



GLOBE PROGRAM  
*Elementary K-4*

INTERNATIONAL PROJECT



## Važnost zajednica učenja unutar vertikalna odgojno-obrazovnih sustava

International Teachers  
Conference:  
Sustainability in  
Kindergartens and Schools  
10.06.2023.  
OŠ Leskovec pri Krškem

Vesna Lampić  
Dječji vrtić "Trnsko", Zagreb





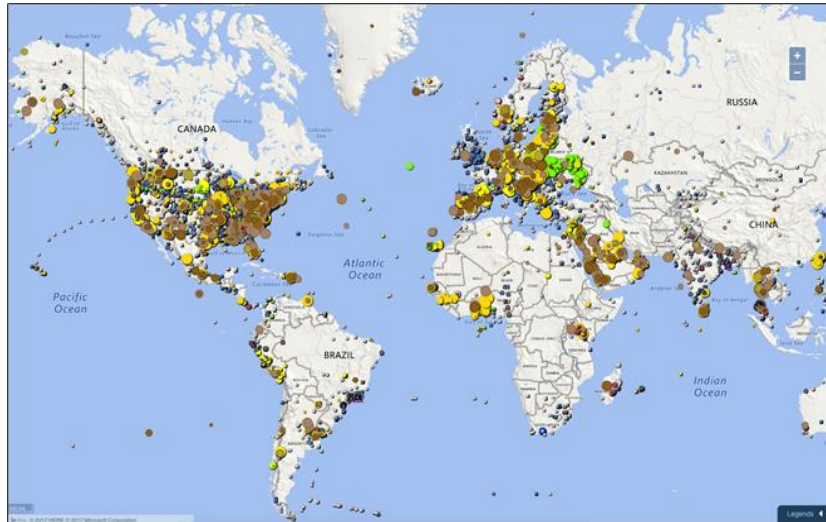
## (The **G**lobal **L**earning and **O**bservations to **B**enefit the **E**nvironment)



Sponsored by:



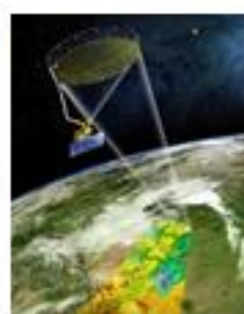
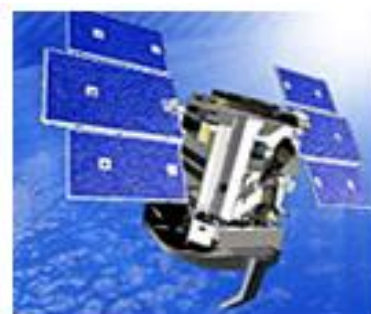
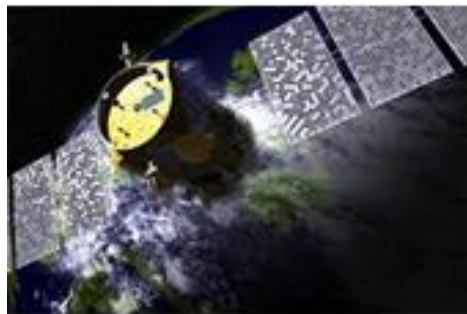
Supported by:



Program GLOBE je međunarodni znanstveni i odgojno-obrazovni program koji pruža učenicima, učiteljima i široj javnosti mogućnost da sudjeluju u prikupljanju podataka i znanstvenom procesu i pri tome svrhovito doprinose razumijevanju planete Zemlje, njenog sustava i globalnog okoliša.

**VZJA:** Svjetska zajednica učenika, nastavnika, znanstvenika i građana koji zajedno rade na boljem razumijevanju, održavanju i poboljšanju Zemljinog okoliša na lokalnoj, regionalnoj i globalnoj razini.

**MSJA:** Povećati svijest pojedinaca diljem svijeta o globalnom okolišu, doprinijeti većem znanstvenom razumijevanju Zemlje i podržati poboljšana postignuća učenika u znanosti i STEM području.





# THE GLOBE PROGRAM

A Worldwide Science and Education Program

(The **G**lobal **L**earning and **O**bservation to **B**enefit the **E**nvironment)

Globalno učenje i opažanje za dobrobit okoliša



GLOBE International  
<https://www.globe.gov/>

GLOBE Hrvatska  
<http://globe.hr/>



Atmosphere

Biosphere

# Citizen Science



GLOBE Observer



Scan Me



Scan Me



GrowApp

Pedosphere

Hydrosphere

# GLOBE Observer

THE GLOBE PROGRAM

Choose your protocol:

- Clouds**
- Mosquito Habitat-Mapper**
- Land Cover**
- Trees**

[Visit the GLOBE Website](#)  
[Visit the Observer Website](#)

Sponsored by:

Supported by:

19:24

< Cloud Coverage

What does your sky look like?

