



Erasmus+

”Be the Guardian of the Galaxy Yourself!” Methodology File



Activity:	Festivals and words on environment
Sending country:	Sweden
Teacher:	Daniel Plastrougi
Objective:	Get background on upcoming festivals and learn more on concepts about sustainability/environmental protection
Materials needed:	Handheld Devices and laptops
Age of children:	15
Number of children:	17
Time needed:	20 minutes
Activity description:	The aim for the activity is to engage the students and to learn new words and concepts connected to sustainability and the environment.

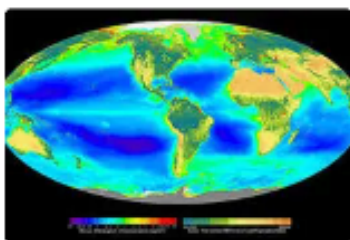
The students first listened to and read a text on both foreign and domestic festivals that focus on nature, such as Swedish Midsummer. Following this the students were to practice vocabulary by using an online ICT-tool called Blooket.

The students were allowed to use their mobile devices to access blooket.com where they enter a prompt code given by the teacher.

The teacher has beforehand prepared an online game, either constructed by themselves or by using a pre-existing one made by other teachers in the community. For this lesson, there were many games to choose from and the teacher chose one where they did not simply translate words but instead were to find the correct explanation for the concept/word.

You can review the game here: <https://dashboard.blooket.com/set/618d2e4210f32c6e9d1c0bde>

The students are then given an avatar that will partake in different games where they “score” by providing the correct answer for a question or translating words from native language to English. They now practice ESL but it also raises their awareness on environmental issues.



Human Impact on Environment

SQL 6.9 Humans impact the environment and individuals can influence public policy decisions related to energy and the environment.

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18 Questions Show Answers Plastrougi

Question 1
best management practices

Practices that can be used to reduce the amount of pollution
 Protects the Earth from UV rays, poisonous to us
 Pollution that comes from one specific source
 A scale used to measure how acidic or basic a substance is

Question 2
dissolved oxygen

20 sec



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Activity:	Sustainable cooking
Sending country:	Sweden
Teacher:	Irene Tegemark
Objective:	Teach students the value of using local produce and considering sustainability when shopping.
Materials needed:	Classroom set up with teaching kitchens.
Age of children:	15
Number of children:	20
Time needed:	80 minutes

Activity description: The aim of the lesson is for the students to learn how to minimize their impact on the environment when cooking/baking.

For this activity, the students got to join in a baking class where the aim is to produce delicious pastries but using products that minimize the environmental impact. There is, just as an example, always the option of cooking/baking without dairy products to decrease carbon footprint.

The students were divided into smaller groups and they each got different recipes to follow. They learnt the lesson of not overusing ingredients idly and to instead be very precise when measuring the ingredients. They had to choose between different brands to show that they are aware of social as well as environmental sustainability issues connected to major international corporations.

The teacher evaluates how well the students have performed and of course the students get to try the sweets they have made.





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Activity:	Turning old objects into something new
Sending country:	Sweden
Teacher:	My Birgersson Olsson
Objective:	Learn how recycled materials can be used to craft new items.
Materials needed:	Old electrical wires to strip from copper or ready made rolls of recycled metal wires.
Age of children:	15-16
Number of children:	15
Time needed:	60 minutes

Activity description: The aim is for the students to gather knowledge on how to recycle as much as possible from their everyday life, including stripping copper wires from electrical wires. In crafts, the students are taught techniques which they can apply later in life to mend furniture, stitch and sew apparel that have worn down. This is in accordance with the Swedish national curriculum which states that environmental issues as well as sustainable materials are to be used when possible.

In this activity, the visiting students were shown by local students how they work with their projects over the course of one semester. The projects are planned and executed by the students and during this visit, they (students) showcased the crafts they had acquired, and the visitors got to try out and learn the techniques displayed to them.

One of the techniques is based on metal wires and the teacher begins by showing students inspirational ideas from her personal Pinterest page. (<https://www.pinterest.se/mybirgersson/metall-tr%C3%A5d/>)

The students then get to design their project or print an image from the Internet. They choose materials and then start to braid/intertwine the materials to create the desired product.

