ACTIVITY

1.1 Scale of values in Social Networks

Learning objectives:

- Identify own and social values present in Social Networks related to sustainability.
- Reflect on the alignment of sustainability values with their own values and the values present in Social Networks.

Contents:

- Personal values, which guide individual student's behaviour.
- Social values, present in social networks through influencers who have a large number of followers.
- Sustainability values, which can also be found on social networks through accounts dedicated to promoting sustainability.
- Use of information and communication technologies.

Duration: 1 hour, 30 minutes

Description: The aim of this activity is to identify a list of values and anti-values that are present on Social Networks to relate them to their own values and sustainability ones.

1. At the beginning of the session, students will be asked to name influencers or youtubers they know and write them down on the board or in a place where students can see them. It is recommended that teachers have a list of 1 or 2 influencers per social network (Instagram, YouTube, Facebook, Tiktok,...) that appear in Google searches such as "Top influencers/youtubers/tiktokers in the country", as well as a general knowledge of the content they deal with in order to contextualise it and adapt it to students in secondary education.

2. Once 5-6 influencers have been identified, the content they deal with will be shared with the class group, a presentation can be prepared, printed information sheets can be brought as a summary of the content they deal with, number of followers, etc.

3. Students will then be asked to evaluate the values (previously agreed) that they believe the influencers promote. It is recommended to use "The 10 universal values collected by OXFAM": Respect, Empathy, Responsibility, Solidarity, Will, Honesty, Compassion, Love, Forgiveness, Gratitude. Individually or in pairs, the students will have to point out the values they believe each influencer promotes. They can also propose another value or even an anti-value if they believe that they do not promote any. This can be captured in a table, a diagram or a mind map.

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Example of table:

Values/ Influencers	Influencer 1	Influencer 2	Influencer 3	Influencer 4	Influencer 5	Influencer 6
Respect						
Empathy						
Responsibility						
Solidarity						
Will						
Honesty						
Compassion						
Love						
Forgiveness						
Gratitude						
Other:						

4. Once this has been done, a content search should be carried out on Social Networks, identifying profiles that promote sustainability values such as: respect for others, including those of present and future generations, for difference and diversity, for the environment, for the resources of the planet we inhabit. They can search by hashtags (e.g. #sustainable #eco #environmentaljustice, etc.). With this information, students will make a report, table or fact sheet explaining the number of followers of these pages, type of content shared, etc.

5. Finally, there will be a group discussion and reflection on the following questions:
What are my own values?
How are my personal values similar to and different from the values present in Social Networks?
What role do Social Networks play in my life?
What would happen if only the prevailing values and anti-values were promoted on social networks?
How could sustainability values be promoted in creative ways?

Related SDGs:



GreenComp COMPETENCE:

Valuing sustainability

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Materials and resources:

- https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/
- https://www.sosteniblepedia.org/index.php/Valores_de_la_sustentabilidad_y_la_regeneraci%C3%B3n
- http://ri.uaemex.mx/handle/20.500.11799/49592
- https://www.unodc.org/documents/e4j/IntegrityEthics/MODULE_2_-_Ethics_and_Universal_Values_-_Spanish.pdf
- https://unesdoc.unesco.org/ark:/48223/pf0000230950_spa

Assessment:

Formative- Evidence of the work carried out, such as completed fact sheets, mind maps or tables.

Assessment criteria- Active participation in group reflections and completion of fact sheets, mind maps and/or tables duly completed.

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ACTIVITY

1.2 Carmela's footprint

Learning objectives:

- Identify and reflect on how we can have a more sustainable lifestyle, which considers future generations by learning from past ones.
- Promote empathy towards future generations, both human beings and the rest of the living beings that inhabit the planet.

Contents:

- Ecological footprint in practice
- Intergenerational empathy
- Austerity

Duration: 1 hour, 30 minutes

Description: The aim of this activity is to learn from past generations or current rural ways of life that promote equity and justice between generations through the viewing of a video that promotes reflection, analysis, and personal involvement.

1. At the beginning of the session, the video "Carmela's Footprint" will be shown, which reflects how a woman in a rural area has a minor environmental impact on her daily activities.

2. In pairs, the students will reflect on the following questions, putting the central idea of each question on a sticky note of a different colour: *What kind of lifestyle does Carmela have? How does this lifestyle care for the environment? What difficulties do we detect in having a similar lifestyle? Why did people used to have a lifestyle that was more respectful of nature in the past?*

3. The students, once they have finished, will paste the answers to the questions by colour on the board in the spaces for each question in such a way that there are columns or circles with the sections as follows:

Carmela's lifestyle	How does Carmela care for the environment?	Difficulties in being like Carmela	Why was it like this before?

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4. Once all the sticky notes have been placed on the board, a group reflection will take place, asking the students to present some of the answers that are on the sticky notes to the whole group.

5. Afterwards, they will come back with the same partner and identify how they use the energy sources mentioned in the video and how they can reduce their environmental impact by using them differently. They can do this in a table, mind map or concept map format.

Energy sources:
·Artificial light at home
·Domotics (Alexa, Google assistant, etc.)
·Dishwasher
·Refrigerator
·Air conditioning
·Heating
·Cooking machine
·Air freshener
·Computer/mobile or e-mail
·Internet shopping/home shopping
·Telephone
·Greenhouse
·Television
·Entry phone
·Washing machine
·Detergent/Bleach/softener
·Clothes dryer
·MP3 radio/speaker

Reflection questions:
·*How do you use this source of energy?*
·*Rank in ascending order which resource you use most and least.*
·*What negative impact do you think this energy source may have on the environment?*
·*How do you think you can make a more responsible use of these energies?*

6. Finally, they will share with the whole group some of the answers. For example, each pair can share 2 or 3 sources of energy.

Related SDGs:



GreenComp COMPETENCE:

Supporting fairness

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Materials and resources:

- https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/
- https://calculadora-carbono.climatehero.me/?source=GoogleKeywordsSpain&gclid=Cj0KCQjwjryjBhD0ARIsAMLvnF9GJrCXhi0AmyxVxmnxzncXxlsl7G0z7_CjzvL3EPAb1KVamp57YyYaAopREALw_wcB
- http://fundacionimpulso.com/archivos/12779
- https://es.unesco.org/about-us/legal-affairs/declaracion-responsabilidades-generaciones-actuales-generaciones-futuras
- https://www.youtube.com/watch?v=280aTeLaT1o&t=

Assessment:

Formative- Evidence of work such as the tables completed.

Assessment criteria- Active participation in the two reflective group activities, mind maps or table.

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ACTIVITY

1.3 Naturemotion

Learning objectives:

- Identify and reflect on how humans are part of nature.
- Promote respect for the needs and rights of other species and living beings.

Contents:

- Emotions generated from contact with nature (calmness, fear, tenderness, etc.)
- Empathy with other species and living beings.
- Artistic expression (photographic or painting, depending on choice).

Duration: 2 hours, 30 minutes

Description: The aim of this activity is that students recognise the value of nature in their social environment through art, specifically through artistic expressions such as photography and/or painting.

