

TRAINING CURRICULUM





SMILE Training Curriculum

Supporting Climate Change and Sustainable Mobility Education in Schools



university of
 groningen



CARDET



Acknowledgments

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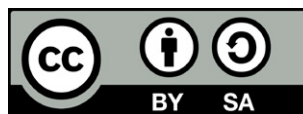


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Introduction

By the end of this century, climate is expected to change due to the large amounts of Greenhouse Gas (GHG) emissions in the atmosphere. The introduction of greener actions like sustainable mobility will improve the well-being and health of all citizens and future generations. Climate change is a persistent issue that demands sustained efforts, which is why it is crucial to disseminate education about it in both elementary and high school levels. Equipping teachers' knowledge and skills on using green activities will contribute to achieving environmental sustainability. Within this concept, the aim of the Erasmus+ SMILE project is to build the capacity of teachers to be able to implement activities with students in the field of climate change, sustainable mobility and STEAM education in order to increase awareness on the topic.

In particular, this resource pack provides educators with six comprehensive lesson plans that explore a range of thematic areas, from promoting environmental awareness and preservation to understanding the risks of unsustainable methods and recognising the benefits of sustainable mobility. Each area contributes to GreenComp's goal of equipping individuals with the knowledge, skills, and values necessary to shape a sustainable future. The GreenComp is a reference framework for sustainability competences developed by the European Commission that provides a common ground to learners and guidance to educators, advancing a consensual definition of what sustainability as a competence entails (Bianchi et al., 2022).

All lesson plans include clear and concise instructions and detailed descriptions of the activities. By incorporating these engaging and interactive activities into the classrooms, elementary and secondary education teachers can foster a generation of informed and empowered citizens committed to action. In the following link, you can also find further educational resources for teachers and students that promote awareness of climate change and sustainable mobility: <https://www.thesmileproject.eu/>.



Lesson Plan 1

Preserving our local environment



Lesson Plan 1 - Preserving our local environment

School Level:

Age groups:

7-12

Thematic area	Environmental Awareness and Preservation
Duration	2 teaching periods (45 minutes each – 90 minutes in total)
Classroom setting	A regular classroom with desks and chairs (students working in pairs)

Prior knowledge

Before teaching this lesson, **teachers** need to have a basic understanding of:

- Local flora and fauna

Lesson Overview

In this lesson, elementary-level students will explore their local environment to develop an appreciation for nature and its preservation. The lesson will engage students in hands-on activities, such as observing plants and animals, identifying species, and drawing what they discover. Through experiential learning, students will connect with their local environment and understand the importance of protecting it.

Materials needed

List of necessary materials / resources for current lesson plan:

- Notebooks and Pencils
- Outdoor Access
(e.g., schoolyard or nearby green area)
- Magnifying Glasses
- Clipboards (optional)
- Drawing Paper
- Colored Pencils
- Field Guide Books or Printouts of Local Flora and Fauna
- Stopwatch or Timer
- Whiteboard and Markers

Learning Outcomes

Upon completion of this lesson, students should be able to:

- **Observe** and describe local plant and animal species.
- **Identify** common flora and fauna in their area.
- **Understand** the importance of preserving local ecosystems.



Description
of the lesson
activities



Activity 1 - Nature Walk and Observation (45 minutes):

Part 1. Introduction (5 minutes):

- Start the lesson by gathering students in the classroom.
 - Briefly review the importance of exploring and preserving the local environment.
 - Share the objective of the activity: to observe and document local flora and fauna.
 - Explain the use of magnifying glasses and clipboards (if provided).
-

Part 2. Preparing for the Nature Walk (10 minutes):

- Instruct students to get ready for the outdoor nature walk.
 - Ensure they have their notebooks, pencils, magnifying glasses, and clipboards (if used).
 - Emphasize the importance of staying safe, following instructions, and respecting the environment during the walk.
-

Part 3. Outdoor Exploration (20 minutes):

- Lead students to the designated outdoor area (e.g., schoolyard or nearby green space).
 - In pairs, have students explore the area, paying close attention to plants, insects, and animals.
 - Encourage them to use their senses (sight, hearing, and smell) to make observations.
 - Allow students to take notes and sketches in their notebooks.
-

Part 4. Return and Group Discussion (10 minutes):

- Signal the end of the outdoor exploration.
- Bring students back to the classroom.
- Facilitate a group discussion, where students share their observations and experiences during the nature walk.
- Encourage students to describe what they saw, heard, and smelled.