This can be done with little or no money. Strip copper from wires to create the materials used for this project is a great way for the students to learn about what materials we have all around us and how we can utilise them after “the product they lived in has died”.





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Activity:	Discuss your ecological footprint!
Sending country:	Sweden
Teacher:	Elias Mahfoud
Objective:	Get an understanding on how their lifestyle affects their ecological footprint and measures they can take to improve it
Materials needed:	Laptops
Age of children:	15-16
Number of children:	28
Time needed:	60 minutes

Activity description: The aim is to raise awareness about our ecological footprint – what is it and what can we do to decrease or impact on the environment?

The lesson starts with asking the students what they think about when they hear the term “sustainable development” and letting them discuss with each other. (5 minutes)

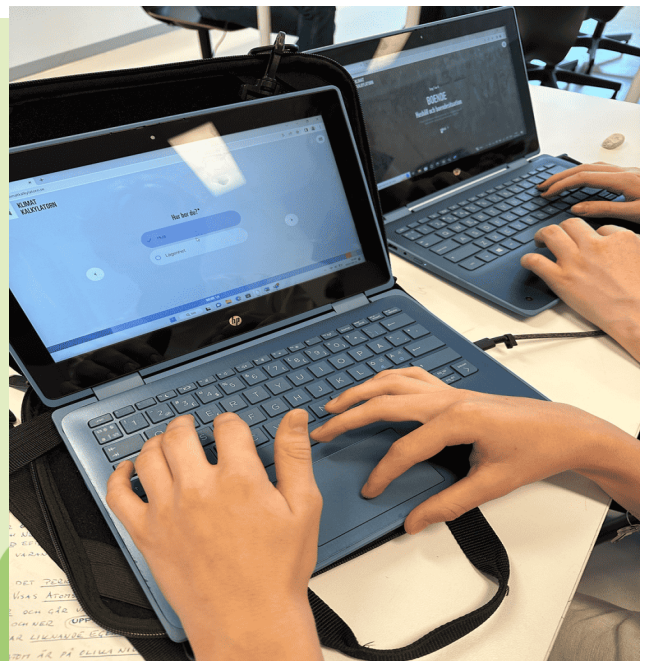
After writing down the students’ thoughts, there’s a small lecture (10 minutes) about different types of sustainability and which types of natural resources that are available for humans, their uses, and if our consumption of these are sustainable in the long run.

Afterward, the students are asked to calculate their ecological footprint through a Climate calculator (<https://www.klimatkalkylatorn.se/>) – and are asked to compare their results in pairs to see if there’s anything they’re surprised about and get insights on areas of improvement in their consumption. The pairs will also discuss different ways they could change their lifestyle and see what’s doable for them.

Lastly, the pairs share what they’ve discussed with the rest of the class. Before the lesson ends, the students are encouraged to do the Climate calculator at home with their families and report back to the teacher how it went and which discussions that perhaps arose from this activity.

Vad tänker 9G när de hör “hållbar utveckling?”

- Konsumera mindre
- Mindre fossila bränslen
- Konsumera och leva utifrån att vi har ett jordklot
- Soppsortera – människans ansvar för att minska utsläpp, matsvinn etc.
- Äta mindre kött



Some of the students thoughts regarding “sustainable development” – includes “less fossil fuels”, “consume less”, “waste management”, “eat less meat”.



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Activity:	Why vegetarian food?
Sending country:	Sweden
Teacher:	Gina Collin
Objective:	Learn about pros and cons with vegetarian food and practice how to debate a subject
Materials needed:	Laptops
Age of children:	14
Number of children:	28
Time needed:	50 minutes
Activity description:	In order to be able to make good decisions for themselves and for the environment the students' needs to be confronted with both sides of the topic. This lesson creates the foundation for the students to be able to make a good decision for the future.

The students first listened to and read a text on <https://www.livsmedelsverket.se/> about vegetarian food and the recommendations from livsmedelsverket.se on what to consider when you make vegetarian food for children and how that is a good option for both health and the environment.