1. At the beginning of the session, students will be shown some photographs of Sebastian Salgado and his exhibition Genesis (show without sound from minutes 0-0:06; 0:17-0:24; 1:40-1:50) as well as some videos of Gregory Colbert in his exhibition Ashes & Snow (show with sound from minutes 3:00 to 6:40)

2. Afterwards, a group reflection will be held on the power of photographs and images to convey an emotion and pose questions to be answered briefly on a sheet of paper individually: *What emotions have some of these images provoked in me? What kind of relationship with nature have they awakened in me? Could I describe an emotion that a sunrise, an animal, a tree, or a flower has made me feel?*

3. In the second part of the session, there will be an outing to a park or natural space near the school (it could be the beach or a park), or to the schoolyard (if it is naturalised). Each pupil will bring a camera or mobile phone to take photographs (or bring material to draw and paint if you want to adapt it to the artistic field of visual and plastic arts).

4. Students will be invited to observe all the natural elements around them as if they were seeing them for the first time, as well as to be as contemplative as possible as if we were going to photograph a lion and we wanted to go unnoticed, trying to open our eyes wide. Rather than looking for an aesthetic photograph or a great technique, students will be asked to be attentive to the

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emotions (positive or negative) that being in this environment awakens in us. The teacher can direct the students' attention to different natural elements (e.g. types of trees, type of soil, insects, birds, types of bushes, flowers, etc.).

5. They will be asked to focus on the element that most attracts their attention for a few minutes, observing its movement, characteristics, colour, making a photograph/painting/drawing of this element.

6. Once they have their photograph/painting, they will be given a table to record the different emotions they have experienced. They will have to write down the element that generated that emotion and make a brief justification. Below is an example of a table:

Emotions/ Natural elements	Element:	Element:	Element:	Element:
Fear: Shocked, Concerned, Uneasy, Uneasy, Frightened, Shocked				
Joy: Happy, Amused, Enthusiastic, Euphoric, Exalted.				
Sadness: resentful, rejected, alienated, abandoned, hurt.				
Anger: aggressive, violent, upset, angry, hostile.				
Love: enraptured, enamoured, admired, passionate.				

7. After about 15 minutes, students will be asked to share in small groups the drawings, photographs or paintings they have made, as well as to share the differences and similarities in the emotions each person experienced.

8. Based on this activity, an exhibition can be prepared with the photographs or artworks in a student gallery where students can present and explain their emotions to other classes and the rest of the educational community or the general public.

Related SDGs:



GreenComp COMPETENCE:

Promoting nature

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Materials and resources:

- Camera or mobile phone or painting materials
- https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/
- Flying Elephants Presents Part 2 - YouTube
- Trailer "Sebastião Salgado – Genesis" - YouTube
- https://www.miteco.gob.es/es/ceneam/articulos-de-opinion/2017-07-08-abril-vega-loren_tcm30-419306.pdf

Assessment:

Formative- Submission of evidence of work, such as completed tables.

Assessment criteria- Active participation in the initial individual reflection activity, handing in the table completed and photograph/painting with text.

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ACTIVITY

1.4 The Earth Charter

Learning objectives:

- Identify and reflect on how humans are part of nature.
- Promote respect for the needs and rights of other species and living beings through the Earth Charter.

Contents:

- Empathy with other species
- The Earth Charter

Duration: 1 hour

Description: The aim of this activity is to reflect on the values promoted by the Earth Charter and to get to know the living beings that inhabit a natural environment.

1. In a natural setting outside the classroom, students will be asked to read the second paragraph of the preamble of the Earth Charter, which talks about "the earth, our home, is alive with a unique community of life".

2. After reading it, an individual (supervised) walk in a natural area will be carried out, and students will be asked to find a living being to interview; it can be a tree, an animal or any other.

3. Students will either silently or aloud ask the following questions to write them down as they observe and try to understand the perspective of other living beings that share the Earth:

How old are you?
What forces of nature or uncertainties have you experienced in life?
From your point of view, what does the Earth provide that is essential for you and your kind to survive and for your species to evolve?
What do you need to preserve your health?
What limited resources are you concerned about?
What can people like me do to help protect your vitality, diversity and beauty?

4. After about 15-20 minutes, students will be asked to return to the group to share their answers and conclusions.

5. Finally, the teacher will share a poem that other students made collectively when they conducted the same interviews:

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Lying in the open air
Rain falls
In my eyes
Relaxed
Clearing my mind
All my concerns.

When the wind blows
I can feel
As it blows over
All my weary feelings
Invite people, animals, insects, fish,
To be part of it.

Please understand
Almost all of them
Just look at them
Although plant
They are
also living beings.

Learn
nature wants to be seen
tapped
heartfelt
not destroyed.

Look around you,
Please understand
Plants are in pain
Broken branches,
Broken glasses.
Close your eyes,
Hear a lot more.

The sound of branches
In the breeze.
Whispers the earth,
A distant call of crows
Drifting
Like sighs
To my ears.

Wild,
And free.
Trapped
Disabled
Like me.

Nice to be in the forest again
As a child
Discovering new things
Learning that
Nothing lasts forever.

Extension activity: If the teacher wishes, the students can be asked to write a poem in groups similar to this one, expressing in 2 or 3 short lines what they would like to reflect from the interviews in a poetic way. A poetry book could be elaborated and presented to the educational community from this exercise.

Related SDGs:



GreenComp COMPETENCE:

Promoting nature

Materials and resources:

- Copy of the Earth Charter https://cartadelatierra.org/lea-la-carta-de-la-tierra/descargar-la-carta/
- Activity adapted from: https://greenteacher.com/article%20files/explorandolacartadelatierra.pdf (Poem on page 5)

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Assessment:

Formative- Evidence of the interview conducted.

Assessment criteria- Interview conducted with all responses answered in a reflective way.

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ACTIVITY

2.1 What are the SDGs?

Learning objectives:

- Promote critical reflection on the current situation of the world.
- Encourage critical thinking
- Promote empathy for the impact of human actions on the planet
- Foster a sense of responsibility towards the environment around us.

Contents:

- Sustainable Development Goals
- 2030 Agenda
- Pollution
- Sustainability

Duration: 1 hour

Description: The aim of this activity is to learn about the Sustainable Development Goals (SDGs), and to be able to relate different elements and link them to the corresponding SDG. The aim is to relate different images with the definition and the corresponding name of each SDG, reflecting on and becoming aware of the need for change at local and global levels towards sustainability.

1. First, the teacher will give a brief explanation of the 2030 Agenda and which are the 17 SDGs. To do so, the following video produced by UNESCO can be shown. At the end of the video, the teacher should ask the students if they were aware of the SDGs and the existence of the 2030 Agenda.

2. Afterwards, students have to match different images and definitions with the names corresponding to each SDG. To do this, the teacher gives each student(or in pairs, depending on the number of students in the classroom) an envelope (there should be 17 envelopes in total) with two elements: an image and a phrase/definition (laminated and with velcro or blue tack on the back) of two different SDGs. On the board, there will be a poster board or a large sheet of paper with three columns. In the first column, there is the name of each SDG, and in the other two, there is space for each student (or pair of students) to clip the image and definition of each SDG. It is recommended to search for images on Google Images or iStock to relate each one to the SDGs by googling each SDG.