Activity 2 - Species Identification and Creative Exploration (45 minutes):

Part 1. Identifying Species (15 minutes):

- Provide field guide books or printouts of local flora and fauna.
 - Guide students in using these resources to identify the species they observed during the nature walk.
 - Discuss the names and characteristics of the identified species as a group.
-

Part 2. Drawing and Sharing (25 minutes):

- Distribute drawing paper and colored pencils to students.
 - Instruct each student to choose one plant or animal species they observed during the nature walk.
 - Allow students ample time to create detailed drawings of their chosen species.
 - After drawing, invite students to share their drawings with the class.
 - During the sharing, encourage students to describe what they learned about their chosen species, including its name, features, and any interesting facts.
-

Part 3. Reflection and Discussion (5 minutes):

- Lead a class discussion focused on what students discovered during the nature walk and drawing activity.
 - Discuss the importance of preserving local ecosystems and biodiversity.
-

Closing Activity (5 minutes):

- Ask students to write or draw a brief reflection on what they enjoyed most about exploring their local environment and what they learned.
- Give students an opportunity to share their reflections with the class if they'd like.

Assessment

1) **Formative assessment:** During the nature walk and observation activity, the teacher will assess students' comprehension by engaging in discussions and providing feedback on their observations.

2) **Summative assessment:** The lesson's summative assessment will involve reviewing students' drawings and reflections to evaluate their understanding of the importance of preserving the local environment.



References

National Geographic (n.d). National Geographic Kids. <https://kids.nationalgeographic.com/>

Project Learning Tree (n.d). Learning is in our nature. <https://www.plt.org/>

Nature Explore (n.d). Playing outside brings children to life. <https://natureexplore.org/>

Lesson Plan 2

Class Eco-pledge



Lesson Plan 2 - Class Eco-pledge

Age groups:

7-14

Thematic area	Engaging with the Local Community for Climate Change Awareness
Duration	2 teaching periods (45 minutes each – 90 minutes in total)
Classroom setting	A regular classroom with desks and chairs.

Prior knowledge

Before teaching this lesson, **teachers** need to have a basic understanding of:

- Climate change and pollution's negative impacts
- Environmental impact of daily habits
- Sustainable daily habits to have
- Palaus' green policy on eco-tourism and sustainable living

Before following this lesson, **students** need to have a basic understanding of:

- The same as teachers but on a more basic level

Materials needed

List of necessary materials / resources for current lesson plan:

- A platform that can collect students' inputs such as "[Mentimeter](#)" or "[AHA slides](#)"
- A3 paper and stationary for a class poster
- Laptop and wi-fi connection
- Projector or screen to present

Lesson Overview

In this lesson, the students (no matter what age group) will engage in a brainstorming activity where they share their perceptions of the impacts that climate change has in their lives and together work towards finding key changes they can make in their daily lives to lower theirs and the school environmental footprint. The end result is a "school eco-pledge" that is inspired by Palaus' poetic "tourism eco-pledge". Students will also make a poster of the pledge so that they are reminded of their great work and commitment towards a more sustainable living.

This activity will stimulate the following skills in students: communication, teamwork, problem-solving, and creativity. By defining the pledge by themselves, students will feel more validated and empowered. The pledge of common commitment will also stimulate responsibility and the sense of belonging to a unity community (the class). Furthermore, the creativity and poetic twist to the activity make it multidisciplinary (science, technology, languages and arts), following STEAM education principles.

Learning Outcomes

Upon completion of this lesson, students should be able to:

- **Recognise** the environmental impacts of their daily habits.
- **Practice** the commitment towards a more sustainable living.
- **Evaluate** their progress towards sustainability.
- **Debate** common engagement and commitment towards sustainability with their peers.