- Clouds or Contrails
- Clear Sky (No Clouds or Contrails) >
- Obscured (smoke, dust, haze, fog, etc. limits view of sky) >

19:25

< Overall Sky Conditions

What percentage of the whole sky is covered by clouds? \*

- Few < 0 - 10
- Isolated 10 - 25
- Scattered 25 - 50
- Broken 50 - 90
- Overcast 90 - 100

What color is the deepest shade of blue in the sky?

9:24

< Surface Conditions

- Snow / Ice
- Standing Water
- Muddy
- Dry Ground
- Leaves on Trees
- Raining / Snowing

21:19

08/08/2021 Clouds

North

Date/Time (UTC): 08/08/2021 13:47:00

Data Source: GLOBE Observer App

Latitude/Longitude: 44.445, 15.0364 (44° 26' 42", 15° 2' 11.04")

Organization: DV Potočnica

Site: 33TWK029213

Total Sky

- Cloud Cover: Scattered (25-50%)
- Sky Color: Pale Blue
- Sky Clarity: Somewhat Hazy

High Level Clouds

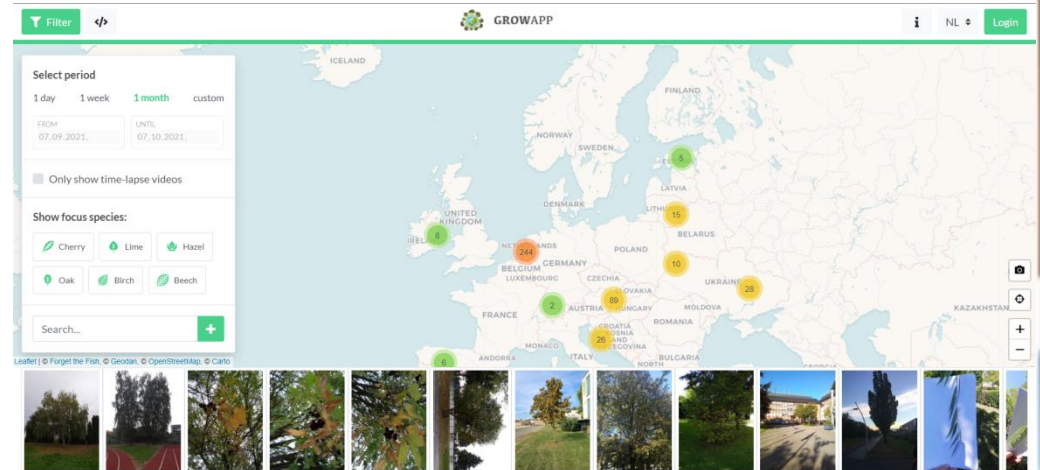
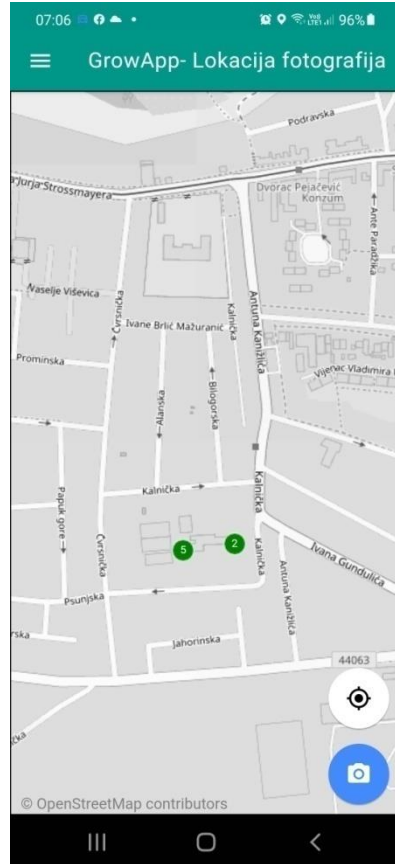
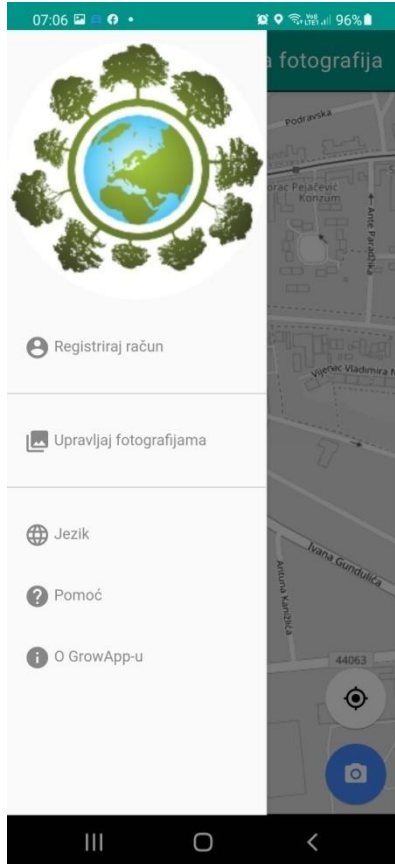
- Cloud Types: Cirrus, Cirrocumulus
- Cloud Cover: Scattered (25-50%)
- Opacity: Translucent
- Short Lived Contrails: 0
- Persistent Non-Spreading Contrails: 0
- Persistent Spreading Contrails: 0