3. Once this has been done, students (in groups)have approximately 10 minutes to go to the United Nations website and consult the information available on the SDGs and the goals that have been proposed for each of them. The goal is that students learn more about each of the SDGs to achieve the objective of this activity. They have to choose which 3 SDGs are considered

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the most important/necessary, and briefly justify why. They have to reflect as a group and agree on the choice and justification.

4. Students are asked to write down their reflections in a table containing in one column the "Objective chosen" and in the other column a "Brief justification".

5. After around 10 minutes, one spokesperson from each group will have to explain to the rest of the group what was their choice and present a brief argumentation.

Related SDGs:

(all)



GreenComp COMPETENCE:

Critical thinking

Materials and resources:

- https://www.istockphoto.com/es
- https://www.youtube.com/watch?v=MCKH5xk8X-g
- Sustainable Development Goals and Targets - Sustainable Development

Assessment:

Formative- Critical reflection sheet

Assessment criteria- Completed sheet and participation in the activity.

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ACTIVITY

2.2 Energy at home

Learning objectives:

- To broaden students' knowledge of the different types of energy.
- Reflect on and be aware of the impact of the most commonly used energies on the ecosystem.
- Raise awareness among students to promote a willingness to bring about change.

Contents:

- Renewable and non-renewable energy
- Energy sources
- Energy consumption

Duration: 30 minutes

Description: This session encourages students to be aware of what is happening in their environment in relation to energy. In other words, they learn about the energy used in their homes and what it is used for. The aim is for students to reflect on the impact of the energy used and to learn about more sustainable alternatives.

1. Prior to this activity, students should ask their families which of these energies they use at home and for what purpose. If possible, it would be interesting for them to bring copies of bills for: Electricity, natural gas, butanegas, petrol/diesel oil, Biomass (firewood, compressed wood,etc.).

2. With this information, students will have to fill in the following table:

Energy distribution	Do you use it at home? Or in the car? Yes, or no?	What do you use it for at home?	How does it arrive?	How much does it cost? *(Price per unit of energy = kWh)*
Electricity				
Natural Gas				
Butane				
Petrol/ diesel				
Biomass				
Solar thermal				

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3. Once the table is completed, students have to answer the following question individually:

Have we always used the same energy at home or
have we changed it at some point?
If so, why this change?

4. In this table, they should indicate whether they use the different energies at home or in the car and explain why they use them.

5. Then, the students must find out how the different energies or energy they use get home and what they cost.

6. Once the table has been completed and the questions have been answered, these are discussed aloud. In addition, the teacher asks the following questions: Which is the most commonly used form of distribution? Could you use natural gas to watch TV? Which is the most expensive, and why do you think this is the case? Can you say which is the cleanest? Do you think any of the different energies could be used for everything? Could any of these energies replace all of them? Which one?

7. Based on these questions, a group debate and reflection is generated on the most used energy and why this is the one that is most used and not another.

Related SDGs:



GreenComp COMPETENCE:

Systems thinking

Materials and resources:

- https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/
- https://www.miteco.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/manual_h_v_canarias_energia_tcm30-171579.pdf
- https://www.miteco.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/students-book-energy_tcm30-171399.pdf

Assessment:

Formative- Evidence of the table with the different questions answered.
Assessment criteria- Active participation in the table creation, group discussion, and reflection. Delivery of the table duly completed.

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ACTIVITY

2.3 True or false?

Learning objectives:

- Promoting reflection on the current climate crisis
- Encourage critical thinking by evaluating information and arguments.
- Generate empathy in students about climate change and the impact of human actions on the planet.
- Expand knowledge on climate change.

Contents:

- Fake news
- Misconceptions about climate change
- Pollution

Duration: 1 hour

Description: The aim is that students, in pairs or groups of 3, reflect on the statements provided on climate change and develop the arguments that have led them to their choice.

1. The teacher shows the following video (2 min.) on the importance of immediate action to face climate change and the proposed SDGs.

2. Then, the students, in pairs or groups of 3, will reflect on the statements they are given about climate change and provide the arguments that have led them to this choice. They will then have to decide whether each of them is true or false and argue their decision:

- Current climate changes are a consequence of human activity.
- The increase in global temperature is a consequence of human activity.
- CO2 emissions from humans correspond to a very small percentage of the CO2 emissions that exist in the world.
- Even if they can't guess whether it will rain tomorrow, they can guess what will happen 50 years from now.
- Volcanoes release more CO2 per year than humans do.
- Spring comes early.
- More violent wildfires are caused by climate change.
- Global warming is caused by the sun, which is getting hotter.
- Investment in renewable energy generates unemployment.
- Climate change is generating extreme weather events.

To justify why they believe each statement to be true or false, they can search for information on the internet. They are asked to present their justifications in a mind map or table.

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3. When everyone has finished this work in teams, a group sharing is held in which the teacher puts all these statements on a poster or large piece of paper, or they are projected on the smartboard, leaving two spaces on a side of each statement. The teams are given enough green and red stickers to stick one or the other next to each statement, depending on whether they consider it to be true or false, as each statement is commented on.

4. The teacher asks if the first answer is true or false, and each team has to match the colour corresponding to their answer. Whoever answered false, the red one, and whoever answered true, the green one. In this way, the teacher can see in a more general way the opinion of the class group. Afterwards, some of the students say out loud why they think the statement is true or false.

5. After each statement, the teacher explains the correct argumentation. This is repeated for each of the different statements. The teacher has a document with the correct arguments for each statement.

6. The teacher then promotes reflection on the facts and the need to contrast information and that not everything that appears on the internet has to be reliable.

7. Finally, to go beyond the proposed statements, students have to look for different news related to climate change. In order to read the news, they have to use a critical reading template which specifies the questions students have to ask themselves in order to critically read the information consulted on the internet (preferably from a reliable source e.g. National Geographic, United Nations, newspapers, etc.):

·*What problem is stated in the text?*
·*What is the main idea?*
·*What scientific content can be related?*
·*Who wrote this document?*
·*Why did he/she write it?*
·*What ideas or beliefs led the author to write the text?*
·*Could a test or experiment be conducted to check the credibility of the main idea?*
·*What data, facts or evidence does the author provide to support the main idea?*
·*Are the conclusions in line with your current scientific knowledge, and why?*

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Related SDGs:



GreenComp COMPETENCE:

Systems thinking

Materials and resources:

- https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/
- ODS 13 | Climate Action - YouTube
- https://www.verificat.cat/clima

Assessment:

Formative- Completed table and the analysis of the news.

Assessment criteria- Rather than assessing whether they are right or wrong, the time spent, active participation and whether they really looked into whether their answer would be right or wrong can be assessed, but this is left to the teacher's discretion.

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ACTIVITY

2.4 Air pollution in my town or city

Learning objectives:

- Promote reflection on the current climate crisis and its challenges in terms of difficulty, people involved, time and geographical scope.
- Generate empathy in students about climate change and the impact of human actions on the planet.
- Expand knowledge of climate change in its context.

