

2nd PANHELLENIC CONGRESS

13 έως 15 Νοεμβρίου 2015
13 to 15 November 2015



ERATOSTHENES



eTwinning Greek Team Meeting



The project



This project is the 10th in the series of Eratosthenes eTwinning projects "measuring the circumference of the Earth". It is based on the experience of Eratosthenes, curator of the library of Alexandria, that 2200 years ago, calculated in a simple way, the circumference of the Earth by comparing two shadows.

The team

8 teachers participated to this meeting in Patras from 13 to 15 November 2015

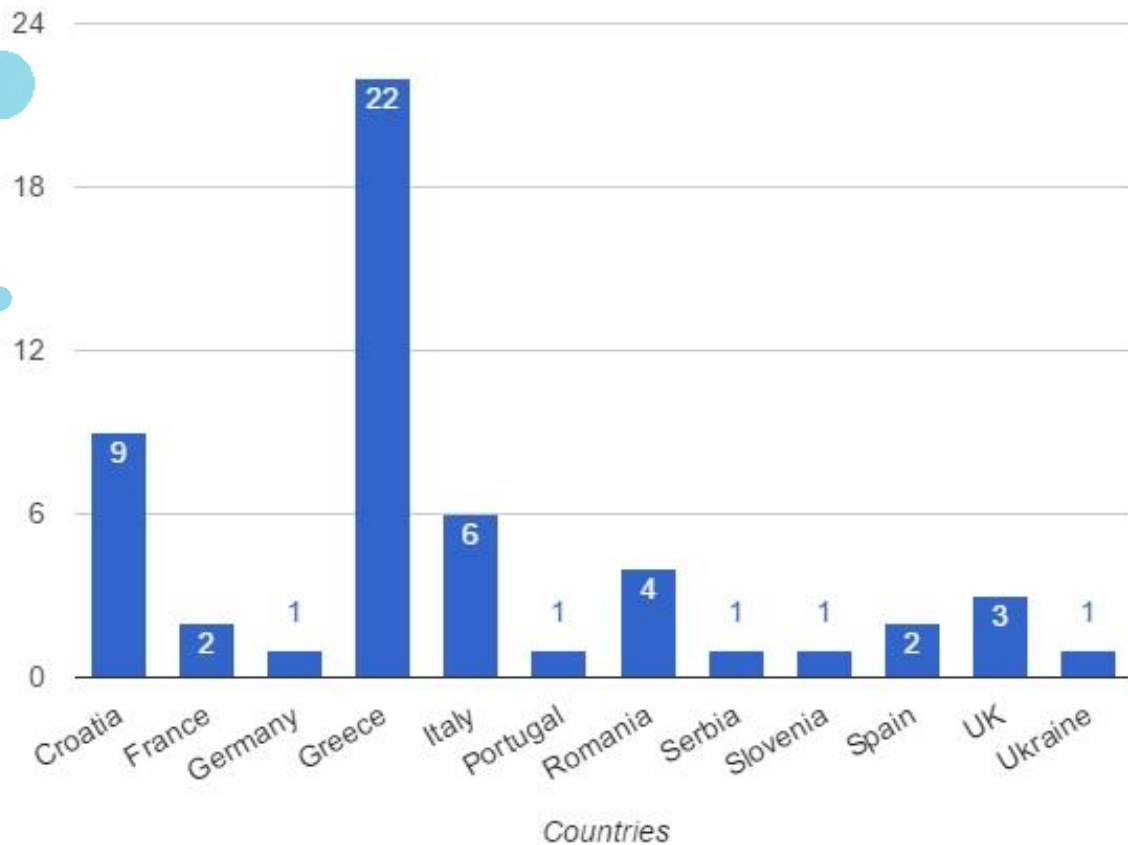


Bill Kostopoulos (Athens-Protypo Peiramatiko Gymnasio Agion Anargyron)
Eleni Hartzavalou (Ioannina-Collège Pilote Expérimental Zosimaias Scholis)
Petros Efstathiou (Athens-3rd Junior High School of Ilion)
Athanasia Zafeiropoulou (Petrroupoli-4th Junior High School of Petrroupoli)
Aspasia Dilalou (Aigio-1st High School of Aigio)
Stavroula Lada (Chania-Primary School DDMN Hellenic Navy Logistic Command)
Ntardas Thanasis (Asprogyros-3rd High School of Aspropirgos)
Eric Vayssié (Lafrançaise-Collège Antonin Perbosc)