Mid Level Clouds (not observed)

Low Level Clouds (not observed)

# GrowApp

[www.growapp.today](http://www.growapp.today)



# Elementary GLOBE



Namijenjen je djeci vrtićkoga uzrasta i učenicima nižih razreda (K-4: 5-11)

## MODULI:

- Kvaliteta zraka
- Klima
- Oblaci
- Eko sustav
- Godišnja doba
- Tlo
- Voda

## Svaki modul ima:

- Slikovnicu sa izmišljenom znanstvenom pričom u kojoj učenici istražuju određeni dio eko sustava koristeći znanstvene metode
- tri istraživačke aktivnosti koje pomažu učenicima da razvijaju svoje istraživačke znanstvene sposobnosti
- pripremu za učitelja i rječnik znanstvenih pojmova







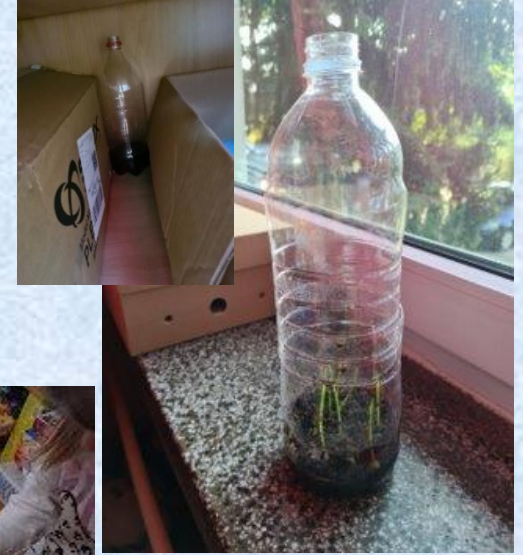
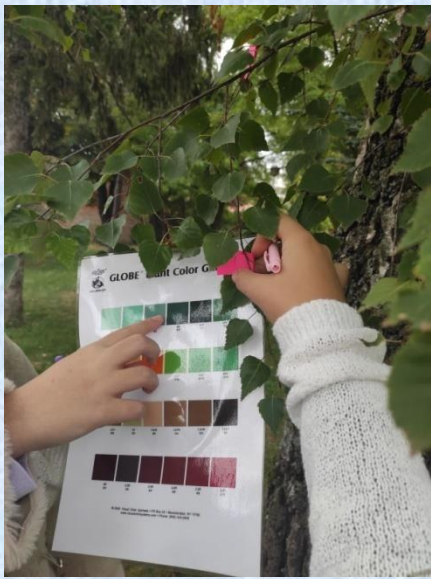
# Atmosphere



# Pedosphere

# Biosphere

# Hydrosphere



# Međunarodni projekt "GLOBE Program Elementary K-4"



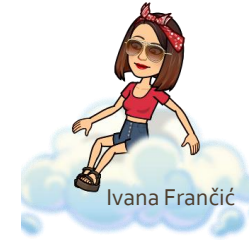
Arhiva izvora korisnih za implementaciju Elementary GLOBE programa



Mreža škola i vrtića koji implementiraju GLOBE aktivnosti i surdnja unutar cijele vertikale odgoja i obrazovanja



Mogućnosti mentoriranja novim GLOBE učiteljima, prema "Pay it Forward" sistemu



**ZNAM**

# GLOBE Program Elementary K-4



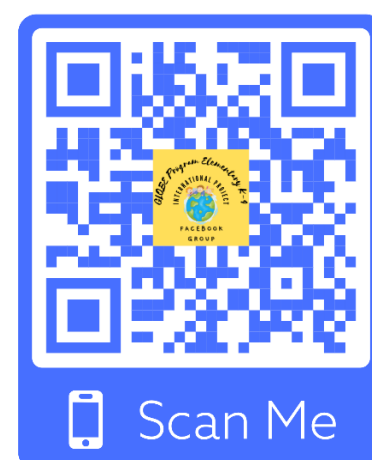
[Međunarodna  
Web stranica](#)