Description
of the lesson
activities



1. Introduction (10 minutes):

Start by engaging students with the question “Do you think climate change impacts your daily lives?” Followed by “What are those impacts?”

2. Activity 1 (20 minutes):

Brainstorming section where students share their perceptions and impacts on climate change. The teacher collects their input.

3. Activity 2 (5 minutes):

The teacher shares the video on Palau’s eco-pledge

https://www.youtube.com/watch?v=e_OihCwH2x0

4. Activity 4 (45 min):

The teacher invites the students to have another brainstorming section by asking: “What are the commitments towards the environment that you believe everyone should make?”. The students are invited to share what they believe are good measures to become more sustainable, on an individual and school level. The teacher collects the inputs.

5. Activity 5 (10 min):

Both students and teachers will work together to find the common aspects of everyone’s interventions. These points are noted.

6. Activity 6 (30 min):

The teacher guides students to develop a “school eco-pledge” similar to the eco-pledge shown in the video.

7. Activity 7 (30 min):

The students transform the pledge into a poster to be displayed in the classroom-

8. Closing activity (10 minutes):

The teacher ends by highlighting the importance of community engagement in finding a solution towards a more sustainable world. Students are reminded of their commitment and are incentivized to present and follow the pledge principles at home.

Assessment

The school eco-pledge success will be evaluated in key environmental dates such as:

- Earth day: April 22nd
- Oceans day: June 8th
- Nature conservation day: July 28th

These are merely suggestive and can be adapted to every school situation. The teacher can prepare a survey with all the pledge principles to students classify from “1- did not keep” to “5- always kept the promise”. After collecting the answers, a class discussion will be held where students can share their difficulties and successes in a guilt-free, constructive environment.

assessment



References

Palau's eco-pledge websites: <https://palaupledge.com/>, <https://www.palaugov.pw/project-to-make-palau-a-carbon-neutral-destination-launched-by-palau-bureau-of-tourism-sustainable-travel-international-and-slow-food/>

Lesson Plan 3

Green Heroes: Learning ways to live sustainably



School Level:

Age groups:

8-14

Lesson Plan 3 - Green Heroes: Learning ways to live sustainably

Thematic area	How to reduce waste, conserve water and consume less energy
Duration	1 teaching period (45 minutes)
Classroom setting	A regular classroom with desks and chairs.

Prior knowledge

Before teaching this lesson, **teachers** need to have a basic understanding of:

- Waste management and recycling
- Energy efficiency
- Water conservation
- Environmental impact of daily choices

Before following this lesson, **students** need to have a basic understanding of:

- The environment and its importance
- Sustainable practices (like turning off lights, recycling, and not wasting water)

Lesson Overview

The current lesson plan is about promoting environmental sustainability by engaging students in understanding and implementing small, everyday actions to reduce their environmental footprint. It employs various methods to engage students, including brainstorming to encourage participation, hands-on sorting activities for recycling and composting comprehension, discussions to emphasize water conservation and energy efficiency, and a recap to reinforce key take-aways.

Materials needed

List of necessary materials / resources for current lesson plan:

- Whiteboard or chalkboard
- Markers or chalk
- Empty containers for waste sorting activity
- Projector and screen (optional for multimedia presentations)

Learning Outcomes

Upon completion of this lesson, students should be able to:

- **Recognise** the expressions and impacts of unsustainable individual ways.
- **Identify** how individuals can integrate sustainable practices related to waste management, energy consumption and water usage.



Description
of the lesson
activities

1. Introduction (5 - 10 minutes):

Start with an engaging question: "Do you know how we can help the environment in our daily lives?" and collect as many different ways as possible on the board.

2. Activity 1 (15 minutes):

Discuss the importance of recycling and composting to reduce landfill waste by using empty containers labeled "Recycle," "Compost," and "Landfill." Once everyone knows what recycle, compost and landfill is, gather in a circle and ask students to decide which Element Card goes to each container (see cards below).