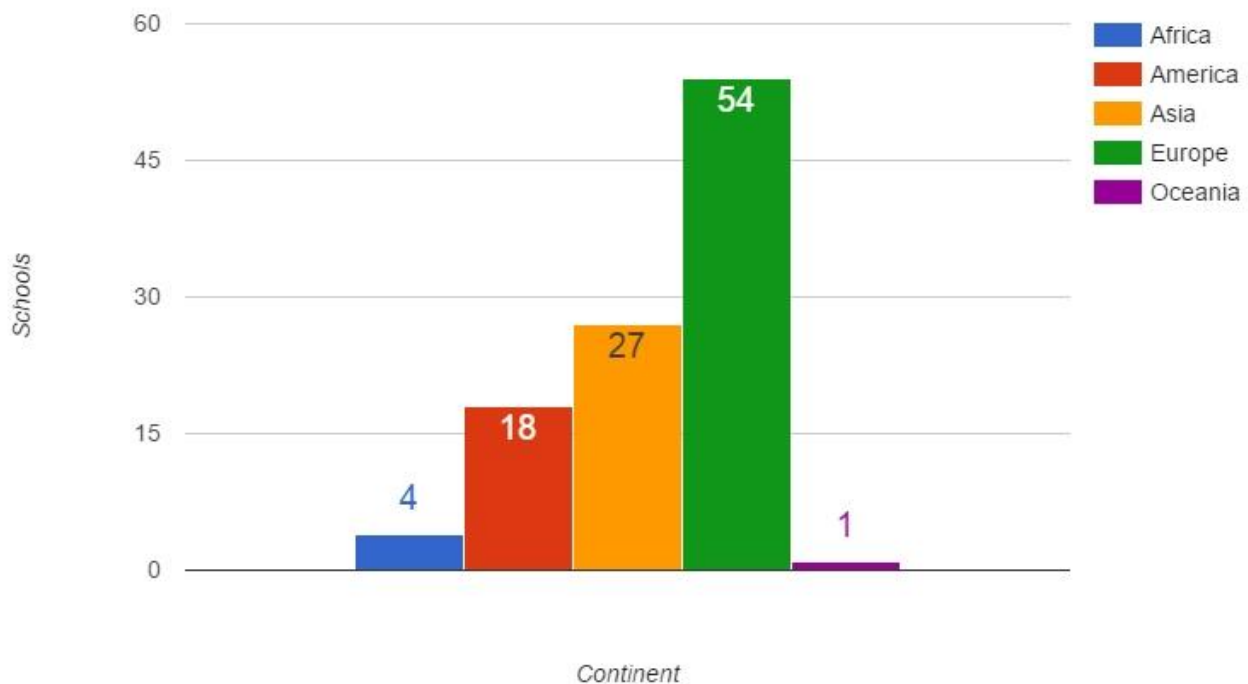
The Greek schools

24 Greek schools participate
to the 2015 project

54 European schools - 12 countries (Jan-Oct 2015)