Contents:

- Current challenges of sustainability and climate change in their particular geographical scope
- Misconceptions about climate change
- Pollution

Duration: 1 hour

Description: The aim is that pupils learn about the sustainability and climate change challenges in their geographical context, as well as misconceptions about climate change. Due to its complexity, this activity is recommended for secondary education.

1. The teacher will start the activity by briefly explaining what air pollution is, the different clouds plus pollution, and the influence of anticyclonic situations or squalls on pollution. Below is a summary of the information that could be presented:

AIR POLLUTION

Atmospheric pollution is the presence in the air of materials that, in certain quantities, imply a risk, damage or serious nuisance for people and other living beings, goods of any nature, as well as that can damage different materials, reduce visibility or produce unpleasant odours. Atmospheric pollution can be natural, produced by volcanic eruptions or unprovoked forest fires or by the biological activity of living beings. This type of pollution has always existed, and the planet is capable of self-regulation, but the most damaging and difficult to regulate is air pollution due to human activities. Industrial processes and the burning of fossil fuels are the main sources of air pollution.

THE CLOUDS

There are different types of clouds, and thanks to the scheme inspired by the International Cloud Atlas, we can identify them. Thus, clouds are divided, according to their general shape, into 10 major types called genres. At the same time, each subgenre is divided according to: shape, structure,

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transparency, arrangement of its elements, the presence or absence of segregated clouds, as well as the development of the cloud itself.

To understand this, see the following guide: *Cloud Identification Guide* https://public.wmo.int/en/WorldMetDay2017/resources

CLOUDS + POLLUTION?

Anthropoclouds are those clouds that originate from human activities. Although cloudiness in the sky is generally considered to be of purely natural origin, since the beginning of the Industrial Revolution, the large-scale use of fossil fuels and the release of water vapour and other gases from nuclear, thermal and geothermal power plants have led to significant alterations in local atmospheric conditions. In some cases, the new atmospheric conditions can lead to the formation of clouds that would not otherwise appear in the sky. These clouds are called anthropocloud.



Anthropocúmulus originating from the activity of the Nesjavellir geothermal power plant (Iceland) (August 2009)

FOG + POLLUTION?

Smog is an air pollution that occurs when fog is combined with smoke and other pollutant particles floating in the atmosphere in areas of high pollution. Smog is a concept that mixes smoke and fog. Anticyclonic situations with an extended period of time favour the stagnation of polluting particles.

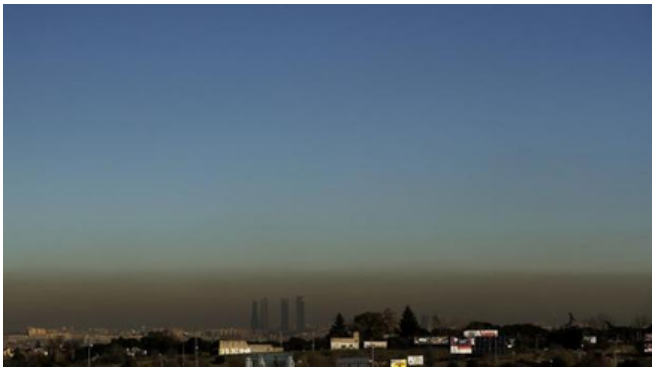


Smog

ANTICYCLONES, SQUALLSAND POLLUTION?

Anticyclonic situations favour the stability of air masses and therefore the containment of pollutants in the first layers of the atmosphere. Situations with squalls favour the dispersion of pollutants, as the air mass is unstable.

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Anticyclonic situation with pollutants contained in the Madrid air mass

2. Once the students have this initial basic information, the activity begins, which will be carried out in groups of 3-4 students.

3. Each group will have to carry out a search on the presence of different pollutants in their town or city. They should consult the IDESCAT website and look for data on air pollution in their town or city. They will be able to see the main pollutants and the amount of emissions. Not all towns and cities are listed on this platform. If you cannot find your municipality, you can do it directly through the Windy tool.

4. Once they have consulted this information, they should go to the public health, website, which explains the main pollutants, the effects they have on health, as well as the established health protection reference values for each of the pollutants

5. Then, they will have to enter the Windy website, and they will be able to observe live how the atmosphere is at that moment in relation to the different pollutants. With all these data, they will have to draw up a comparative table in which the first column shows the type of pollutant (H2S - hydrogen sulphide/ hydrogen sulphide, SO2 - sulphur dioxide, O3 - ozone 3, CO - carbon monoxide, NO2 - nitrogen dioxide) and in the following columns: the current level in their municipality, the recommended level, the consequences for health and the environment and the recommendations to reduce exposure.

6. Once the task has been completed, the work carried out can be presented to the rest of the groups, promoting a joint reflection on air pollution in the immediate environment.

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Extension activity: To extend the activity, it would be interesting for students to look for information on which sector or activity generates the emission of each of the polluting gases. In this way, students could be made aware of the impacts of human activities.

Once the students have all the information about the different pollutants, pollution levels, etc., they have to look for information about which sector of activity (e.g. industrial, tourism, textile, etc.)generates which pollutant or which sector emits more pollutant gases.

The aim of this extension activity is to get students to reflect on the importance of this activity, the economic implications and how the emission of these polluting gases could be reduced. The reflection can revolve around supply-demand, the use and abuse of products and services that we humans carry out and the consequent emission of polluting gases.

Related SDGs:



GreenComp COMPETENCE:

Problem framing

Materials and resources:

- https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/
- ODS 13 |Climate Action - YouTube
- https://public.wmo.int/es/D%C3%ADa-Meteorol%C3%B3gico-Mundial-2017/recursos
- https://salutpublica.gencat.cat/ca/ambits/proteccio_salut/aire/
- https://www.windy.com/ca/-C%C3%A0meres-web/Espanya/Catalunya/Reus/webcams/1604052525?camsEu,no2,41.155,-0.542,8
- https://www.idescat.cat/indicadors/?id=aec&n=15215
- How do clouds influence the Earth's environment? iWater
- Cloud types: names, characteristics and photos - Summary with photos (ecologiaverde.com)
- Resources | World Meteorological Organization (wmo.int)
- Smog: what it is and what consequences it has on the environment | Bioguide

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Assessment:

Formative- Completed comparative table with the current state of air pollution in the town or city, including recommendations.

Assessment criteria- Table duly completed and active participation in group reflection.

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ACTIVITY

2.5 My ecological footprint

Learning objectives:

- Foster a sense of responsibility towards the current and potential climate situation in terms of difficulty, people involved, time and geographical scope.
- To provide measures that students can take in their daily lives to anticipate and prevent problems arising from climate change, as well as to mitigate and adapt to existing ones.

Contents:

- Environmental impact
- Ecological footprint
- Individual action
- Reduction of CO2 emissions

Duration: 1 hour

Description: The aim is that students, individually, reflect on the different activities they carry out in their daily lives, from the moment they get up to the moment they go to bed, and their relationship with the environment, and the individual impact that our daily actions have.