The students work in pairs to find good arguments for why children should eat more vegetarian food. Every argument needs to have a counterargument. The students are allowed to search the internet but are required to use reliable sources according to criteria taught earlier.

The students present the arguments they have found and the teacher writes them on the whiteboard in front of the room in a VENN-diagram.

The teacher has beforehand prepared an online survey on **mentimeter.com**. The students take a stand – Will you increase your weekly amount of vegetarian food?



Sök på innehåll

+ Sök via kategorier istället, till exempel lagstiftning

Matvanor, hälsa & miljö Livsmedel & innehåll Företagande, regler & kontroll Om oss

- Kostråd
- Kostråden - hitta ditt sätt
- Matvanekollen - testa ditt sätt
- Gravida - råd om bra mat
- Ammande - råd om bra mat
- Barn och ungdomar
- Spädbarn

Start / Matvanor, hälsa & miljö / Kostråd / Barn och ungdomar / Vegetarisk mat till barn

Vegetarisk mat till barn

Lyssna

En kost med mycket grönsaker, rotfrukter, baljväxter och fullkorn är bra både för hälsan och miljön. Därför är det bra om barn lär sig tycka om sådan mat i unga år, det ökar chansen för att de ska fortsätta med de vanorna även senare i livet.

På denna sida
[Olika typer av vegetarisk mat](#)



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Activity:	Poor vs rich countries
Sending country:	Sweden
Teacher:	Magnus Lindström
Objective:	Learn the difference between poor and rich countries
Materials needed:	
Age of children:	14
Number of children:	25
Time needed:	40 minutes, over the course of 3 weeks
Activity description:	The aim is to give the students a knowledgebase on which they later can develop sound arguments when debate on living conditions, pollution and the politics that accompany these areas.

The purpose of this lesson was to make the students understand how different the conditions are for poor countries compared to the richer countries and how the richer countries must share their resources in order for us to live in a sustainable world

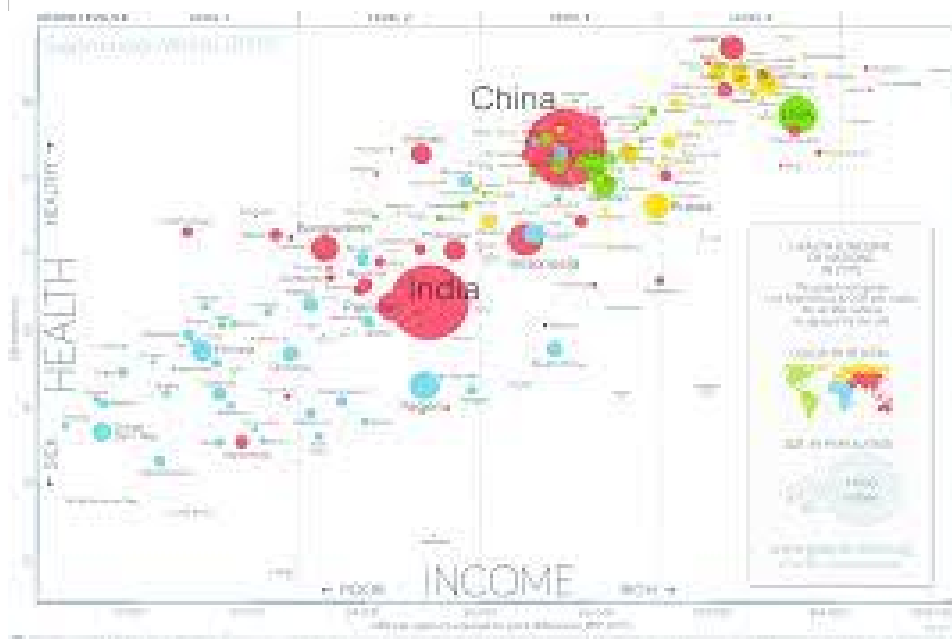
Earlier in geography, the teacher, have worked with renewable and non-renewable natural resources for increased understanding among students.