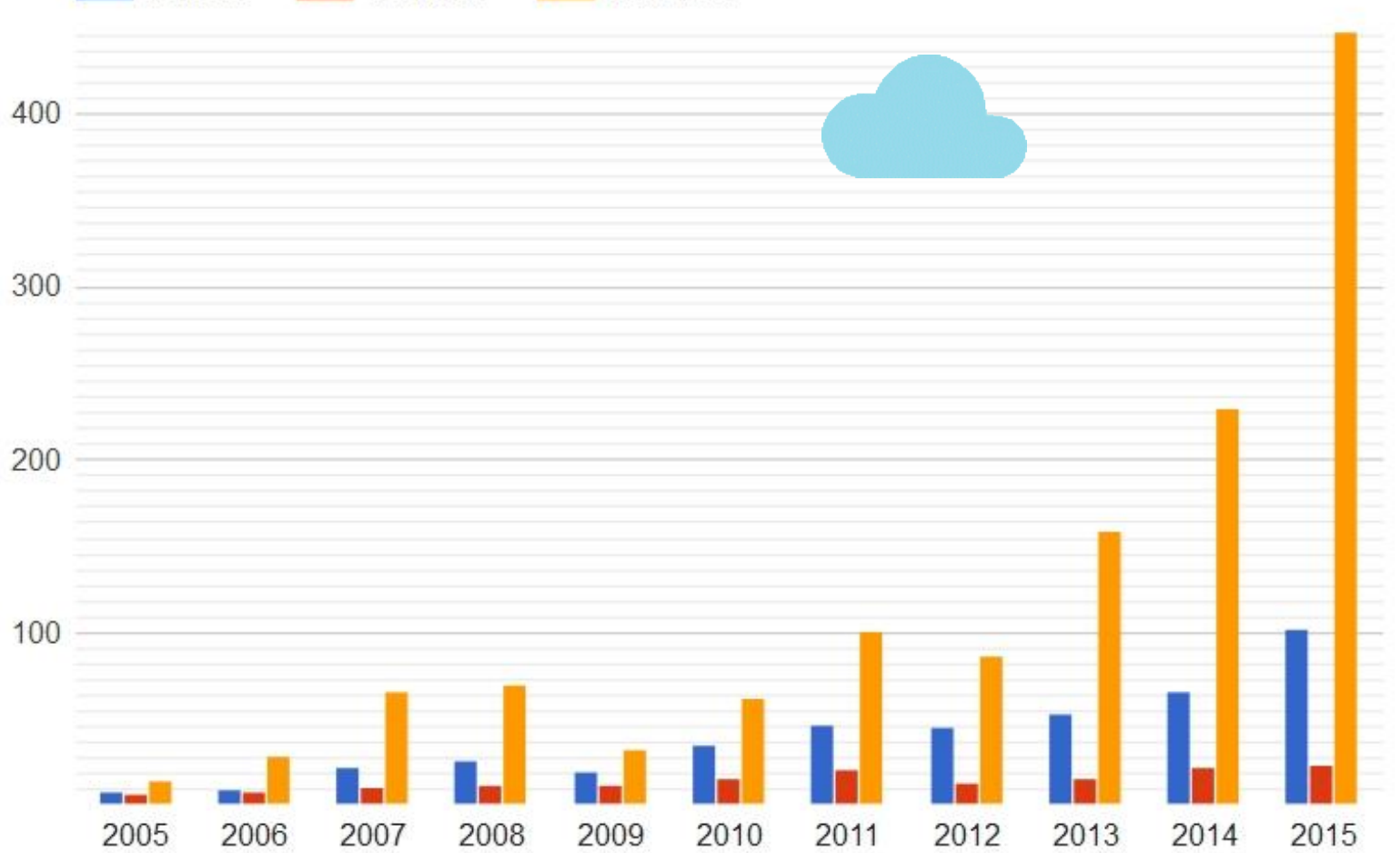
104 Participating schools (Jan-Oct 2015)



5 continents

Eratos 2005 to 2015 (october)