1. Students are asked to calculate their ecological footprint online (see materials and resources). With this initial activity, students become aware of the magnitude and impact of our lifestyle on the environment.

2. Once the individual ecological footprint has been calculated, there will be a group sharing, with the aim of reflecting on the impact we have on the planet, and how we could reduce our footprint.

3. Afterwards, individually or in groups of 2-3 students, they will reflect on more sustainable alternatives to our daily activities. Students will be asked to make a list of the different actions (at least 5) in their daily lives from the time they wake up until they go to sleep. For example:

·*Action:* Wrap lunch in foil or cling film.

·*Alternative:* Carry the sandwich in a lunch box or beeswax wrap.

·*Improvement:* Reduce the consumption of plastic and polluting materials. Reduce consumption of disposable products. Reduce pollution. Saving of resources.

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4. They will then have to think out loud and together about how they could reduce their ecological footprint in different areas (at home, at school, etc.) to save water, energy, etc.

·*Example:* in winter, try, as far as possible, to have showers for all family members at more or less the same time, as the water only has to be heated once. Or organise to share the car as many times as possible, fill the mop bucket with water from the shower while waiting for it to heat up, etc.

5. At the end of the sharing and reflection, the teacher projects a short presentation with recommendations for reducing the ecological footprint (see action ideas in the Materials and resources section).

Related SDGs:



GreenComp COMPETENCE:

Problem framing

Materials and resources:

- https://www.youtube.com/watch?v=chh0sAmfCwo
- Ecological Footprint Calculator - FVS (vidasostenible.org)
- Ideas for the presentation of recommendations: https://www.ecologiaverde.com/como-reducir-la-huella-ecologica-2454.html

Assessment:

Formative- Completed list of actions, alternatives and improvements. Work done in class.

Assessment criteria- Table duly completed and active participation in group discussions and reflections.

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3.Envisioning sustainable futures

ACTIVITY

3.1 Moonshot thinking for climate change

Learning objectives:

- Encourage students to visualise different future problems.
- Promote students' ability to imagine alternative solutions or scenarios for a sustainable future.

Contents:

- Climate change
- Foresight problems and solutions
- Possible scenarios
- Alternative sustainable futures

Duration: 1 hour

Description: The aim of this activity is that students, through the Moonshot thinking technique, visualise future socio-environmental problems, as well as possible solutions or alternatives to achieve a more sustainable future.

1. Students are proposed to review the "Expected effects and impacts of climate change" of the student's notebook of the Aragonese Strategy for climate change and clean energies (Available in this link >>"Didactic Material" >>"Students">> Page 9).

2. In large group, brainstorming will be carried out on how some problems (3 or 4) can be made worse by promoting imagination, as if they get 10 times worse, as if we foresee an even worse imaginary future. This can be written on the blackboard, in a drawing, on a poster or on a large sheet of paper with stickers. The teacher will have to motivate the students to think about this future, if possible, based on the scientific evidence we have today, not just as a catastrophic science fiction film, but trying to think about the possible real consequences.

3. Once they have these catastrophic scenarios, in smaller groups, they will make a mind map for these even more catastrophic situations by dividing them into social, economic and environmental domains and including, for each of these, different possible solutions. They will be given the indication that this is an imagination exercise so that they can think and imagine different innovative solutions, including for example, not invented technologies. For example, in the social field, they can think that migration will worsen due to climate change and there will only be 2 or 3 cities per continent where it will be possible to live (catastrophic and social scenario), and from here, they could come up with a solution to solve this problem.

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4. At the end, the product (mind map) and some of its solutions will be shared with the rest of the groups.

Related SDGs:



GreenComp COMPETENCE:

Futures literacy

Materials and resources:

- Student's notebook page 9 https://www.aragon.es/-/frenar-el-cambio-climatico.-un-reto-de-todos
- Large sheets of paper, stickers and coloured markers
- https://www.sesamehr.mx/blog/moonshot-thinking-innovacion/
- https://youtu.be/SPBVyyPgz6c?t=2688

Assessment:

Formative- Mind map

Assessment criteria- Mind map including different catastrophic future scenarios and possible solutions.

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ACTIVITY

3.2 Let's make proposals to achieve the SDGs

Learning objectives:

- Reflecting on the current and future world situation.
- Enhance a sense of responsibility towards the surrounding environment by managing sustainability transitions and challenges and making future-related decisions in the face of uncertainty.
- Empower students to make decisions.

Contents:

- Climate change
- Sustainable Development Goals
- Adaptability for a sustainable future.

Duration: 1 hour

Description: This activity consists of reflecting on the SDGs. The aim is for students to answer the following question: What could be done to achieve the SDGs?

1. Students have to imagine that they are politicians and important people around the world who have the capacity and responsibility to change and improve the world and to respond to SDGs 6, 7, 11, 12, 13, 14, and 15.

2. Students are grouped into sub-groups of 4-5 people, and within each group, adopt the following roles: politician, economist, education expert, sustainability and environment expert and health expert. Each group has to choose 2 SDGs.

3. For 10 minutes, they have to reflect on the chosen SDGs and propose 5 actions for each of them that would help to achieve them. These should be realistic and achievable, taking into account current lifestyles and the roles of the different members of the group. Each group should write down on a sheet of paper the SDGs they have chosen and the proposals they have made for each of them.

4. After 10 minutes, each group has to share their proposals with the rest of the class group.

5. After the sharing, the teacher asks the following questions: *Why do you think the SDGs exist? Do you think it is necessary for them to exist? What do*

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you think about the fact that it has been necessary to take measures and actions such as the 2030 Agenda?

The aim is to get students to reflect on the current situation, develop critical thinking and become involvedin the action.

Related SDGs:



COMPETENCIA GreenComp:

Adaptability

Materials and resources:

- https://recursoseducativos.ongdeuskadi.org/recurso.php?id=258

Assessment:

Formative- 5 actions that each group has worked on per each SDG.

Assessment criteria- Active participation, ideas that relate to the SDGs are consensual and discussed.

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ACTIVITY

3.3 Role play on environmental issues

Learning objectives:

- Promote student management of environmental issues, transitions and challenges in complex sustainability situations.
- Encourage students to make decisions related to the future in the face of uncertainty, ambiguity and risk.
- Foster critical thinking and the promotion of assertive communication and reflection.

Contents:

- Environmental issues
- Political accountability
- Environmental disasters

Duration: 1 hour

Description: The aim is that students adopt the role of different people with responsibility in their municipality and thus be able to reflect on the management of some of the environmental problems we face to promote a more sustainable society.

-The activity is explained to the students, where they will take on the roles of different responsible people from their town or city. The roles and sectors are as follows (they can be adapted):

Ø Representatives of the municipality (mayor, councillor for the environment, administrative/accountant, etc.)

Ø Representatives of different social entities of the village (hiking club, women's collective or group, young people of the village, etc.).

Ø Representatives of: livestock breeders, farmers and shop owners in the village.

Ø Representatives of the enterprises - employers' group

Ø Representatives of the educational community (teachers, students, principals, etc.).

