



ISLAND SCHOOLS

Sustainable Transport



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Session 2: Analysing the data collected
This lesson plan consists of 2 separate sessions. The first session outlines a period of research and data collection. The second sees time being spent analysing this information and making sense of this in preparation for presentations in Week 4.

Session 1: Introduction
In this first week, pupils will be introduced to the topic of sustainable transport considering the complexities of economic, societal and ecological impact.

Session 3: Get to know your partner island
Learners travel virtual to their partner island. They are introduced to the challenges of sustainable transport on their partner island and they create groups to solve each challenge.





Session 5: Working together - online
Pupils work on-line in groups and develop a solution to solve the challenges of sustainable transport in each island. They work in groups formed by students from both schools and find creative solutions for the challenge.

Session 6: Sharing the solution
Pupils share the solutions they've created with each other. This is also the opportunity to share the project more widely with the rest of the school.

Session 4: Choosing a challenge
This time, pupils use the information of previous sessions and brainstorm the main problems their island has regarding transport.

Session 7: Looking back, looking forward
In the final session the pupils look back at the past sessions and then look forward, imagining a future scenario for their island.



Session 1: Introduction

Sustainability challenge: Sustainable Transport

School type: Mixed age group, approx. 10-16 years

Week/Session number: 1

General description:

In this first week, pupils will be introduced to the topic of sustainable transport considering the complexities of economic, societal and ecological impact.

Pupils will explore transport from different angles, according to individuals (myself), the local community, the wider society, the world ...

They will start with the Sustainable Development Goals (SDG) and make clear connections to relevant goals, using videos or websites. Teachers and pupils choose which goals they want to work with.

1. Sustainable Transport and its impact.

Focus on the **relationship between individuals and society**, some questions and ideas on this:

- How does transport affect your island? Positively/negatively, what are the challenges and opportunities?
- Discuss the connections between transport and the community.
- Discussions between students, create a mind map and connect ideas.

2. Sustainable Transport.

Look at different types of transport and how some types are more sustainable than others in terms of their social and environmental impacts? Discuss the effect of various types of sustainable transport.

Learning outcomes:

Students should be able to:

- Know SDG that relates to the project.
- Define and understand different types of transport.
- Explain the effects of different types of transport on individuals and society.
- Explain the effects of transport on climate, environment and nature.
- Contribute to the discussion on how transport can be made more sustainable in the future.

Materials needed: (teachers and students select what they think is most relevant to use

1. Access to computer, phone, tablet or another smart device.
2. SDG goals: short videos or visit the UN's own SDG website.

<https://www.heimsmarkmidin.is/>

<https://sdgs.un.org/goals>

<https://sdgs.un.org/topics/sustainable-transport>

3. Goals relevant to Sustainable transport are (integrate the SDG icons 4,6,7,8,11,13,14,15 (link to the description of these goals in the respective language, see below)
4. Blog, on-line material, ideas for discussions – below you will find a selection of material that teachers can choose from to get ideas for discussions and tasks:

- Basic description on sustainable transport:

<https://www.youtube.com/watch?v=T9j42-V5cr0>

- What is sustainable transport? Some ideas to look at:

<https://climate.selectra.com/en/advice/sustainable-transport>

- Sustainable transportation solutions for a sustainable future:

<https://www.youtube.com/watch?v=yDz5bRy7AgI>

- How can cities shift people to more sustainable transport:

<https://www.youtube.com/watch?v=PzhwrDgrqUA>

- Clean sustainable transport infrastructure:

https://www.youtube.com/watch?v=njCRLuDHw_c

- The sustainable transportation plan on Bainbrigde island:

<https://www.youtube.com/watch?v=MJqKZhpCqIY>

On-line material in Icelandic (considering sustainable transport and its economic, societal and ecological impact)

- The use of electricity in transport: <https://www.youtube.com/watch?v=OKHnNjuOPBU>

- Strætóskólinn: <https://www.youtube.com/watch?v=ys7PG9XxSlk&t=2s>

- Electric cars: <https://www.youtube.com/watch?v=xzXHmKR435k&t=2s>

- Walking: <https://www.youtube.com/watch?v=QDPdl1ClS9k>

- Public transport: <https://www.youtube.com/watch?v=2UkTG0cz8Ro>

- Cycling: <https://orkusetur.is/myndbond/samgongur/?playlist=af09f22&video=f2deacb&fbclid=IwAR2BncPsQN4IKkeXBBIpRiOmFbhxa-46WMeN9RZgEUdqi8KnrJcLrrbqWI8>