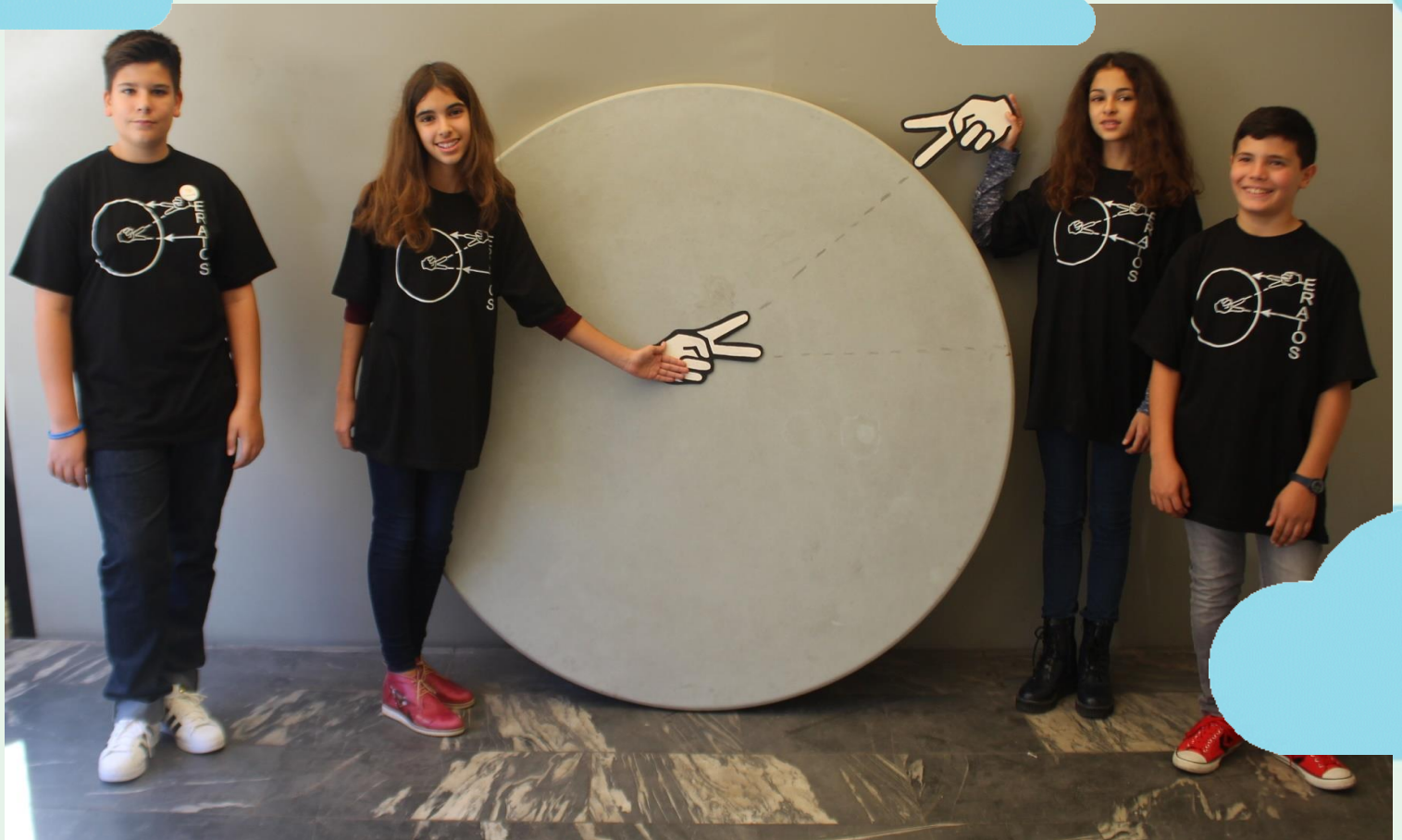
Schools Countries measures



The students



The students



Alkmini Bounta, Stavroula Bounta, Giorgos Stekas
(Peiramatiko Gymnasio Agion Anargyron)

Nikolas Kostopoulos
(Ekpedeftiki Anagennisi)

Geogebra workshop



Geogebra workshop

Drawing the geometric figure,
using Geogebra application



Geogebra interface showing a geometric construction and data table.

Algèbre

- Angle
 - angle1 = 7.2°
 - angle1₂ = 7.2°
 - angle2 = 0°
 - α = 0°
 - β = 7.2°
 - γ = 7.2°
 - δ = 0°
- Conique
 - c: x² + y² = 16
 - h = 0.5
 - p = 12.57
- Demi-droite
 - a: -0.5x + 3.97y = 0
 - e: y = 0.66
 - f: y = 0
 - k: y = 0
 - n: -0.5x + 3.97y = 0
- Droite
 - b: y = 0.66
 - g: y = 0
 - t: x = 0
- Nombre
 - distance = 799.92
 - latitude1 = 30.7
 - latitude2 = 23.5
- Point
 - A = (0, 0)
 - B = (-3.94, 0.66)
 - C = (5.26, 0.66)
 - D = (5.22, 0)
 - E = (-4, 0)
 - F = (-4, 0)
 - G = (4, 0)
 - G' = (3.97, 0.5)
 - G'' = (3.96, 0.66)
 - G₁ = (4, 0)
 - H = (3.94, 0.66)
 - I = (-4, 0)

Graphique

23 september 2015 (Alexandria-EGYPT) Latitude: 30.7°
23 september 2015 (Cancer tropic-) Latitude: 23.5°

7.2° Alexandria
800 km
0° Cancer tropic

circumference = $\frac{360^\circ \times 800 \text{ km}}{7.2^\circ - 0^\circ} = 40000 \text{ km}$

angle	angle1 = 7.2°	angle2 = 0°
city	Alexandria	Cancer tropic
country	EGYPT	
date	23 september 2015	23 september 2015
latitude	latitude1 = 30.7	latitude2 = 23.5