-Before forming the groups and choosing the roles, the activity is explained to them. In an assembly, the students must identify and agree on the main environmental and sustainability problems in their municipality in order to implement adaptation and mitigation measures to reverse them. Depending on the problems chosen, there will be representatives and sectors that will be more or less affected; what must be achieved is that all representatives (i.e. members of different roles)commit to adopting the measures.

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-For this reason, they must draw up a document with a report on the agreements reached. This document should include the problems chosen, how these problems negatively affect the municipality and the environment, the measures that have been proposed, the measures that will finally be carried out (chosen by assembly), the actions that each area/sector should carry out to contribute to the resolution of the problem and finally the benefits or changes that these improvements/measures will generate. The environmental issues chosen should be real and relevant to their town or city. Some examples are:

Ø On rainy days, the automatic watering of the lawns and green areas of the town/city is still activated.
Ø Street lamps could be fitted with solar panels.
Ø There is no cycle lane or it does not reach all parts of the city.
Ø The opening hours of the bulky waste collection service are very limited, as are the opening hours of the recycling centre.
Ø Waste generation: The city generates a large amount of waste and it needs to be treated if its impact on the environment is to be reduced.
Ø Lack of litter bins throughout the municipality/city.
Ø Air pollution from large industries

OPERATION

1. As many groups are created according to the sectors that exist.
2. A first joint meeting is held in which the different problems to be dealt with are chosen. It is recommended that 3-4 issues are selected.
3. They then meet in sectoral meetings. In these meetings, each group/sector should discuss the following aspects for each issue. These should be collected in a document, as at the end of the session, they should draw up a report explaining:

Ø What impact does the problem have at the level of the municipality/city (impact on the environment, population, etc.)?
Ø What could be done to reduce the impact of this problem? Global actions at the municipality/city level.
Ø Actions that should be taken by your sector, more specifically, to contribute to the identified problem.

4. First round: Joint meeting in which a representative from each sector presents their proposals.

5. Second round: Once each sector has explained its proposals, they should discuss in an assembly with one representative per sector, which are the best measures and actions for each problem. At the end of this round, an agreement must be reached and each sector must commit it self to an action.

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EXAMPLE:

The town's industries generate a lot of waste that they do not manage properly and end up polluting the river that flows through the municipality. The businessmen explain that, in order to manage waste properly, they would have to invest much more money and that, as they are currently doing so, they are not in breach of any regulations. One possible solution would be for the City Council to give economic resources (incentives) to industries to allocate money to good waste management. Activities can be carried out at school to raise awareness among pupils. Different events can be held in the town with social organisations to raise money and contribute to this problem.T he money can also be used for other problems, etc.

Related SDGs:



**Depending on how it develops, it may be linked to more SDGs.*

GreenComp COMPETENCE:

Adaptability

Materials and resources:

- https://www.naturalizaeducacion.org/2021/09/01/la-asamblea-ciudadana-por-el-clima/
- Similar ethics game https://www.youtube.com/watch?v=HeA5Z6Q-104

Assessment:

Formative- Keep a tally of group's participations, make an observation of participations during the assembly.

Assessment criteria- Active, dialogical and respectful participation.

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ACTIVITY

3.4 Moonshot thinking in my everyday life

Learning objectives:

- Encourage students to visualise different future problems.
- Promote the students' ability to visualise how they would adapt their actions in the future.
- Empower learners to decide how they could already adapt some actions in the present.

Contents:

- Climate change
- Foresight problem sand solutions
- Possible scenarios
- Managing transitions
- Decision-making
- Alternative sustainable futures.

Duration: 2 hours

Description: The aim of this activity is that students, through the Moonshot thinking technique, visualise future socio-environmental problems, as well as possible solutions or alternatives to achieve a more sustainable future by grounding it in their daily lives in the present through a role-play in which they fictitiously embody how they would have to adapt to live in a more sustainable future.

1. It is recommended to work on this activity once the "Moonshot thinking for climate change" activity has been carried out, as once the students already have the social, environmental and economic solutions, they will be asked in teams to create a theatrical script for a role-play about how a child of their age will have to live in 50 years' time in order to adapt to the consequences of climate change. The characters and settings can be: the child, his/her family, his/her neighbours, the school environment, holidays, etc. The theme can revolve around one or two catastrophic scenarios and the solutions they have proposed. At the end, they can leave a moral or lesson for the audience about how we could act from now on so that we could foresee this catastrophic scenario.

2. Present the role-play (this can be in another session) to the class group and/or the educational community, as appropriate.

3. Finally, the students individually have to answer the following questions and hand them in writing: Have I ever thought that this problem could happen? What difficulties do I see in changing my life in this way in the present? Could

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any of this be adopted now? Together they will also hand in a collage or visual board using digital technologies (Canva and Google images)in which they will show how they can, on an individual level, already apply different adaptations to their personal life (in at least 4 habits of their life such as: leisure, school, family, neighbourhood or community) to avoid the catastrophes of the role-play.

Related SDGs:



GreenComp COMPETENCE:

Adaptability

Materials and resources:

- Computers or tablets to work on the visual board in Canva: https://www.canva.com/es_es/crear/collage-fotos/

Assessment:

Formative- Theatrical script and visual collage

Assessment criteria- Theatre script depicting a child's future covering one or two catastrophic scenarios and the solutions they have proposed. Visual collage including at least 4 changes in their daily life.

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ACTIVITY

3.5 All my subjects on climate change

Learning objectives:

- Encourage students to work in a transdisciplinary way by adopting a relational way of thinking.
- Promote creativity to see the backbone axis of a single issue related to sustainability.
- Empower students to make decisions

Contents:

- Climate change
- Inter- and transdisciplinarity
- Sustainable Development Goals

Duration: 1 hour
Description: The aim of this activity is that students, through transdisciplinary work, can empower themselves and adopt a relational way of thinking using creativity to interweave the different axes of sustainability.

1. In a first step, all SDGs are briefly presented, emphasising SDGs 6, 7, 11, 12, 13, 14, and 15. It is recommended to use the explanatory video of the SDGs.

2. Teams will be formed to work on the selected SDGs, dividing them among the groups. Each team will be given the list of subjects they are currently studying (e.g., language, natural, social and cultural environment, art education, civic and ethical values education, physical education, foreign languages, mathematics, etc.), and they will be initially asked if they think it is possible to work on the SDGs in all the subjects they are currently studying.

3. They will be presented with a hypothetical situation in which, for one day, they are the school principals, and they have to find the most creative way to make a positive change in all subjects to include the SDG they are responsible for.

4. As school principals and leaders, they will be asked to propose a series of actions to be implemented in the school related to the SDGs that each group will work on independently. They have to explain how knowledge of the different subjects could be related to the SDGs and sustainability.

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5. At the end, they can present their ideas to the other groups in their class and/or to the teaching staff, school management team, etc.

Related SDGs:



GreenComp COMPETENCE:

Exploratory thinking

Materials and resources:

- https://recursoseducativos.ongdeuskadi.org/recurso.php?id=258
- https://www.youtube.com/watch?v=MCKH5xk8X-g

Assessment:

Formative- Delivery of ideas and presentation to teachers.