- Carpooling: <https://www.youtube.com/watch?v=UghgJ1ukfM8>

- On-line working: <https://www.youtube.com/watch?v=l7YiZl5mvtw&t=14s>

- Eco-driving: <https://www.youtube.com/watch?v=VoawnnO6TTO>

- Orkusetur: <https://orkusetur.is/>

SDG goals relevant to Sustainable transport

Each country can provide relevant link to their language

- Goal 4 – Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
 - Target 4.7: By 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development.
 - [4.7 Menntun fyrir alla - Icelandic](#)
 - [4.7 Ποιοτική εκπαίδευση - Greek](#)
- Goal 6 – Clean water and sanitation: Ensure availability and sustainable management of water and sanitation for all
 - Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
 - Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
 - [6.3 og 6.4 Hreint vatn og hreinlætisaðstaða- Icelandic](#)
 - [6.3 6.4 Καθαρό νερό & αποχέτευση - Greek](#)
- Goal 7 – Affordable and clean energy: Ensure access to affordable, reliable, sustainable and modern energy for all.
 - Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix.
 - [7.2 Sjálfbær orka - Icelandic](#)
 - [7.2 Φθηνή & καθαρή ενέργεια - Greek](#)
- Goal 8 – Decent work and economic growth: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
 - Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
 - Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.
 - [8.8 og 8.9 Góð atvinna og hagvöxtur – Icelandic](#)
 - [8.8 8.9 Αξιοπρεπής εργασία & οικονομική ανάπτυξη - Greek](#)

- Goal 11 – Sustainable cities and communities: Make cities and human settlements inclusive, safe, resilient and sustainable.
- Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- Target 11.4: Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.
- Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
- [11.2, 11.4 og 11.6 Sjálfbærar borgir og samfélög – Icelandic](#)
- [11.2, 11.4, 11.6 Βιώσιμες πόλεις & κοινότητες - Greek](#)
- Goal 13 -Climate Action: Take urgent action to combat climate change and its impacts.
- Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- [13.3 Aðgerðir í loftslagsmálum - Icelandic](#)
- [13.3 Δράση για το κλίμα - Greek](#)
- Goal 14 – Live below water: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
- [14.1 Líf í vatni -Icelandic](#)
- [14.1 Ζωή στο νερό - Greek](#)
- Goal 15 – Life on land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- [15.1 Líf á landi - Icelandic](#)
- [15.1 Ζωή στη στεριά - Greek](#)

Structure and activities:

- 1. Teachers introduce the Sustainable Developmental Goals (SDG)** and make clear connections to relevant goals listed above, making use of videos or websites.
 - Students in small groups choose to work with two or three goals using computers/phones.
 - Discussion between students, on the relations between individuals, society and transport and the goals. Why do we need these goals? What do they call for? What is the meaning of the goals? To whom do they apply?
 - Groups introduce the goals they worked on for the rest of the students and teachers. Later this week following work on their assignments they could introduce their work for more people, even record their presentations.

- 2. Introduction via videos on Sustainable Transport.**
 - Use one (or more) of the recommended video-links to introduce the concept. Keep in mind the connection to Climate Change. This will serve as an intro/opening for the work in coming weeks.

- 3. Sustainable transportation.** Teachers and students discuss the work ahead and focus on the relationship between individuals, society and sustainable transport.
 - Make a KVL/KWL assignment about sustainable transportation (Kann – vill vita– hef lært: See Icelandic guidelines; <https://menntastefna.is/tool/kvl-kennsluadferdin/> English: [KWL - The Teacher Toolkit](#))
 - How do individuals and society depend on transport and how does transport depend on individuals and society?
 - Discussion between students, create a mind map and connect ideas.
 - Discuss the connections between humans/individuals and the transport.

