EGU
European Geosciences Union
Geosciences Information for Teachers
GIFT

Vienna | Austria | 8–13 April 2018

Pilvi Tauer – Tallinna Tehnikagümnaasium

Piret Karu – Tallinna Reaalkool

Euroopa Liit
Euroopa Sotsiaalfond

Eesti tuleviku heaks

- The EGU Committee on Education has organised Geosciences Information for Teachers (GIFT) workshops since 2003.
- These are two-and-a-half-day teacher enhancement workshops held in conjunction with EGU's annual General Assembly.
- There, selected top-level scientists working in the Earth sciences offer the invited teachers talks centred on a different theme every year.

European Geosciences Union General Assembly 2018

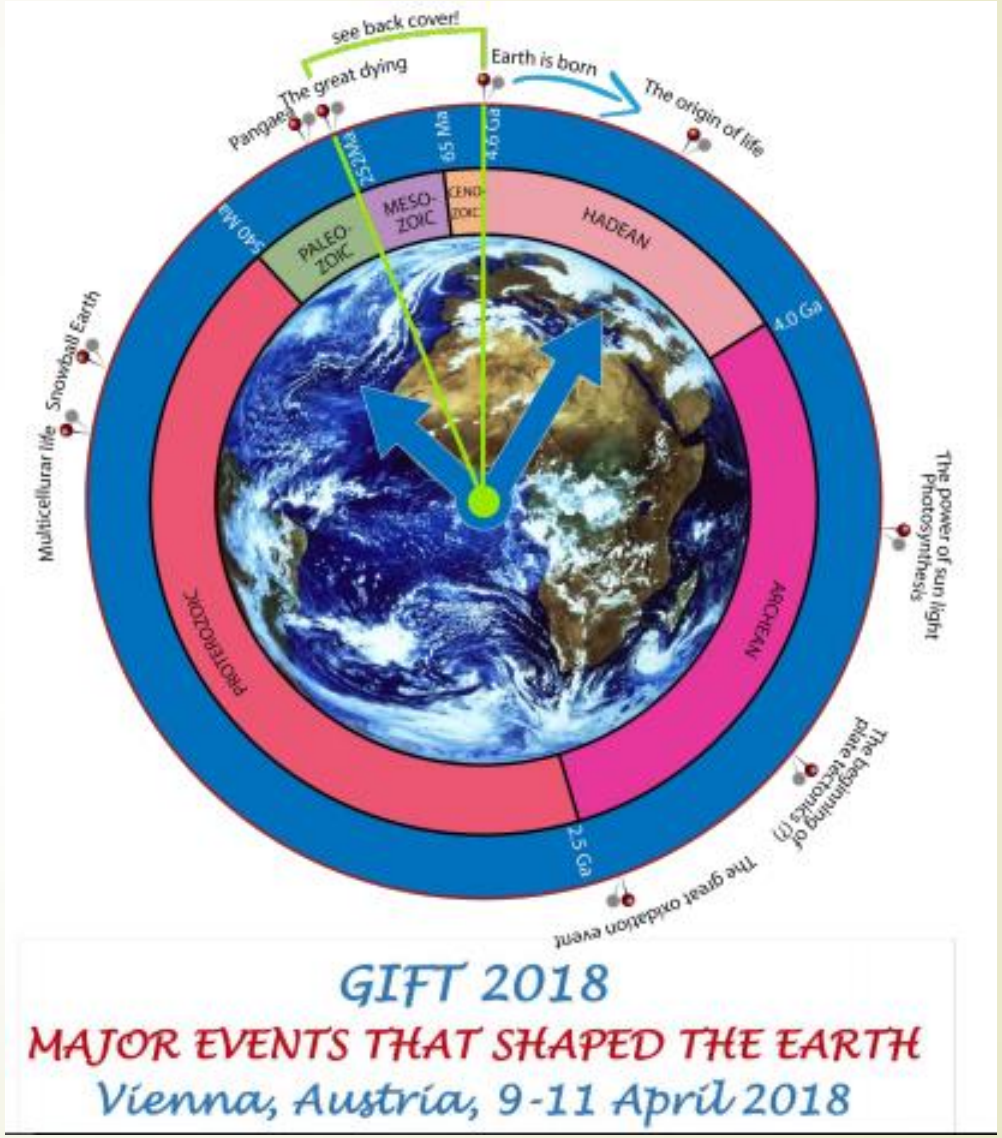
Vienna | Austria | 8–13 April 2018

The EGU General Assembly 2018 was again a great success with 4,776 oral, 11,128 poster, and 1,419 PICO presentations. 666 unique scientific sessions together with 68 short courses and 294 side events created an interesting programme. At the conference 15,075 scientists from 106 countries participated, of which 53% were under the age of 35 years.