Assessment criteria- Ideas that relate to the SDGs and to the subjects presented in a clear and dialogical way to the teachers

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4.Acting for sustainability

ACTIVITY

4.1 How efficient is my house?

Learning objectives:

- Identify one's own potential for sustainability through the concept of energy and its sources, as well as the feeling of individual responsibility for the current climate situation in one's own home.
- Provide measures that students can actively take in their daily lives to face climate change.

Contents:

- Environmental impact
- Individual action
- Reduction of CO2 emissions
- Forms of energy
- Energy use
- Energy efficiency

Duration: 2 hours
Description: The aim is that students individually identify their own potential for sustainability in their own home and contribute with measures to make it more efficient.

1. Prior to this session, the teacher will explain the concept of energy efficiency labels and will ask students to check the labels on the following appliances in their home: fridge, freezer, microwave, television, washing machine, tumble dryer, dishwasher, oven and air conditioning. If possible, it would be interesting for them to take a photograph of the label, as this will provide more information about the consumption of the product.

2. The information to be collected for each appliance is the consumption in kWh, the power (W) and the energy class letter. All appliances have a label showing consumption and power, even if they do not have an energy efficiency label. If there is an appliance that does not have a label, you should look for information on the internet about that appliance to find out how much it consumes.

3. In addition, in order to carry out the second part of the activity, they must download a free mobile application called AhorraLuz (available on Android and iOS).

4. The session begins with a reminder of the different elements of the energy label, so that students know how to interpret a label, as well as the difference

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in consumption and efficiency between the different letters.

5. Following these steps, students have to produce a report in the form of a table containing the following information:

Ø COLUMN 1: Device + energy efficiency letter.
Ø COLUMN 2: Power (Watts)
Ø COLUMN 3: kW (divide Watts by 1000)
Ø COLUMN 4: kWh (multiply kW by the hours of use per day)
Ø COLUMN 5: Cost (€) /year (multiplykWh x days of the year used, by the price per kWh)
Ø LAST ROW: TOTAL €

By means of these different mathematical calculations, students will calculate the economic expenditure (approximately) of each household appliance over the course of a year. The different appliances should be ordered from less consumption to more consumption. Once the calculations have been made, the cost of all the appliances should be added up to find out approximately how much it costs per year.

6. Once this information has been completed, it is shared with the large group. The whole class group comments aloud on the letter of each device and the annual cost. The aim is for the students to be able to make a comparison between the consumption of those who have more efficient devices and those who do not.

7. In addition, a group reflection on the economic impact of the use of different household appliances will be held. However, the impact is not only economic for individuals, but this energy consumption also has an impact on the environment, as all this energy must first be produced before it can be consumed, which generates a risk and an impact. In other words, it is not a question of reducing energy consumption to reduce the economic cost to each person, but also, and above all, to reduce the impact that this generates on the planet and the environment. These reflections must move away from looking only at the common good of human beings. The epicentre is not people and humans, but planet earth.

8. After this reflection, in subgroups of 4-5, students will debate and agree on 10 actions to have a more sustainable energy consumption in their homes. Once the actions have been agreed upon, they must write them on a poster or cardboard. These will be presented to the class group, explaining each proposal.

9. Finally, the cardboards with the actions proposed by each subgroup will be hung on the wall or displayed above the desks. Meanwhile, the teacher will

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idistribute small stickers to each student (12 stickers if there are 4 subgroups and 15 stickers if there are 5 subgroups). Each student individually must choose from each cardboard the 3 most important actions for him/her, which considers that could carry out at home. A visual representation of the most voted and relevant actions for the class group will be obtained, which can be commented on and debated in a large group before ending the activity.

Related SDGs:



GreenComp COMPETENCE:

Individual initiative

Materials and resources:

- APP AhorraLuz for Android: https://play.google.com/store/apps/details?id=com.yhondri.ahorraluz&hl=es&gl=US and for iOS: https://apps.apple.com/es/app/ahorraluz-precio-de-la-luz/id1523032850
- https://selectra.es/energia/info/que-es/etiqueta-energetica

Assessment:

Formative- Action proposal

Assessment criteria- Completed cardboard with actions.

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ACTIVITY

4.2 What is the energy use in my school?

Learning objectives:

- Act for change in collaboration with others.
- Promote critical thinking by distinguishing the most and least energy efficient elements of the school.
- Empower learners through school-level improvement planning and design.

Contents:

- Energy efficiency
- Energy audit
- Types of energy

Duration: 1 hour 30 minutes
Description: The aim of this activity is that students can get closer to the energy reality of the school in order to act in favour of change by collaborating with others.

1. This energy audit is qualitative, as the aim is not to find out the energy and economic cost of the school, but to create an overall picture of the current state of the school in relation to energy efficiency. Beforehand, the concept of the energy efficiency label, can be explained to the students, and all the points that will be analysed in a large group can be clarified.

2. Groups of 4 to 5 students should be created to distribute the different tasks and actions to be carried out. The first part of the audit is to collect information about different aspects of the school. To do this, they will have to ask for information to the school principal or leader, teacher coordinator, go around the classrooms, etc.

Ø What types of energy are used in the school (electricity, butane, diesel, naturalgas, petrol, etc.)?
Ø Energy consumption of the school (ask for the invoices of different months to the school management team).
ØWater heating systems (electricity, gas).
ØThermal insulation of the building(double-glazed windows, doors, walls, roofs).
Ø Appliances used in the school and energy efficiency label.

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For this part, each member of the group is responsible for accounting for one item:
Ø Lighting: Number of bulbs and/or fluorescent lights. Spaces with natural light, etc. Hours per day they are in operation.
ØComputers and projectors: Number of computers and projectors.
Ø Heaters and radiators: Number of heaters and/or radiators. What the system is like (central throughout the building, independent, etc.).

3. Each group should go around the school to collect the corresponding information. It is very important that, when entering the classrooms to carry out the count, they are respectful with their schoolmates and the teachers who are using the space. They should enter the classroom and explain that they are doing an activity and ask if they can enter the classroom for a moment. Each group should take note of the information they collect.

4. Once each group has collected the information that corresponds to them, they must carry out a diagnosis where they reflect the strengths and weaknesses (SWOT analysis: Weaknesses, Threats, Strengths and Opportunities) in order to draw up a list of proposals for improvement in their area. They can look for information on the implications and effects generated by the current situation in the school in relation to their area (for example: high consumption light bulbs, few spaces with natural light, etc.) and, based on this, make proposals for improvement.

5. In order to make the list of proposals, students can take into account the following questions:
Ø Of the energies used in the school, could any be replaced by a more sustainable one?
Ø Do all appliances have an energy efficiency label? If not, which ones can be replaced and what would be the cost to the school (find information on the price of energy-saving light bulbs and fluorescent lamps and multiply by the number of bulbs and fluorescent lamps)?
Ø In broad terms, what could be done to reduce the school's energy consumption?
Ø In relation to heating, what are the implications of the current system in the school, and could it be more efficient?
Ø How can water be saved in the school?
Ø Could the thermal insulation of the building be improved and what systems could be implemented?