3. Activity 2 (10 minutes):

Explain the importance of conserving water and discuss sustainable everyday practices (like fixing leaky faucets, shorter showers, turning off the tap while brushing teeth, etc.)

4. Activity 4 (10 minutes):

Analyse the importance of saving energy and reducing carbon emissions by mentioning simple practices (like turning off lights, using energy-efficient appliances, sealing drafts in windows, etc.).

5. Closing activity (5 minutes):

Recap the main points of the lesson and emphasize that small actions can make a big difference. Encourage them to start a Water Conservation and Energy Efficiency Scavenger Hunt (see list below).

Additional activity for older students (45 minutes):

Divide the students in groups of 2-3 and ask them to write short stories with an environmental message, emphasising on waste reduction, water conservation and energy efficiency.

Assessment

Assign each student the take-home task of creating a “Sustainable Living Action Plan.” This individual project should focus on how students can implement sustainable practices related to waste reduction, water conservation, and energy efficiency in their daily lives and what environmental impact they expect to achieve.



References

E.O.AN. (n.d.). GRE – CYCLE. <https://grecycle.gr/>

Material Template: Element Cards

Recycle:	Compost:	Landfill:
Empty aluminum cans	Fruit and vegetable peels	Synthetic fibers (e.g., acrylic and nylon)
Glass bottles and jars	Coffee grounds and filters	Styrofoam
Cardboard boxes	Eggshells	Mirror
Plastic bottles (with recycling symbol)	Tea bags	Plastic bags and wrappers (without recycling symbol)
Newspapers and magazines	Yard waste (grass clippings, leaves)	Paper cups with a plastic lining on the inside
Paper (office paper, printer paper)	Untreated wood chips	Ceramics
Steel or tin cans	Paper towels and napkins	Waxed or plastic-coated paper
Plastic containers (e.g., food containers like yogurt cups)	Bread and pasta	Cardboard contaminated by food, grease, or oil

Scavenger Hunt List

Water Conservation Scavenger Hunt	Energy Efficiency Scavenger Hunt
Spot a person who is not turning off the tap while brushing their teeth	Locate a person who is leaving the TV on when not in use
Identify a person who is using rainwater to water plants or garden	Identify an appliance that is being used with the eco-mode setting
Use timer to record your shower duration	Find a person who is using energy-efficient lightbulbs
Locate a person who is taking a shorter shower than you	Discover a person who is using natural light whenever possible
Check if a faucet at school or home is dripping	Spot a person who is not unplugging the charger once the phone is charged
Calculate the average daily water usage of your household or school*	Calculate the electricity consumption of a particular appliance and estimate the cost savings of using an energy-efficient model*

Lesson Plan 4

Eco Detectives: uncovering the secrets of sustainability



Lesson Plan 4 - Eco Detectives: uncovering the secrets of sustainability

School Level:

Age groups:

10-12

Thematic area	Discovering the risks of unsustainable methods for the future
Duration	1 teaching period (45 minutes)
Classroom setting	A regular classroom with desks and chairs.

Prior knowledge

Before teaching this lesson, **teachers** need to have a basic understanding of:

- Sustainability and its three pillars: environmental, social, and economic.
- The major environmental and social risks associated with unsustainable practices, such as pollution, resource depletion, and limited access to clean water or food.

Before following this lesson, **students** need to have a basic understanding of:

- What sustainability means, even at a fundamental level.

Lesson Overview

The current lesson introduces the concept of sustainability in a way that is engaging and understandable for students aged between 10-12 years old. It raises awareness about basic environmental and social risks while fostering critical thinking and curiosity. The lesson encourages students to start thinking about their role in promoting sustainability and making responsible choices. The methods employed include case studies, small groups, discussion, brainstorming and reflection.

Materials needed

List of necessary materials / resources for current lesson plan:

- Whiteboard
- Markers
- Projector and screen (optional)
- Timer or clock
- Handouts (printed or digital)

Learning Outcomes

Upon completion of this lesson, students should be able to:

- **Comprehend** the concept of sustainability, encompassing its three core pillars: environmental, social, and economic.
- **Recognize and articulate** fundamental environmental risks linked to unsustainability, notably pollution and resource depletion.
- **Identify and elucidate** primary social risks stemming from unsustainability, including challenges like limited access to clean water, food scarcity, and broader community concerns.