[Wakelet  
International](#)



[Wakelet  
Hrvatska](#)



[Facebook  
International](#)



[Facebook  
Hrvatska](#)

# STEM

Science Technology Engineering Mathematics  
(znanost, tehnologija, inženjstvo, matematika)



# STE(A)M

Science Technology Engineering (Art) Mathematics  
(znanost, tehnologija, inženjstvo, umjetnost, matematika)



Kompetencije ➔ **BUDUĆNOST?**  
**KREATIVNOST-VRIJEDNOSTI!**

(A)= Multi- → Inter- → Transdisciplinary

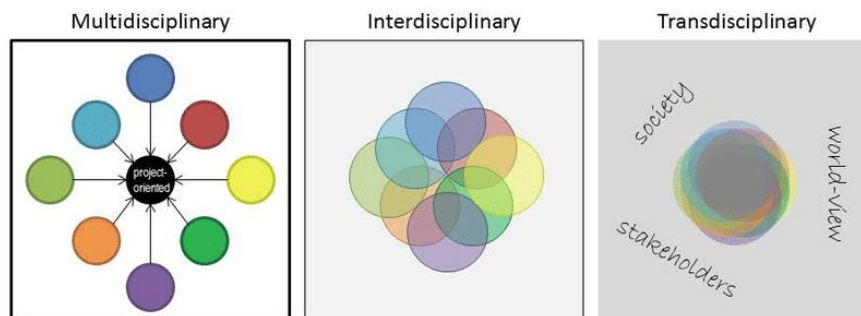


Figure by Clotilde Lechuga-Jimenez

# DOBRO DOŠLI NA SCIENTIX



## SCIENTIX

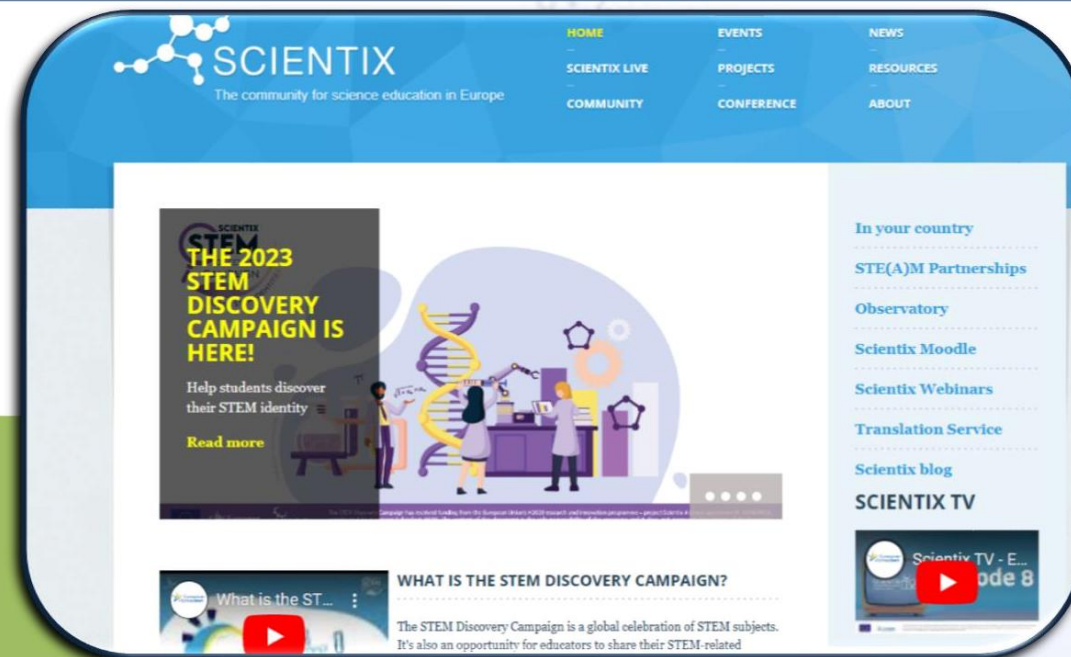
Zajednica za prirodoslovno  
obrazovanje u Europi

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# Scientix, zajednica za znanstveno obrazovanje

Scientix, koji koordinira Europska mreža škola, središte je europske zajednice za obrazovanje u području STEM-a od 2010. godine...

... Nudi prostor za sve one koji rade u području znanstvenog obrazovanja (nastavnike, istraživače obrazovanja, donositelje politika, stručnjake za obrazovanje u području STEM-a itd.) kako bi mogli razmjenjivati informacije, surađivati i učiti jedni od drugih.



<http://www.scientix.eu>



S više od 10 000 nastavnika mjesečno, SCIENTIX dopre do više od 120 000 učenika svakog mjeseca!