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6. Once each group has drawn up a list of proposals for improvement, these should be shared with the whole class. There should be two or three class leaders who write down the different proposals from all the groups.

7. Once the sharing is finished, they should hold an assembly to reach an agreement on which of all the proposed actions are the highest priority and the most affordable for the school. They have to draw up a report/minutes with the established agreements.

8. Finally, a dissemination campaign can be carried out in the school in order to inform students from other groups and classes, teachers, etc.

Related SDGs:



GreenComp COMPETENCE:

Collective action

Materials and resources:

- https://teachersforfuturespain.org/asamblea-ciudadana-por-el-clima/
- https://selectra.es/energia/info/que-es/etiqueta-energetica

Assessment:

Formative- Improvement report and assembly participation

Assessment criteria- Report on the state of the school by team, with possible improvements, as well as active participation in the assembly.

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ACTIVITY

4.3 And together, what can we do?

Learning objectives:

- Promote responsibility towards the current climate situation
- Identify and analyse actions that students could take in their daily lives to face climate change.

Contents:

- Environmental impact
- Ecological footprint
- Individual action
- CO2

Duration: 30 minutes
Description: The aim of this activity is that students identify actions they can take in their daily lives to face climate change by working together with others and disseminate them through a short, informative video.

1. At the beginning of the activity, students should already have calculated their ecological footprint, otherwise, teachers can find different ways to calculate it on the internet (see *Dimension 2. Embracing complexity in sustainability. Activity 5. My ecological footprint*).

2. In groups of 3 or 4, students will have to make a list of different actions (4 actions per area) that can be taken in different areas to reduce their impact. The areas are:

Ø In the classroom
Ø At school
Ø In the home/family

3. This will be followed by a group reflection on what are the different obstacles to being able to carry out these actions and how they could actually do it together with others.

4. Finally, they will be asked to make a short video in their groups of no more than 1 minute on at least 1 action per area of work, linking it in the video to one or more SDGs. It is not necessary for the students to appear in the video, but the narration should be creative, like a Tiktok video. Once the video has been made, it will be disseminated among friends, family and school colleagues.

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Related SDGs:	GreenComp COMPETENCE:
	*Collective action*

Materials and resources:

- https://www.vidasostenible.org/proyectos/calculadora-de-huella-ecologica/

Assessment:

Formative- Footprint calculation and list of actions

Assessment criteria- Calculation of the footprint done correctly, list of actions discussed in group and making of a short video.

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ACTIVITY

4.4 Dissemination campaign

Learning objectives:

- ·isseminate the different projects and proposals that students have developed in collaboration with their peers to promote sustainability.
- Encourage teamwork and networking
- Work on digital competence
- Enhance information processing skills

Contents:

- Digital competence
- Information processing
- Dissemination of projects
- Collaboration with others

Duration: 1 hour 30 minutes

Description: The aim is for students to gather all the information they have been working on, where different ideas for change, actions and possible solutions have been proposed, and to draw up a dissemination campaign.

1. Students should be able to organise themselves into committees or areas. They should be in charge of selecting the information they want to share, and they will also have to decide what material they want to produce: from an informative infographic to a video/short film, a magazine, information panels, etc.

2. The main objective is to share everything that has been worked on during the different sessions, in order to share it with the educational community.

3. In order to be able to elaborate the dissemination project correctly, students should ask themselves the following questions:

Ø *Define the objectives:* Specify what is wanted to achieve through dissemination. The objectives must be realistic.
Ø *Think about the target audience:* To whom it is aimed at and adapt the content and format to the target audience's profile. If there are different target groups, you can make materials suitable for different levels (students, families, teachers, etc.).
Ø *Define the product to be produced:* E.g. e-magazine, leaflets, short film, etc.
Ø *Define the channel(s) to be used for dissemination*. For example, Through social media or networks, school circulars, school email, leaflets, posters, etc.
Ø *Determine the material you will need:* Computers, sheets, a camera (to record videos if necessary), printer, etc.

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4. Students should be able to search for the information they consider necessary to develop a good dissemination project.

Extension activity: If this activity is done after introducing the SDGs or if student sare familiar with the SDGs, you could ask them to link their outreach campaign to one or more of the SDGs.

Related SDGs:



**Depending on how it develops, it may be linked to more SDGs.*

GreenComp COMPETENCE:

Collective action

Materials and resources:

- Computer, internet access, etc.
- The material will depend on what the students want to produce.
- You can use Calameo, which is a tool that allows you to make a digital magazine. You upload a PDF document, and the tool uploads it and share it in the form of a magazine.
- You can also use Canva, which allows you to create digital content (videos, presentations, infographics, etc.).

Assessment:

Formative- Dissemination project.

Assessment criteria- The project must have all the required elements.

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ACTIVITY

4.5 A controversial strawberry

Learning objectives:

- Promote student experimentation with the dimensions of action in the political system and their respective responsibilities and mechanisms of action.
- Reflect on this experimentation, the importance of accountability for unsustainable behaviour, and the relevance of demanding effective policies.

Contents:

- Sustainable resource management
- Socio-environmental dilemma: the tragedy of the commons.
- Political system
- Terrestrial and underwater ecosystems

Duration: 2 hours

Description: The aim of this activity is that students experience the importance of sustainable resource management through the dilemma/tragedy of the commons, which refers to when natural resources for collective use inevitably lead to overexploitation and, in the long term, are destroyed or depleted. Through this exercise, the aim is to reflect on and gain a better understanding of the political system and terrestrial ecosystems.

1. The teacher will explain the tragedy of the commons. The following video can be used.

2. The teacher will then read the news on the Doñana case together with the students and will ask them to carry out a research/search on the internet and then make a mind map based on the following questions:

Ø What is the origin of the strawberry?
Ø ENVIRONMENTAL FIELD: What natural systems are involved in growing a strawberry?
Ø SOCIAL AND ECONOMIC SECTOR: Identify the political, citizen, economic and environmental pressures surrounding the Doñana case.

3. Afterwards, they will have to make a comic in teams, either in digital or physical format, in which "the strawberry" will be the central character who will explain the different elements that are at stake in the Doñana conflict and that will be part of the mind map created.

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4. Within the comic "The Strawberry", the students have to come up with ideas on how to solve the situation, trying to consider the 3 spheres of sustainability: social, environmental and economic.

5. Finally, when presenting the comic to the class group, the teacher can ask the students if they know of any similar situation in their immediate environment where they live or where they have gone on holiday. If they do not know of any, it is recommended that they bring in a case that is closer to home.

Related SDGs:



GreenComp COMPETENCE:

Political agency

Materials and resources:

- https://www.eldiario.es/andalucia/donana-agua-patos-agua-fresas_1_10110978.html
- https://www.youtube.com/watch?v=pUnRONOdmao

Assessment:

Formative- Mind map and comic.

Assessment criteria- Mind map duly completed and comic strip with the required elements.

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