

The Baltic Sea Project's activities within the UNESCO Associated Schools Network

Gedy Matisen

Tartu Environmental Education Center (Tartu Nature House)

gedy.matisen@tartuloodusmaja.ee



Riiklik koordinaator
Eesti



HARIDUS- JA
TEADUSMINISTEERIUM



Citizen science programme

From students to active citizens and scientists!



Citizen science (CS) – volunteer monitoring and research conducted by amateurs (public participation in scientific research).

Outcomes: advancements in science; better public understanding of science and nature; better ICT skills; and all other benefits of learning outdoors.

Equipment: A smartphone, internet, account in Gmail, Facebook, iNaturalist, Zooniverse, PlutoF or GBIF; paper and a pen.



What you don't know, you can't appreciate.

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Pairing Bloom's Taxonomy with effective study strategies:

Level 1: Remember – take photos of species, study the names of species, list the main characteristics of species or habitats

Level 2: Understand – discuss, compare and classify species using iNaturalist, explain the need for citizen science, summarize the results (diagrams, tables etc)

Level 3: Apply - start a local study group and ask community to join to make an inventour of the biodiversity, keep a designated area for biodiversity and stop mowing the lawn too often

Level 4: Analyze - research connections between species, how does one species contribute to the ecosystem

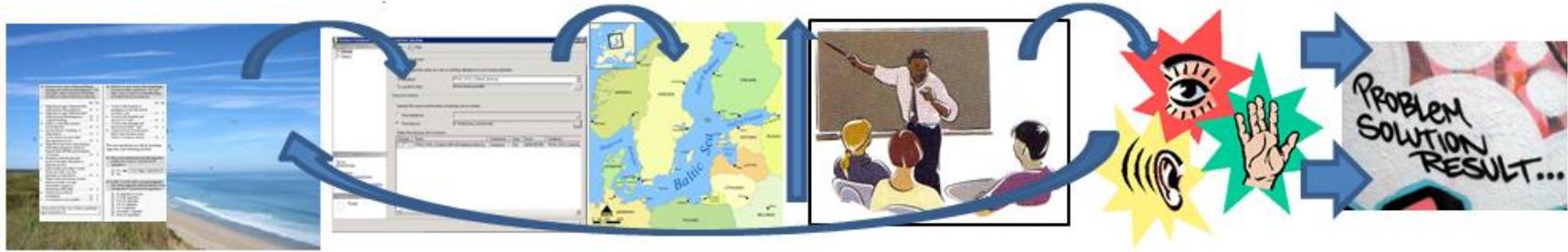
Level 5: Synthesize - study the food chain and possible impacts after pollution or extinction of one species, make a simulation game, play strategic board games

Level 6: Evaluate - compare legislative criteria with the real life monitoring summaries and make conclusions, share your opinions and debate, use critical thinking to determine best arguments

Level 7: Create – design your own mini CS project, use CS data to create a solution for a problem accuring in the nature or build a model of certain habitat, write an article or organize an event that helps to change people's behaviour for the better



Citizen science programme structure



Observation in nature -> Database -> Interactiv map -> ? -> teacher seminar -> hands-on ! -> solutions

*students asking

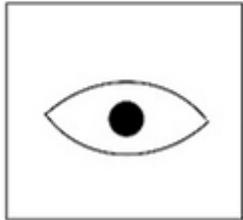
*teachers are encouraging
higher-order thinking

*national summaries

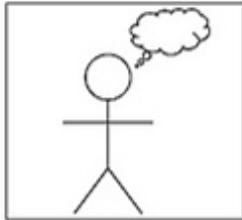
*generating new
attractive lessons

*more inclusion

*more global understanding
*higher-order thinking



Observing



Thinking



Trying



Making an effort! And changing your point of view!

Outdoor lessons within the Baltic Sea Project



Communication (discussions in mother tongue, foreign language)

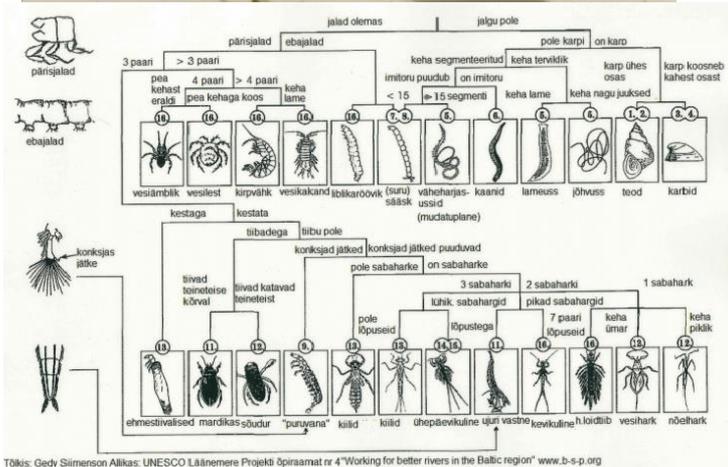
Mathematical competence and basic competence in science and technology (water quality, water purification, diversity, measuring parameters, comparing, summarizing, concluding)

Digital competence (collecting and analyzing data)

Learning to learn (organize info, manage your role for better teamwork)

Social and civic competence (share results, learn about community and environmental problems, shape values)

Sense of initiative and entrepreneurship (find solutions, create action plans and projects, act upon them)



CS possibilities in BSP



13 CLIMATE ACTION



CS programme [„BioBlitz around the Baltic Sea“](#) (27. August)

CS programme [„Coast watch“](#) (August-October; April-June)

14 LIFE BELOW WATER



CS programme [„River watch“](#) (August-October; April-June)

CS programme [„Water quality check“](#) (September; May)

CS programme [„Air quality check“](#) (all year round)

15 LIFE ON LAND



CS programme [„Spring waterbirds counting“](#) (April)

CS programme [„Signs of spring“](#) (March-June)

Good way to celebrate UN Days:

[Water Day](#) (March)

[Earth Day](#) (April)

[Migratory Bird Day](#) (May)

[Environment Day](#) (June)

[Oceans Day](#) (June)

MORE INFO with RE-NEWED learning materials will be sent to coordinators and they will send info to schools!

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From students to active citizens and scientists!



iNaturalist Search

Explore Your Observations Community Identify More

BioBlitz around the Baltic Sea 27.08.2020
AUG 27, 2020

About
Leave 114

Read More

Edit Project Project Journal

Overview 1,326 OBSERVATIONS 496 SPECIES 165 IDENTIFIERS 71 OBSERVERS Stats

Sustainable prizes: lottery will happen next week; notification will appear in iNaturalist mailbox.
Baltic Sea bioblitz tutorial video: <https://www.youtube.com/watch?v=9sgVrkTHKwE>

Baltic Sea web quiz

From students to active researcher!

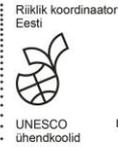
Next Web Quiz:

1. October - 30. November 2020

Prizes: environmental friendly products or a work shadowing day to a scientist!

Earlier quiz questions and answers:

http://www.b-s-p.org/home/international_web_quiz/



Thank you!



Foto: <https://500px.com/photo/29180481/happy-time-by-sarawut-intarob>