- 4. Transport.** Provide basic information on transport in general.
 - Think about and list up different kind of transport.
 - What types of transport do I have in nearest surrounding and in the island? How is my life related to transport?
 - What is the economic, societal and ecological impact of transport on your Island.
 - What type of transport is sustainable?
 - What can I do to have a positive impact on sustainable transportation?
 - Students visit the websites and look for videos on sustainable transport and report on what they see and hear. Make a summary of the site or a video.

Output/wrap-up, feedback and assessment:

The visible outcomes of students' work that can be used to assess their learning will vary according to the goals and topics they choose, but they might be in various forms such as, posters, concept maps, videos or PowerPoint presentations. They, however, should be made to address authentic audience such as people/parents/local government who might be invited to come and listen and give feedback. Even if audience from the local community are not invited students could nevertheless present their products to each other and be given roles as listeners to give feedback (to ask questions, probe for meaning etc).



Session 2: Analysing the data collected

Sustainability challenge: Sustainable Transport

School type: Mixed age group

Week number: 2 and 3

General description:

This lesson plan consists of 2 separate sessions. The first session outlines a period of research and data collection. The second sees time being spent analysing this information and making sense of this in preparation for presentations in Week 4.

Part 1 sees pupils undertake research on what renewable energy source would best serve their island using practical tasks. They'll be sorting and refining this information in the subsequent session.

Learning outcomes:

At the end of these 2 weeks, pupils are able to...

- Conduct field research in their local area
- Compile the data they have gathered
- Describe the information they have gathered
- Explain their findings

Materials needed:

Measuring Wind Speed

- Paper cups or yoghurt pots
- Tape or glue
- Straws or sticks or pencils

Measuring Wind Direction

- A bottle of bubbles

Measuring Cloud Cover

- A mirror
- A white board pen

Measuring Waves

- A decibel reader app

Measuring rivers

- Two poles/flags/stakes/markers of some kind
- A bright coloured ball

Structure and activities:

Warm Up:

At one point in time, travel posters were an important way to advertise places to people around the world. Start by showing some travel posters to the class as examples. Together, identify the key features of a travel poster – what are the characteristics of the best ones? Next, ask the class to design their own travel posters for their island. When doing so, ask them two questions:

- How would they like people to travel to the island?
- How do they think people will actually travel to the island and on the island?

These questions will open up discussions on transport to the island and on the island. We want travel to be as environmentally friendly as possible but for that to happen we need access to renewable energy. The class will now begin an investigation to find out what renewable energy works best for their island.

Data gathering:

The class will create their own equipment to measure and evaluate different renewable energy sources themselves. This lesson plan gives examples for wind energy, solar energy, hydro and wave energy but you can deviate from this to measure geothermal or any other energy source if you wish.

Measuring Wind Energy:

The class are going to work together to create anemometers – instruments used to measure wind speed. Picture instructions can be found at the end of this lesson plan. To measure wind direction, blow some bubbles and see what direction they go in. This could influence the best place to put wind turbines.

Measuring Solar Energy:

The class are going to work together to create an instrument to measure cloud cover. Cloud cover is measured in Oktas. Take a mirror and divide it into 8 squares using a pen or whiteboard marker:

Hold the mirror so it faces the sky. The sky will be reflected in the mirror. Count how many squares have clouds in them. This will allow you to measure how much cloud cover is in this area at this time. If 0 boxes have clouds in them then the score is 0 Oktas – the sky is clear and could be good for solar energy. If all boxes have clouds, then it scores 8 Oktas. It is very cloudy and solar energy might not be reliable here. Think about how these scores may change at different times of year and factor this into your decision.

Measuring Wave/Tidal Energy:

Big waves generate the most energy. It is difficult and unsafe for us to travel out to see to measure them but luckily large waves also make lots of noise! Download a decibel measuring app on a smart phone or another device and visit a safe piece of coastline. Using the app, measure how loud the waves are. Which part of the island has the largest waves? This would be the best place for wave/tidal energy.

Measuring Hydro Energy:

Visit part of a local river. Place one flag or pole at a point on the bank of the river. Place the second pole or flag a few metres downstream. Record the distance between the two poles/flags. Then, drop a bright coloured ball or something else that floats into the water at the first pole/flag. Time how long it takes for it to get to the second pole/flag. Repeat this a few times. Then calculate how fast the river is: $\text{speed} = \text{distance} \div \text{time}$. Fast rivers produce the most energy. Which river on the island is best for hydroelectric power?