# PRIMATE POTPORU I NADAHNUĆE OD SCIENTIX-A

Možete istraživati tisuće izvora, otkriti znanje temeljeno na dokazima i sudjelovati u međunarodnim kampanjama kako biste preobrazili svoje poučavanje i unaprijedili svoje razumijevanje tema iz područja STEM-a...

**PORTAL SCIENTIX s brojnim izvorima za nastavnike na više od 30 jezika**  
**+**  
**INTERNETSKE KAMPANJE**  
**+**  
**OZNAKA STEM ŠKOLE**  
**+**  
**SCIENTIX TELEVIZIJSKI PROGRAM**





# VAŠE PUTOVANJE POČINJE PORTALOM SCIENTIX

Na portalu Scientix moći ćete:

- pristupiti svim izvorima i člancima,
- saznati novosti o svim događajima Scientix-a,
- otkriti na tisuće projekata u području STEM-a.

The screenshot shows the Scientix website homepage. At the top, there is a navigation bar with the Scientix logo and the tagline "The community for science education in Europe". The navigation menu includes links for HOME, SCIENTIX LIVE, COMMUNITY, EVENTS, PROJECTS, CONFERENCE, NEWS, RESOURCES, and ABOUT. A search bar and a "Sign in" button are also present. The main content area features a large banner for the "SCIENTIX NEWSLETTER IS OUT!" for February 2023, with a "Read it here" link. Below the banner, there is a video player for "WHAT IS THE STEM DISCOVERY CAMPAIGN?". To the right, there is a sidebar with a section titled "In your country" containing links for "STE(A)M Partnerships", "Observatory", "Scientix Moodle", "Scientix Webinars", "Translation Service", "Scientix blog", and "SCIENTIX TV".



<https://www.scientix.eu/home>



# VELIKI OTVORENI INTERNETSKI TEČAJEVI EUROPSKE AKADEMIJE MREŽA ŠKOLA



- Veliki otvoreni internetski tečajevi (MOOC) namijenjeni su nastavnicima, a dostupni su na internetu.
- Traju 5,5 tjedana i otvoreni su za sve!
- Pokrivaju širok raspon tema koje vam pomažu da uvedete inovacije u učionicu.
- Besplatno i personalizirano učenje tempom koji vam odgovara!



<http://www.scientix.eu/live/moocs>



European  
Schoolnet

Academy





# NATJECANJE "LOOK UP-CLOUD HUNTERS 2022"

## STEM Discovery Campaign 2022 -12 natjecanja

12 natjecatelja  
Hrvatska, Cipar, Oman, Ohio-USA

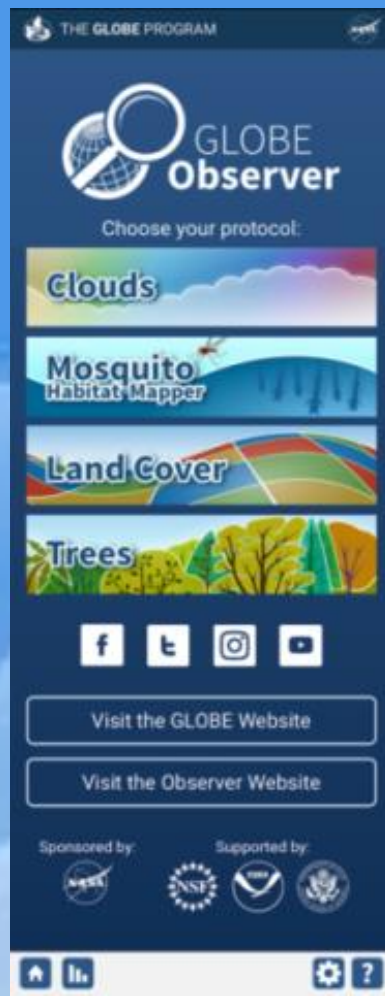


**„Look Up - Cloud Hunters“ - Competition**

For the “2022 STEM Discovery Campaign”, projects “GLOBE Program Elementary K-4” and “Science Picnic/Znanstveni piknik 2022” are announcing their first competition - The “Look Up – Cloud Hunters”!

GLOBE® Based on the methodology of the international GLOBE Program and using the GLOBE Observer application.

Partner organizations: Udruga ZIAZ OUI



Razredna nastava i djeca vrtićkog uzrasta (dob **5-11**)  
Online i aktivnosti u školi ili vrtiću tijekom perioda promatranja (25.04-29.04.2022.)