EGU General Assembly 2018
GIFT Workshop
materjalid

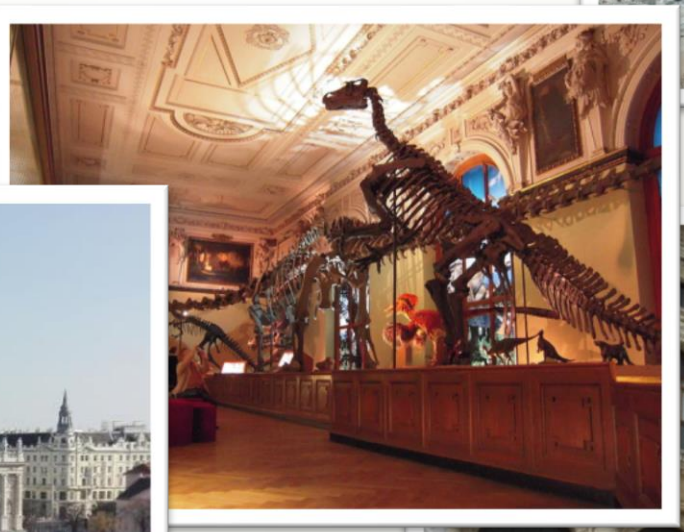
ETTEKANDED

BROŠÜÜR



Pühapäev

- registreerimine/stipendium/transpordikaart
- õhtul kogunemine Loodusloomuuseumis
- + ekskursioon muuseumi katusele ☺



Esmaspäev

- ettekanded

Teisipäev

- ettekanded/poster-sessioon

Science in Tomorrow's School – Learning Beyond the Classroom

Pilvi Tauer – Tallinn Technical Secondary School, Estonia
Piret Karu – Tallinn Secondary School of Science, Estonia

EGU European Geosciences Union General Assembly 2018

Background

Estonia is a small country with only 1.3 million people. In the capital city **Tallinn**, there are 60 upper secondary schools with 44650 students in total. In order to make better use of resources, Nature and Science Learning Centres have been created in Tallinn and all of Estonia. These centres are equipped with modern teaching apparatus and expertise, and provide educational programs designed to correspond to the national curriculum. The aim of the programs is to offer inquiry-based learning, hands-on activities and team-building tasks.

The goal of these programs is to develop the **4 C**'s: **C**ritical thinking, **C**ommunication, **C**ollaboration and **C**reativity.

Tallinn City Government promotes accessibility of science education for all students. Learning Beyond Classroom Project provides each class with one field trip per year into the nature and one workshop in a museum or a research institution. The programs are created and prepared in collaboration with teachers.

Various classrooms

Examples of programs for students

Tallinn Botanic Garden

There are 11 curriculum-based nature programs, which are related to subjects such as math, physics, language etc. For instance, the Nature and Creativity project day allows students to practice correct planting and explore the growth and living conditions of plants etc.

Energy Discovery Centre

… has discovery programs about climate processes, light, sound and electricity.

Tallinn University of Technology

… invites students to participate in labs on oil shale research, future energy sources, food chemistry and genetic engineering.

Tallinn Zoo

has active learning programs for each stage of study at their Zoo School, supervised by zoo educationalists. These programs about nature and animals are designed to support the Estonian education system but they can be modified for other purposes as well.

Nature Schools

operating at Nature Education Centres organise field trips and inquiry-based learning projects in order to explore ecosystems and various life forms, as well as orientenering events and survival skills workshops in the nature.

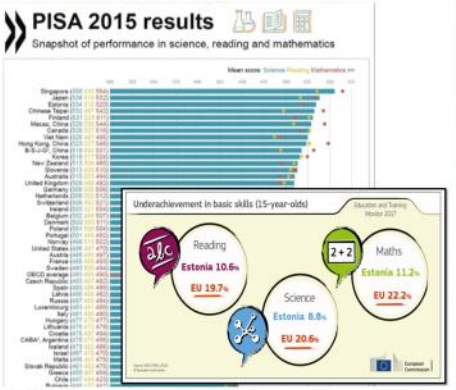
Estonian Museum of Natural History

offers curriculum-based museum classes for schools and nursery schools, which help children gain an in-depth understanding of nature and the processes therein. The museum promotes interest in the environment and exhibits the diversity of nature. The most popular programs are examining natural resources, minerals, rocks and fossils, and growing minerals.

Results

Diverse practical activities have provided Estonian students with very good results in PISA 2015 tests:

- Estonian basic school students ranked third in the world in science after Singapore and Japan. In Europe, Estonia and Finland shared the first and second place.
- Estonia's success can be explained by the fact that most of our students have acquired the basic skills and knowledge, and compared to other countries, there are very few students with a very poor level.
- In collaborative problem solving, Estonia shares the 5th and 6th place with Canada.



PISA results show that we are on the right course.