Session 2:

Time will be spent putting together a visual proposal. This proposal will showcase the results of your investigations and explain which energy source is best for your island and why. This will be shared with your partner school and can also be shared with local representatives.

Decision making happens in different ways on islands across Europe. Prepare to share information with your partner island on how decisions are made on your island. Is there a Mayor? Is there a council? Does decision making happen on the island? Does decision making happen on the mainland? Do certain groups have certain roles?

If the children wish to make change on their island, who is the person they contact?

Feedback and wrap-up:

After completing their data gathering, learners reflect and evaluate upon the process. To consolidate understanding of the impact that tourism has on your island, encourage learners to complete a numeracy task. Cycling a bicycle for 1 hour can generate as much as 100 watts of power. How long would they have to cycle to power:

- A PS5 or a Nintendo Switch for an hour
- Fully charge their mobile phone
- Keep their fridge running for 24 hours
- Boil pasta for 10 mins
- Power a computer for their virtual meeting with their partner school?

Session 3: Get to know your partner island

Sustainability challenge: Sustainable Transport

School type: Mixed age group

Week number: 4

General description:

Learners travel virtual to their partner island. They are introduced to the challenges of sustainable transport on their partner island and they create groups to solve each challenge.

Learning outcomes:

At the end of this session, learners are able to:

- Identify the renewable energy resources on their partner island
- Acknowledge the similarities and differences between renewable energy and sustainable transport for each island and the reasons for these differences

Materials needed:

- Laptop with stable connection and a camera
- Zoom/MS Teams/Google Meet/etc
- Powerpoint/Keynotes/etc

Structure and activities:

Preparation:

Prior to this session, learners should decide upon how they would like to share the information they have gathered in the previous session with their partner island. This can be done through a powerpoint, a video, a show and tell, posters, etc. This aspects should be student lead and they will already be familiar with this process from their series of lessons on Ocean Plastics.

The presentation may cover the following themes:

- What transport currently exists on the island? Public transport, cars, etc
- How is this transport fuelled?
- What transport links connect the island to the mainland or other islands?
- What sources of renewable energy can be found on the island?
- Which sources are most suitable for your island? Why is this?
- Which sources are not suitable for your island? Why is this?
- How can someone go about making change on your island? Who makes decisions about things that happen or change on the island?

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Teachers from both schools should agree on the date and time of the presentations to allow for ample time for learners to be prepared and practice their presentations. These presentations may be saved to a shared drive (OneDrive, GoogleDrive, Dropbox, etc) to allow for learners to revisit this material while they work on their chosen challenge.

The Presentations:

In a predetermined manner, learners will deliver their presentations to their partner school via a video call. The school that went second for the Ocean Plastics presentations should go first this time.

After the presentations:

After the presentations, the teacher makes mixed groups of students for future work. These can be the same groups used in Ocean Plastics or different groups if the teacher wishes.

Once a medium for communication has been decided upon, an ice breaker should be used to get the conversation started e.g. 'What is the one type of food that is loved in your country that is difficult to find anywhere else?'

Feedback and wrap-up:

At this point of the session, learners should be familiar with the modes of transport of their partner island and renewable energy resources. This can be established through regular questioning, formative assessment strategies and the use of plenaries. The use of these is open to teacher discretion.



Session 4: Choosing a challenge

Sustainability challenge: Sustainable transport

School type: Mixed age group

Week number: 5

General description:

This time, pupils use the information of previous sessions and brainstorm the main problems their island has regarding transport. They have a list of problems/challenges, selected a joint challenge with their partner-island school that they then work on together in sessions 6 and 7.

Learning outcomes:

At the end of this week, pupils can:

- List and compare the different challenges identified in the former sessions.
- Find common problems that connect the two partner island schools.
- Select a challenge that impacts both partner island schools.
- Describe the selected challenge in English.

Materials needed:

- Resource 6 Challenge comparison template.
- Free online poll-app (e.g. Doodle)

Structure and activities:

Identifying own sustainable transport challenges

Pupils list the challenges identified during the session 2 and analysed during session 3. This will result in a list of sustainable transport challenges, for instance:

- 'Tourists travel to the island by plane which is much more polluting than the ferry'.
- 'Politicians do not invest in sustainable transport between the island and the mainland'.
- 'People do not use sustainable transport within the island'.