The students have gained knowledge through P.P that has been completed with smaller group assignments.

Hans Rosling statistic of future

The lesson ended by starting watching a film by Hans Rosling, the famous Swedish physician, academic and public speaker, called statistic of future.

He is also known for being the co-creator of Gapminder, that identifies systematic misconceptions about important global trends and proportions and uses reliable data to develop easy to understand teaching materials to rid people of their misconceptions.



You can watch the film here: [\(497\) Hans Rosling Statistic of future - YouTube](#)



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Activity:	Read and reflect on fast fashion
Sending country:	Sweden
Teacher:	Christel Olsson
Objective:	Teaching children to reflect upon responsibility and fast fashion
Materials needed:	An article about landfills, notebook and pencil.
Age of children:	15
Number of children:	26
Time needed:	50 minutes

Activity description: The purpose of this lesson is to raise awareness in topics of the students' everyday life to make it easier for the students to make good decisions for the environment and the future.

For this activity the teacher shows the students an interactive article about landfills in Ghana. The article is from [aftonbladet.se](https://www.aftonbladet.se): [Här är snabbmodets ”ground zero” \(aftonbladet.se\)](https://www.aftonbladet.se)

The teacher read the article together with the students. The students are divided into smaller groups to discuss the problem with landfills. The following questions are discussed:

1. Who are responsible for the landfills?
2. What could fashion companies do with their collected clothes instead of landfills?
3. What is the responsibility for costumers who constantly by fast fashion, use the garment in average 7 times and then throw it in “recycling-bins”?

The students write a text in their notebooks under the headline “How can I contribute to stop the landfills from growing?”





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Activity:	Pallet crafting
Sending country:	Sweden
Teacher:	Daniel Plastrougi
Objective:	Learning to craft using recycled materials
Materials needed:	EU-pallets, hammer, crowbar, wood screws, drill-/screwdriver.
Age of children:	15
Number of children:	12
Time needed:	80

Activity description: “Recrafting” - The aim of the lesson(-s) is to create awareness of how we can recycle things from our everyday life

In this case the subject is crafts, and the students are given 2-3 EU-pallets to create something new from something old.

The students begin by disassembling the pallets into more manageable pieces. They are given 5-10 minutes to decide what they wish to create and how to divide the tasks between themselves. They have to hand in a written plan of the project as this further gives them the opportunity to put their ideas of recycling into action. The teacher can then give them tips on how to proceed or if the project needs some alterations in order to be realistic.

Some examples of what the students have built are a shelving system, flower beds and a fully functioning bench with a detached coffee table.

There is also an option of arranging a competition between two teams and the one who has the least “leftovers” at the end has won.





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Activity:	Compare energy sources
Sending country:	Sweden
Teacher:	Cecilia Söderberg
Objective:	Students learn the pros and cons of different energy sources
Materials needed:	Computer, https://www.so-rummet.se/kategorier/geografi/jordens-resurser-och-handelsmonster/energikallor# , Digital learning platform NE, notebooks
Age of children:	14
Number of children:	22
Time needed:	60

Activity description: Raise student awareness on energy sources and how these are best used now and in the future.

For this lesson, the students will research and compare the different arguments that support/are against solar power, wind power, hydro power, and nuclear power.

The students will be divided into four groups, one for each energy source, and together they will gather as much information they can about the pros and cons of the energy source they've been assigned. To gather the information, they will primarily use a link from SO-rummet but also their digital learning platform NE.

After 20 minutes of research, the students will split into new groups where each member will represent a different energy source. In these groups, they will take turns in explaining what information they've gathered while also taking notes. The notes will be written down in a Word document (shared as an assignment on Teams, see picture).

When each student has listed their pros and cons, the whole class will repeat their findings together with the teacher to ensure that there are no misconceptions.

At the end of the lesson, the students will do an exit ticket where they will write down which energy source they like the best and motivate why.

JÄMFÖR OLIKA ENERGIKÄLLOR

ENERGIKÄLLA	FÖRDELAR +	NACKDELAR -
Kärnkraft		
Vindkraft		
Vattenkraft		
Solenergi		