematics to

nine to 18 year old pupils using specially designed theatre scenarios with mathematics as main topic.

**Method B:** In the century of communications, social media, games, TV-shows etc, we need to bring to the classroom similar activities and use them as methods and tools for improving the learning and to increase the interest of pupils for becoming more active and creative and be actively involved in the learning process. It is known from research that learning through reading is absorbed and sustained only at 10 per cent but experiential learning and learning through explaining mathematics could be an absorbed and sustained knowledge of up to 90 per cent.

The main activities will be

## MATH Theatre Communication Method (A)

- Collection and analysis of the existing related materials and activities for the ages of nine to 18, in the partner countries of the project for the Method A above
- Design and development of Math-Theatre methodology and sample scenarios in the form of a guide-book
- Development of the platform for accepting video plays and for online assessment
- Implementation of a test-

ing and evaluation experiment for MATHeatre in the form of a European Competition

- Design elements of a course on how to train teachers in applying the new method

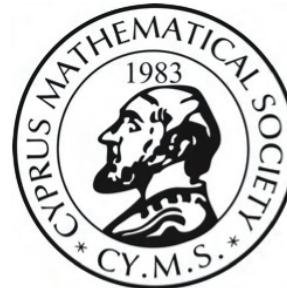
## MATH-Factor Communication Method (B)

- Collection and analysis of the existing related materials and activities for the ages of nine to 18, in the partner countries of the project for the Method B above
- Design and development of the Math-Factor Communication guidelines
- Development of the platform for accepting video participation and for online assessment
- Implementation of a testing and evaluation experiment for Math-Factor in the form of a European Competition
- Design elements of a course on how to train teachers in applying the new method

The main outcomes are:

- i. A dual guide book for the two methods produced in the nine languages
- ii. The development of a training course on how to apply the new methods of communicating mathematics
- iii. Organisation of a European Mathematics Theatre Competition as a pilot testing
- iv. Organisation of the European MATH-Factor Competition as a pilot testing.
- v. The joint on-line electronic platform for the EU Mathematics Theatre and the MATH-Factor.

The project activities contribute to the EU Education and Training 2020 as it is en-



hancing creativity and innovation among youth. It also contributes to the benchmark for decreasing achievers in basic skills (mathematics and science) to 15 per cent. It promotes the European Cooperation on schools in the area of competences by supporting the key competence for mathematics.

Running a competition at European Level will contribute to the increase of language learning, communication between European citizens and cultures, cooperation and networking between countries and organisations, circulating ideas, promote understanding and volunteering among Europeans and increase mobility. Moreover bringing European pupils together, ages nine to 18, will contribute to cultural understanding and promotion of understanding of diversity among Europeans from early ages. The competitions will be open internationally so any pupil from any country at the age of nine-18 will be eligible to participate.

The project consortium consists of 13 organisations from 10 different European countries. It should be noted that the final European and International competition will take place in Cyprus during late spring of 2014.

([www.le-math.eu](http://www.le-math.eu) (to be active in December 2012), [www.euromath.org](http://www.euromath.org), [www.cms.org.cy](http://www.cms.org.cy))

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