Photos are made by the authors Pilvi Tauer and Piret Karu

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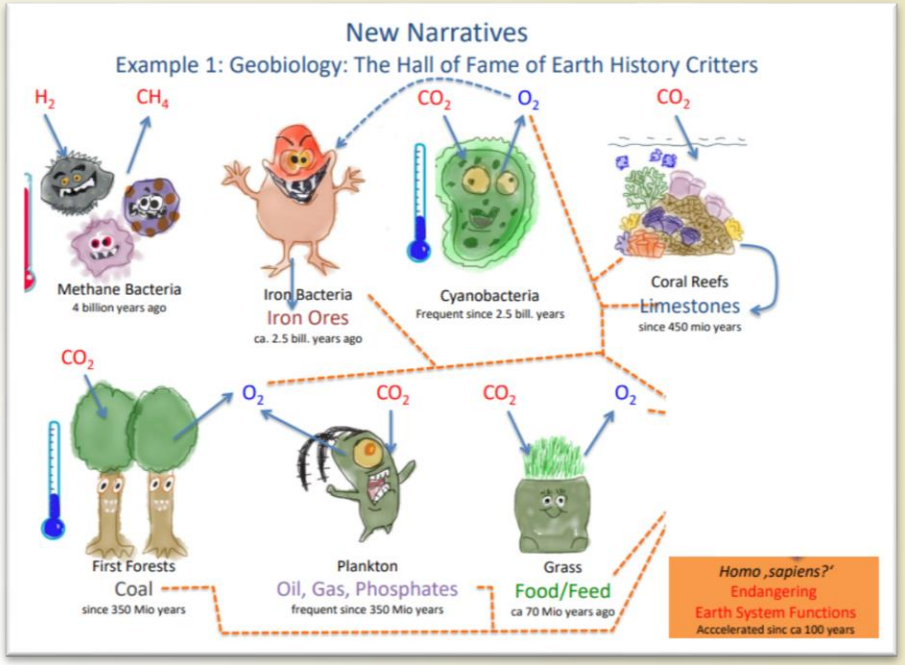
Kolmapäev

- ettekanded/lõpetamine
- ekskursioon



Maria Theresia Monument (cover)

Opening ceremony: 13. Mai 1888 (birthday of Empress Maria Theresia)
Broncefigures: Caspar Zumbusch
Architect: Carl Hasenauer
Fundament: brick
Socle: Granite: Mauthausen, Upper Austria; Bohemian Massif
Age: Variscan (300 – 350 m.y.)
Pedestal: Cistec „Granite“ (granodiorite) from Pilsen area (Czech Republic)
Age: Variscan (300 – 350 m.y.)
Pillars: Alpine serpentinite “Sterzinger Serpentin” from Vipiteno, Alto Adige, Italia
Age: 160 m.y.

Järgmisel aastal:

https://www.egu2019.eu/

Topic: Plate tectonics and Earth's structure – yesterday, today, tomorrow

EGU General Assembly 2019
7–12 April 2019
Vienna, Austria

https://www.egu.eu/education/gift/

EOS1
Geoscience Information for Teachers (GIFT) Workshop 2019
Convener: Chris King
Co-Conveners: Friedrich Barnikel, Francesca Cifelli, Francesca Funiciello, Annegret Schwarz
Session details

EOS2
Geoscience Information for Teachers (GIFT) Workshop - hands-on activities
Convener: Jean Luc Berenguer
Co-Conveners: Francesca Cifelli, Chris King
Session details

EOS3
Science in tomorrow's classroom (poster only session)
Convener: Eve Arnold
Co-Conveners: Friedrich Barnikel, Francesca Cifelli, Stephen Macko, Phil Smith
Session details

Varasemate aastate tegevused https://www.egu.eu/education/gift/workshops/
Varasemate aastate/teemade andmebaas https://www.egu.eu/education/resources/

Mida teha?

- Kandideeri – oktoobri lõpp! education@egu.eu
- Komisjon https://www.egu.eu/education/committee/
- Saada dokumendid (vorm tuleb EGU kodulehele) – taotlus koos enda saavutustega + kooli toetuskiri

application with my teaching experiences and a letter of recommendation

- NB! Ühest koolist üks õpetaja, ühest riigist 3-5 õpetajat! **NB!** Sa pead olema õpetaja!
- Detsembri alguses tuleb vastus

Kui vastus on „JAH“, siis

- Ise tellid lennupiletid ja ostad need välja, ise broneerid hotelli
- Jaanuaris-veebruaris saata oma posteri kirjeldus
- Koostada-printida poster
- Sõita Viini!
- Pühapäeval registreerimisel saad umbes 400€ (mis katab su kulutused täielikult) ja tasuta transpordikaardi (E-R).

Edu kandideerimisel!

- Kevadine Viin ootab!