Identifying the partner island schools transport challenges

Based on the presentation of the partner school pupils in the former session, the pupils list the challenges of the partner school, for instance:

- 'Politicians do not invest in sustainable transport between the island and the mainland'.

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- 'Tourists travel by car on the island which is very polluting'
- 'Insufficient awareness among the transport industry of the Sustainable Development Goals'.

Compare and select a joint challenge.

Pupils compare the island challenges and decide which specific challenge they share and select one to focus on. Which is the most Important challenge for the island? Which of the challenges can obtain a more innovative solution? Which of the challenges can have the most impactful solution on the island? Pupils may use the Challenge ranking template (resource 6) to get to their decision.

If there is more than one joint challenge, the pupils can use a free online poll-app (e.g. Doodle) to decide together with the pupils from their partner island which challenge they will work on in the next weeks.

Description of the challenge

Pupils will use the information gathered in the Sustainable Transport Challenge Ranking template to describe the challenge they selected in more detail and in English. At the next session pupils will work together on the solution to the challenge.

Feedback and wrap-up:

At the end of the week, pupils present their selected challenge – they can choose to do this in English to practice and be prepared to show their work to their partner school in session 6.



Session 5: Working together - online

Sustainability challenge: Sustainable transport

School type: Mixed age group

Week number: 6

General description:

Pupils work on-line in groups and develop a solution to solve the challenges of sustainable transport in each island. They work in groups formed by students from both schools and find creative solutions for the challenge.

Students will identify a bunch of solutions, explaining why they think these solutions would fit the island, including the local community. Students will evaluate each solution with the guidance of their teacher/facilitator and they will try to think of ways of implementing it.

Learning outcomes:

At the end of this week, pupils are able to:

- Evaluate the resources/material collected
- Perform brainstorming activities
- Organise ideas and propose solutions
- Identify which solution fits their island the most
- Negotiate and discuss with peers.
- Respect the democratic process in the framework of which a final decision has been made
- Strengthen their soft skills, such as critical thinking, problem solving, creativity and collaboration, empathy (students put themselves in their peers' shoes)

Materials needed:

- Laptop with a stable connection and a camera
- Zoom/MS Teams/Google Meet/etc.
- PowerPoint/Keynote/etc.
- Ice-breaker games
- Brainstorming canvas
- A presentation template for sharing their ideas to the partner island's peers, maybe in Miro (a collaboration tool to share information in virtual boards)

Structure and activities:

01. Preparation

Students have been doing research on the topic and they will share this information through a ppt presentation or a brief video to their peers from the partner school.

The facilitators, one per school (could be 2 students assigned by their teachers) are distributing tasks

- Some students will start preparing the video
- Some students will prepare an engaging presentation template

Students meet and create a good atmosphere for working. It is important to create a safe space for the students to communicate and share their own ideas confidently. Teachers can use a game as an ice-breaker for the group:

Option 1: Facilitator asks repeatedly to switch on and off the camera if they agree with each affirmation. For example, “Switch on the camera if you play a musical instrument”, “Switch on the camera if you hiked last weekend”,....

Option 2: Teacher prepares an engaging activity in Miro. For example, a map of an island where they have to write in stickers their names and also things they like to do on the island. After they have to connect with lines the different stickers, creating a chaotic map of interactions.

02. Brainstorming:

Each group uses between 45-60 min to brainstorm solutions for the challenge. The main steps for the brainstorming activity are:

1. Open brainstorming: Each group proposes as many solutions as possible. It is not time to judge them, the more ideas the better. It is an individual activity, but it must be transparent for the rest of the group, using a collaborative board (mural, miro or Padlet Tools) or a shared file (google drive or similar).
2. Teamstorming: Students together create new ideas. The facilitator provides some guidelines
in order not to waste
 - Impersonate: Imagine you are another person and ask the participants to answer the challenge as this person would do. You can use different examples: your major, your mother, Ghandi, Greta Thunberg,...
 - Collaborate: Ask to exaggerate, combine, reverse ideas of the other participants.
 - Exchange: Ask one group to brainstorm the other ones. You have fresh ideas from other people in the module.

