

Abstract

With the aid of LfE program, we managed to equip our school with technological equipment that makes our lives easier, including interactive boards in all classes, a photocopier, a computer lab, and a telescope. Our initiatives opened the school to the local community, with ongoing actions positively impacting society. For the first time, people on our island saw the moon through a telescope.

Keywords:

LfE: Technological school Equipment:
Interactive Whiteboards: School
Community: Telescope / Space
Observation: Local Society

Feel

Feelings about the Symposium:

- **Excitement:** The discovery of new knowledge and the understanding of the mysteries of the universe and Earth.
- **Curiosity:** The desire to learn more and explore further.
- **Admiration:** The feeling of appreciation for the beauty and complexity of the universe and Earth.
- **Surprise:** The emotion of astonishment at the incredible variety and the remarkable nature of celestial bodies and natural phenomena.
- **Love for Knowledge:** The interest and love for the fascinating sciences of astronomy and seismology.

Our students understand the educational inequalities between small islands and large urban centers, grappling with isolation, a sense of inferiority and insecurity. Using the LfE's equipment they try to connect with groups from other places, collaborate, and overcome complexes that result from living in this small and isolated province.

Imagine

Through the LfE's equipment, students learn, imagine, develop abilities and skills, share concerns and plans even remotely and that gives them a sense of belonging.

So, in this symposium, our students, educators, and the local community had the opportunity, taking advantage of the LfE's equipment, to organize this event using projectors for lectures and the telescope for space observation.

We were impressed by the lectures and the new knowledge content; there was excitement when we came into contact with the telescope to observe space through it (some educators experienced such an event for the first time). Also, the interaction and reflection that developed among the educators were remarkable.

Description

The equipment facilitates Internet, technology and Communication lessons (ICT) with all school classes, especially the 3rd grade class, for which this course is considered a prerequisite for the panhellenic exams. Interactive devices in every classroom facilitates each lesson, educators, and students, achieving daily educational and pedagogical goals. Students connect with museums, travel globally, and easily interact with peers from other countries and other schools (school network of Evros and school network of Western Macedonia). Many island entities undertake a lot of actions making use of our school equipment.

As part of our activities with the LfE equipment, our main initiative was the organization of the "**Astronomy and Seismology Symposium**" held on June 28, 2023, with the participation of educators, students, and local community members.

The purpose of this initiative was to connect educators from across the island (namely elementary school, middle school, high school teachers) students as well as citizens of the local community, exposing them to astronomy and seismology.

Educators attended lectures on astronomy and seismology to enrich their knowledge and apply these insights in their teaching, aiming to pass them on to their students.

On a practical level, participants in the symposium engaged with the telescope, learned how to observe the space, and also observed the results of the seismograph available at our school through the SEISMO-LAB program <https://seismolab.gein.noa.gr/plots/RGF1A.php>.

Our expectations from the initiative were as follows:

- **Pedagogical and technical challenges/needs**
 - Challenges in preparing materials for two different scientific fields.
 - Need for adapting materials to the understanding level of participants (either students or educators).
- **Pedagogical innovative aspects**
 - Interconnection of two different scientific fields to enhance understanding.
 - Use of practical examples and activities to reinforce learning.
- **Impact on educators**
 - Increase in knowledge and experience of educators in two different scientific fields.
 - Development of new teaching methods incorporating astronomy and seismology.
- **Impact on students**
 - Increased interest in two different scientific fields.
 - Development of critical thinking and understanding of astronomical and seismological concepts.

The learning objectives of our symposium were:

- **Understanding Concepts:** Participants were expected to comprehend the fundamental concepts of astronomy and seismology.
- **Application of Knowledge:** To apply their knowledge in practical examples and activities.
- **Interdisciplinary Connection:** To understand the relationship between astronomy and seismology and its significance.
- **Critical Thinking:** To develop the ability to question, analyze, and integrate information.
- **Interest and Enthusiasm:** To get encouraged and develop an interest and passion for astronomy and seismology.

The age group of the students ranged from 12 to 17, with the participation of 10 students, educators the from high school, the middle school, and the elementary schools, totaling 15 individuals, and 5 members from the local community.

The presentation was conducted by Mr. Dimitrios Prassopoulos, a Physics teacher, in collaboration with the Directorate of Secondary Education in Evros.

Create

At the Astronomy and Seismology Symposium we organized, the first part consisted of a scientific lecture primarily aimed at educators, followed by the second part of the event (in the evening), which involved observing space through a telescope and included participation from students and local community members.

Educators gained new knowledge, were informed about the latest scientific findings, and acquired new perspectives on astronomy and seismology. Additionally, during this symposium, we examined the seismic data from the school's seismograph (our school has a seismograph through a program in which we participate) and other nearby seismographs. By comparing these seismic data, participants were able to draw conclusions and characterize whether it was an earthquake or simply "noise."