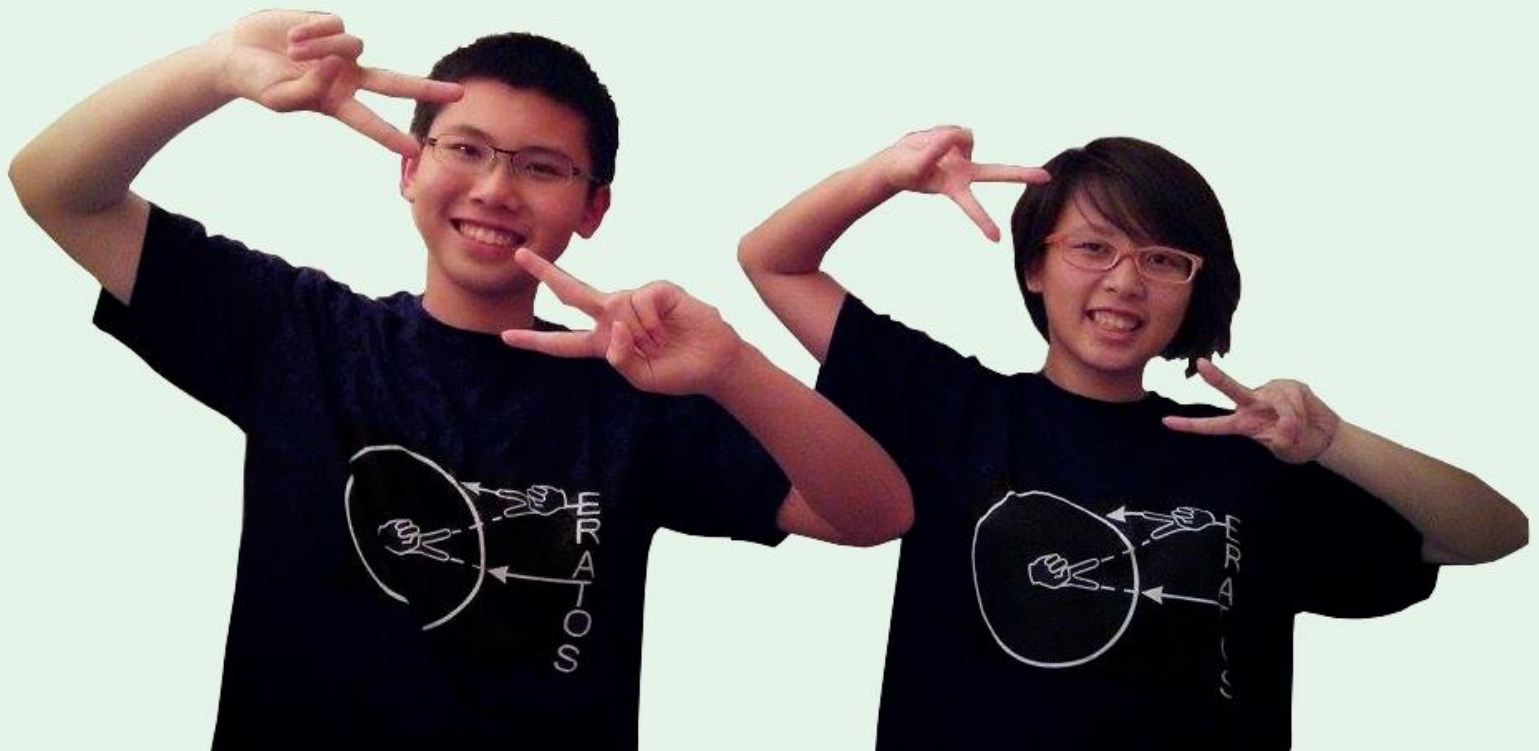
distance = (7.2° - 0°) × 111.1 = 7.2° × 111.1 = 800km

Interdisciplinarity



In Zosimaias Scholis of Ioannina, a pedagogical team of teachers is involved in the project:
Mathematics, Science, ICT, Plastic Arts, Music, Ancient Greek

The logo



On October 28, Ian and Ariel from Taiwan presented the new logo, at the final event of the Global Junior Challenge in Rome