03. Organizing the ideas:

The students organise the ideas using a matrix with two axes: innovation and feasibility. The ideas could be clustered in possible and emergent solutions.

They all meet again and present their final draft, while the rest of the team is listening and paying attention to the final result, and they debate in order to conclude. Mentimeter Tool can be used for the debate.

04. Value proposition

The students end the session by selecting their solution among the different clusters identified in the process.

Additionally, they build a solution. “Building a solution” doesn’t per se indicate a physical thing. Students can work on an ad campaign, present a prototype of a machine they created, or make a film talking about how a community can solve the problem.

Feedback and wrap-up:

After preparing all these, students present a preliminary work to the rest of the class, including their teachers. They prepare for the final event where they will present the results in public. They can collect feedback and resolve any vague aspects.

Teachers can reflect on creativity and collective work. They can reflect on how complicated it is to create collaborative solutions.



Session 6: Sharing the solution

Sustainability challenge: Sustainable transport

School type: Mixed age group

Week number: 7

General description:

Pupils share the solutions they've created with each other. This is also the opportunity to share the project more widely with the rest of the school.

This time pupils involve the school community; they start with a short presentation with what they have achieved the past learning weeks and they are seeking for possible solutions to the challenges identified so far. They have brainstorming sessions and debates, they vote, and their teacher/facilitator is supporting them on not to lose track. They try not to focus on local ideas to the challenges set and they search on the internet for potential solutions coming from other island communities.

Pupils from the partner island will evaluate each solution with the guidance of their teacher/facilitator and they will try to think of ways of implementing it.

Learning outcomes:

At the end of this week, pupils will be able to...

- explore new ideas/solutions
- evaluate the resources/material collected
- categorise those resources according to the social, financial and sustainable impact
- identify which solution fits their partner island the most
- exploit the benefits of debate and voting and express their opinion by using arguments and defend their perspective
- strengthen their soft skills, such as critical thinking, problem solving, creativity and collaboration, empathy (pupils put themselves in their peers' shoes)

Materials needed:

- A customised table based on Resource 6
- a presentation template for sharing their ideas to the partner island's peers and to the local community.
- Digital tools such as Mentimeter, in order to prove the participatory aspect of this process and engage as much pupils as possible or Quizizz, in order to prove themselves to locals that they had done serious research and know a lot of things regarding Sustainable transport on the island

Structure and activities:

Session 1. The facilitator (could be a student assigned by the teacher, like in a flipped classroom) is also distributing tasks

- some pupils will search on the internet and work on the SDGs but in a local level
- some pupils will start preparing content for Mentimeter (debate questions) and for the Quizzes (questions on SDGs in general and how familiar locals are with SDGs)
- some pupils will prepare a simulation game/role play, pretending to be entrepreneurs that wish to invest on the island. The local community should be able to negotiate things and develop some critical thoughts regarding this investment.

Session 2. They all meet and brief the rest of the team with what they have done so far. The teacher provides some guidelines and suggests some corrective actions in order not to lose time and work on concrete results. Rehearsals are starting and the role play is on.

Session 3. They all meet again and present their final material, while the rest of the team is pretending to be the partner island's pupils and debate on the results.

Session 4. They invite the local community in order to check their results and then they prepare themselves to present the results to their peers from the other island.

Feedback and wrap-up:

Feedback is collected not only from the local community but from the peer school as well. Most of the findings are very interesting and they prove the importance of having a dialogue with various stakeholders, such as the local authorities, the private sector, external investors etc. Pupils learn to utilise these findings and move a step further, like re-adopt their solutions or customise those for the benefit of the most people involved.

This big experience should engage many local people in order to share the potential of youngsters bringing awareness on sustainable transport.

After preparing all these, pupils present their work to the rest of the school, both pupils and teachers, so as to collect feedback and resolve any vague aspects. Also, it would be highly recommended that in addition to teachers and pupils, other people could attend the session, so that it becomes a moment of celebration for the pupils. This could be a session with the mayor or something along those lines, obviously done in a child friendly manner.