<https://bit.ly/3aF2bXT>



# "Look Up-Cloud Hunters 2022"

<https://bit.ly/3aF2bXT>

znanstveni piknik

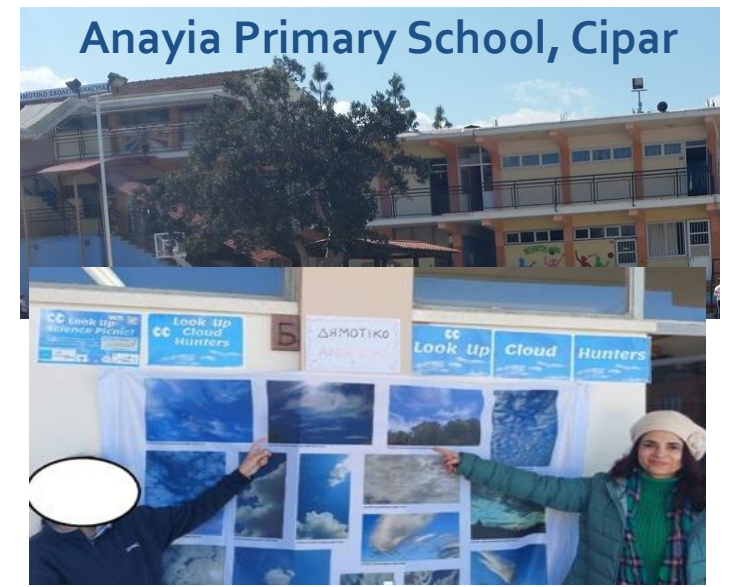


11. znanstveni piknik  
Muzej seljačkih buna  
Dvorac Oršić, Gornja Stubica  
23. i 24.9.2022.  
YouTube ZEZ  
ZEZ - Znanstveni piknik

CARNET FabLab.hr



2022 GLOBE Regional Meeting for Europe and Eurasia  
October 17 - 21, 2022 | Omiš, Croatia



6. TJEDAN ZNANOSTI u OŠ Josip Pupačić - Omiš 17.10. - 21.10.2022.

**AKTIVNOSTI**

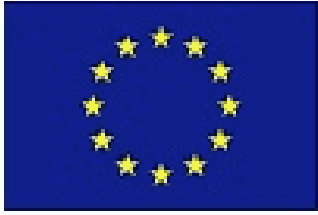
- Matematičke igre (Jasna Marenković)
- Farmacijska parolka (Iva Željand)
- Robotika (Antonia Štepić, Branka Čabrnica)
- Mali roboti (Branka Čabrnica)
- Kvantiranje (Iva Željand, Jasna Marenković)
- Čovjek i mjera (Antonia Štepić, Branka Čabrnica)
- Kvizna igra (Iva Željand)
- Znanstveni olimpijade (Iva Željand)
- Neobičajne životinje (Iva Željand)
- Vremenski zbilje (Iva Željand, Jasna Marenković)
- Plovidba (Iva Željand)
- Astronomija (Iva Željand)
- Kajak i razredni ples (Iva Željand)
- Legu roboti - vježbe pripreme (Iva Željand)
- Sudbina (Anđela Bačić)
- Rakunirno razmišljanje (Iva Željand)
- Mikrosvjetlova zanimljivosti mladih GLOBE-ovaca (Ivana Pupačić)
- Recikliraj i zasadi (Iva Željand)
- Hoće li roboti pospješiti kvaliteta naših života (Ivana Pupačić, Jasna Marenković)
- Opasni! (Martina Fosić, Martina Milina i Marija Đikić)
- Nastup školske kape Bepa i školskog zbora (Marija Đikić i Vinko Đikić)

Gost predavač  
Peter Falcon  
NASA Earth Science - Our Changing Climate, Careers, Opportunities and More



→ Colorado, USA ("GLOBE Annual Meeting")