The purpose of this symposium was for the island's educators to act as knowledge multipliers. This means they should be able to convey this knowledge to their students and expand learning opportunities, encouraging active participation and interest of students in these scientific fields. Additionally, they can encourage their colleagues to implement new approaches in teaching and contribute to the continuous improvement of the educational environment.

As a conclusion from the astronomy and seismology symposium, the following observations can be made:

The participation of teachers, students, and the local community reflects enthusiasm and interest in the sciences and education. Participants gained new knowledge and approaches that they can transfer to their environments. The symposium provided tools and ideas for improving teaching for students, enhancing the quality of education.

The participants (educators and the lecturer) collectively agreed that there should be an adaptation of the educational material of the symposium according to school level and class. They proposed presenting specific topics on earthquakes, our safety, information about planets, the sun, etc., to act as multipliers of this new knowledge.

Overall, the symposium provided an opportunity for engagement, learning, and inspiration, enhancing the continuous improvement process in the educational space and the local community.

Share

In our school, we strive to be a source of educational excellence and continuous advancement. As the largest educational institution on the island, our vision is to emerge as a center of innovation and learning that equips students with the necessary skills for the modern world.

Within this vision, we promote a multidimensional educational experience that places students at the center of the learning process. Through active participation in challenges, programs (EPAS, ImagineEU, eTwinning, The Tipping Point, Circular Economy, Robotics), and events, we offer students the opportunity to develop critical thinking, collaboration, and creativity

Local community organizations, in case of need (e.g., the island's police department organizing training for its staff), with the permission of our school, utilize our technological equipment (e.g., interactive projector) and classrooms.

The activities of our school are shared on the official website <https://blogs.sch.gr/lyk-samothr/> and on social media accounts (Instagram, Facebook), and we have an account on YouTube as well <https://www.youtube.com/@GelSamothrakis>.

Link on the portal

<https://www.schoolofthefuture.eu/index.php/el/group/2456/nodes>



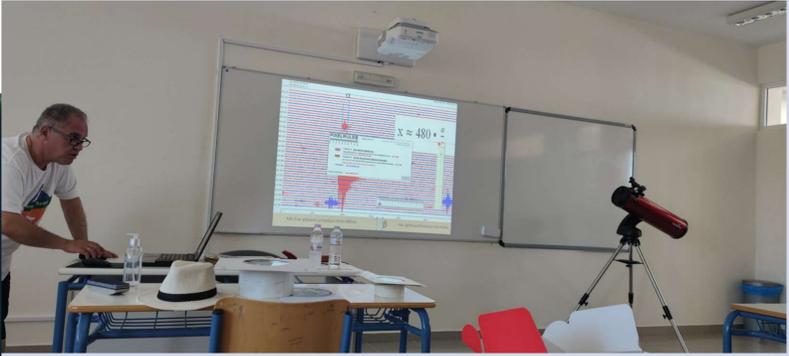
Learning from the Extremes
ΓΕΛ ΣΑΜΟΘΡΑΚΗΣ

ΓΕΛ Σαμοθράκης, 28 Ιουνίου 2023

10.15 - 12.15
Ομιλία: «Seismolab: Σεισμικά κύματα»

<https://seismolab.gein.noa.gr/>

Διοργάνωση: Τμήμα Εκπαιδευτικών Θεμάτων, ΔΔΕ Έβρου
Συνδιοργάνωση: ΓΕΛ Σαμοθράκης



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<https://seismolab.gein.noa.gr/> <https://d-space.gr/>

«Seismolab & D-Space: τα εργαστήρια της φύσης!»
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SEISMO-LAB
ΓΕΩΔΥΝΑΜΙΚΟ ΙΝΣΤΙΤΟΥΤΟ
ΕΘΝΙΚΟ ΑΣΤΕΡΟΣΚΟΠΕΙΟ ΑΘΗΝΩΝ

Discovery Space
ΙΝΣΤΙΤΟΥΤΟ ΑΣΤΡΟΦΥΣΙΚΗΣ
ΙΔΡΥΜΑ ΤΕΧΝΟΛΟΓΙΑΣ ΚΑΙ ΕΡΕΥΝΑΣ

ΕΙΔΕΚ
Εθνικό Ίδρυμα Έρευνας & Καινοτομίας

Διοργάνωση: Τμήμα Εκπαιδευτικών Θεμάτων της ΔΔΕ Έβρου
Συνδιοργάνωση: ΓΕΛ Σαμοθράκης

Erasmus+



Learning from the Extremes
ΓΕΛ ΣΑΜΟΘΡΑΚΗΣ

ΓΕΛ Σαμοθράκης 28 Ιουνίου 2023

12.15 - 14.15
Ομιλία: «Ήλιος» & παρατήρηση με τηλεσκόπια

<https://d-space.gr/>



18.30 - 22.30
Ομιλία: «Σελήνη, ουράνιας θόλος» & παρατήρηση με τηλεσκόπια

Διοργάνωση: Τμήμα Εκπαιδευτικών Θεμάτων ΔΔΕ Έβρου
Συνδιοργάνωση: ΓΕΛ Σαμοθράκης

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