Solutions could be:

- Initiating bike rentals instead of renting cars
- Launching a treasure hunt for tourists focusing on the benefits of sustainable transport against the traditional version
- Offering discounts on products and services when someone is choosing the sustainable way of visiting and enjoying the island

Session 7: Looking back, looking forward

Sustainability challenge: Sustainable transport

School type: Mixed age group

Week number: 8

General description:

In the final session the pupils look back at the past sessions and then look forward, imagining a future scenario for their island.

Pupils reflect on the sustainability challenge/challenges that has/have been explored and discuss its/their global implications in the framework of the Sustainable Development Goals.

If you've/pupils have travelled as part of the programme, this session takes place when you're/they are back on your/their home island.

Learning outcomes:

At the end of this week, pupils are able to...

- use the experience they have gained during the programme, both related to their own island and the visiting island (if they have travelled) to discuss possible future scenarios for their island.
- compare various scenarios, it's benefits and downsides for the global and local environment and the islanders as well.

Materials needed:

- a meeting place
- chairs and tables
- equipment to display the photos

Structure and activities:

Students could arrange an informal meeting at the school where they invite parents and other interested islanders to hear about their ideas on possible future scenarios for their island and what they have learned through the project.

Feedback and wrap-up:

To wrap up the lesson, ask the pupils how they felt working during the project?. Was it difficult to imagine a more sustainable island? Are there things from their partner island that they included in this future island?

As an optional extension, preferably as an additional session, you can work with the partner school to present the future islands to one another digitally. You can also have a live vote(using a video calling service plus, for example, Mentimeter) to decide which learnings they have achieved during the program and recommendations for the following participants

ISLAND
SCHOOLS



RESOURCES



How to make an anemometer

Step 1:

This example uses 5 paper cups, 4 pencils and tape. You can substitute these items for whatever you have to hand.



Step 2:

Tape a pencil to the top of a cup like in the picture below. Repeat this 3 more times. You should have a set of 4. Make sure that the cups are all facing in the same direction



Step 3

Using the end of a sharpened pencil or a pen, make 4 holes on the side of a cup. These holes should be big enough for the pencil to fit through. Stick the end of each pencil into a hole. Make sure the cups are all facing the same direction.



Step 4:

Head outside with your anemometer. In this picture, the anemometer is placed on top of a wooden stake so it can turn freely when the wind blows. You can make a handheld version by putting it on top of a ruler. When the wind blows, it will get caught in the cups and make the anemometer turn. The faster the wind, the faster the anemometer will turn.



Record Sheets:

Wind Speed and direction :

Example

Location 1	The school garden
How fast did it turn?	Very slowly. 1 full rotation in a minute
Direction	Wind came from the west

Location 1	
How fast did it turn?	
Direction	

Location 2	
How fast did it turn?	
Direction	

Location 3	
How fast did it turn?	
Direction	

Cloud Cover:

Location	How many Oktas?

Waves:

Location	How loud were the waves?

River Speed

Location	How fast was the river?

RESOURCE 6

Sustainable Transport Challenge Ranking template.

	Challenge 1:	Challenge 2:	Challenge 3:
<p>Economic impact</p> <p>What is the economic impact of the challenge? Do people earn a living with the challenge? Does it create jobs and income for the island community?</p>			
<p>Social Impact</p> <p>What is the impact of the challenge on the community? What do the people who live on the island think about the challenge?</p>			
<p>Sustainability impact</p> <p>How does the challenge affect the environment? The wildlife?</p>			
<p>Solution brainstorm</p> <p>What are your first ideas for a possible solution? Does it also take the social and economic impact into account?</p>			

Sustainable Transport Solution Ranking template.

	Solution 1:	Solution 2:	Solution 3:
<p>Economic impact</p> <p>What is the economic impact of the challenge? Do people earn a living with the challenge? Does it create jobs and income for the island community?</p>			
<p>Social Impact</p> <p>What is the impact of the challenge on the community? What do the people who live on the island think about the challenge?</p>			
<p>Sustainability impact</p> <p>How does the challenge affect the environment? The wildlife?</p>			
<p>Brainstorm for presenting some concrete solutions</p> <p>What are the arguments you are going to use in order to convince the local community about your solution? Have you thought of all the parameters?</p>			