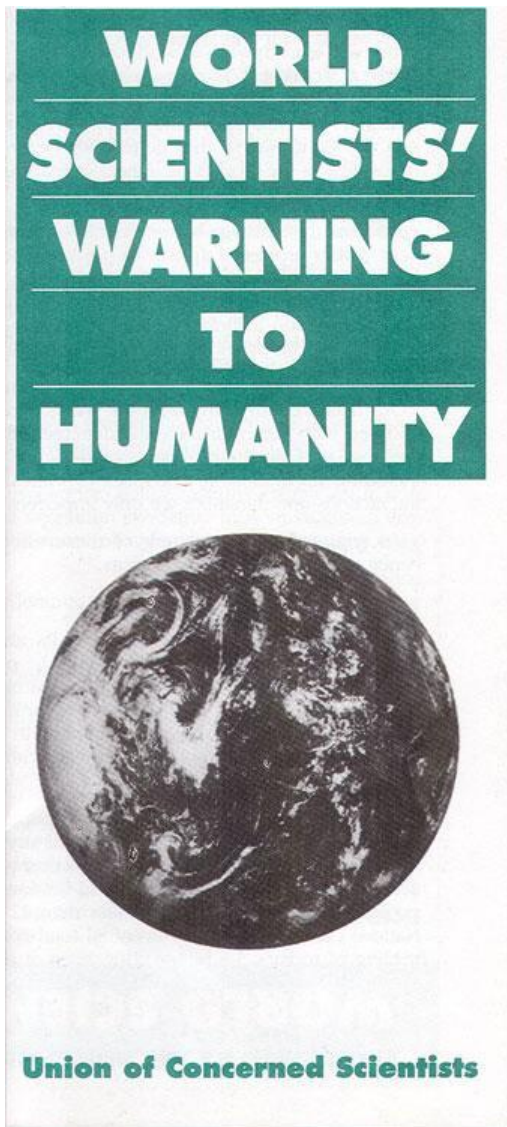


<https://www.scientix.eu/>



<https://www.europeanschoolnetacademy.eu/>

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1992. *World Scientists' Warning to Humanity*

1 700 znanstvenika

2017. *World Scientists' Warning to Humanity: A Second Notice*

15,364 znanstvenika

2019 warning on climate change and 2021 update

11,000 znanstvenika





Ako od malih nogu vježbamo u malim stvarima gledati širu sliku, koliko li će tek široka slika biti kad odrastemo...





Stvarajmo prilike u kojima djeca mogu istraživati uzorke po kojima priroda kreira te shvatiti povezanost i međuovisnost svega u svemiru i pri tom negujemo određene vrijednosti koje će novim generacijama dati bolju budućnost.





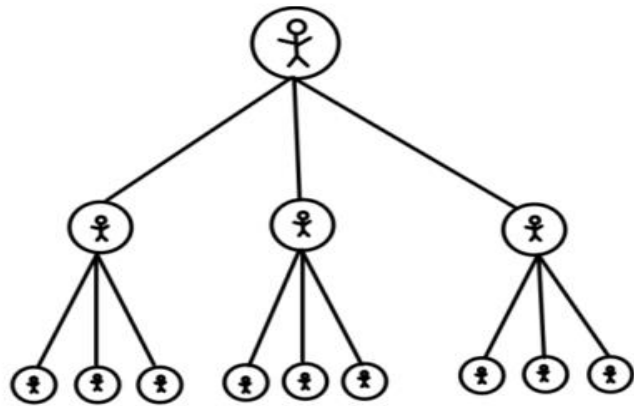
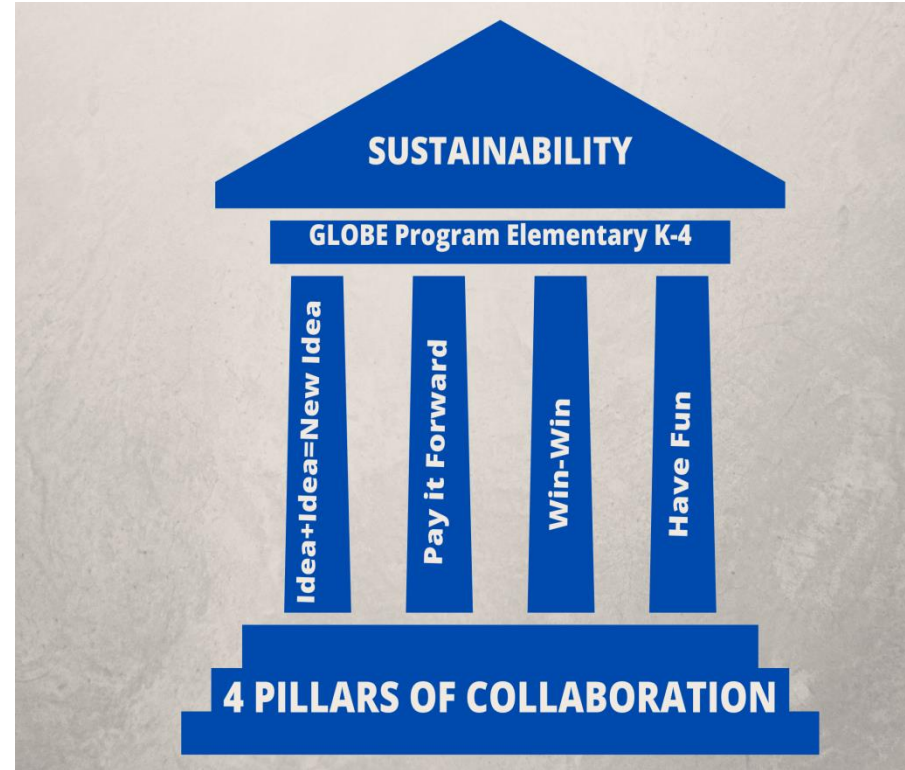
# 4 STUPA SURADNJE

If you have an **apple** & I have an **apple** & we exchange **apples** then you & I will still each have one **apple**.

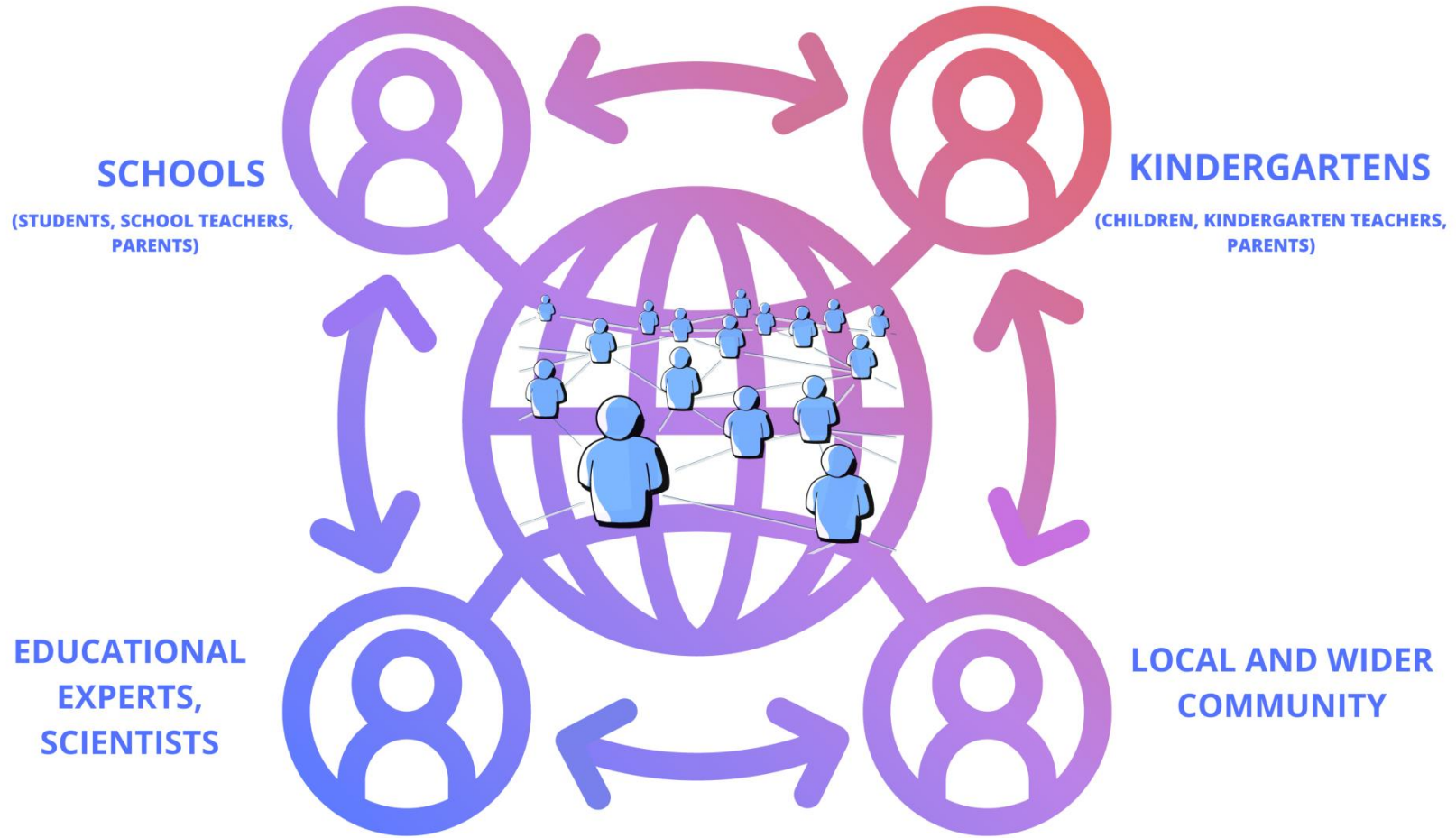


But if you have an **idea** & I have an **idea** & we exchange these **ideas** then each of us will have **2 ideas**.

- George Bernard Shaw



Pay It Forward



# Learning Communities





Vesna Lampić  
[vesnatu@hotmail.com](mailto:vesnatu@hotmail.com)



 <https://static.mathigon.org/videos/pay-it-forward.mp4>

 Poveznice: <https://drive.google.com/file/d/1rU14H64dpcO-Cegnkox4nY99-nv-l1g4/view?usp=sharing>

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