Description
of the lesson
activities

1. Introduction (5 minutes):

Start by asking students what they know about the word “sustainability.” Write their responses on the whiteboard.

2. Activity 1 - Defining sustainability (10 minutes):

Provide a simple definition of sustainability. Explain it means taking care of our planet, our communities, and our future by making good choices. Then proceed by introducing the three sustainability pillars: environmental (protecting the Earth), social (helping people), and economic (making smart economic choices).

3. Activity 2 - Environmental and Social Risks (10 minutes):

Discuss basic environmental and social risks such as pollution, resources depletion, and people not having enough clean water or food. Engage students with an interactive activity, such as showing pictures of polluted areas or discussing the idea of using up all the trees or clean water.

4. Activity 3 – Group activity (10 minutes):

Divide students into small groups (3–4 students per group). Provide each group with a picture related to an environmental or social risk (e.g., a polluted river). Ask them to discuss what they see and what problems it might cause. Then, ask each group share their picture and thoughts with the class.

5. Closing activity (5 minutes):

Encourage students to reflect on what they’ve learned about sustainability and basic environmental and social risks. Suggest a simple homework task, such as drawing a picture of something they can do to help the planet or writing a short paragraph about what they learned.

Assessment

Evaluation of students’ comprehension will be completed during the following:

- their participation in class discussions and activities
- their group presentations of their picture analysis during Activity 3.
- The homework task (drawing or writing)

assessment

Lesson Plan 5

Becoming Agents of Change



Lesson Plan 5 - Becoming Agents of Change

School Level:

Age groups:

10-14

Thematic area	Sustainable mobility
Duration	2 teaching periods (45 minutes each – 90 minutes in total)
Classroom setting	A group-setting classroom suitable for an average number of 20 students divided in groups of 5.

Prior knowledge

Before teaching this lesson, **teachers** need to have a basic understanding of:

- Societal, ethical and financial aspects of sustainability
- Intercultural competences and diversity in society
- Socio-scientific Issues (SSI) - based teaching

Before following this lesson, **students** need to have a basic understanding of:

- the importance of sustainability
- Sustainable and non-sustainable transportation

Lesson Overview

The current lesson plan is about promoting action-taking for sustainable mobility by engaging students in understanding the changes in social life that sustainability transitions bring and identifying the social groups that need support to achieve these transitions. In order to achieve this aim, this lesson, utilises teaching approaches such as Socio-scientific Issues (SSI) and more specific action-taking, role-play games and decision-making activities, that increase students' engagement and build their competencies in argumentation, critical thinking etc.

Materials needed

List of necessary materials / resources for current lesson plan:

- Computer or tablet per student/ station
- Printed informative material for the SSI activity
- Projector and screen or class board

Learning Outcomes

Upon completion of this lesson, students should be able to:

- **Be aware** of the sustainability transitions in mobility.
- **Describe** the challenges of a broad use of sustainable mobility.
- **Identify** the groups of people excluded and why.



Description
of the lesson
activities

Technology transmitted:**Introduction (5 minutes):**

Start with an engaging question: "Are all citizens able to use sustainable means of transportation?". Students write down their answers on a dashboard so as to discuss later in the classroom the issues that arise.

1. Activity 1 - Managing changes and challenges (15 minutes):

In this activity the students are problematised by certain questions regarding the changes that are important to make to achieve a more sustainable future and the challenges to embrace those changes. An example of questions can be: "How do you think we can encourage people to embrace more sustainable transportation options, and what challenges might arise in this process?" The students write down their answers to the dashboard for further conversation in the classroom.

2. Activity 2 - Supporting equity and social justice (15 minutes):

In this activity again, the students are problematised by certain questions regarding accessibility and equity in sustainable mobility which they answer on the dashboard for further conversation in the classroom. An example of questions can be: "In what ways can we ensure that sustainable mobility options are accessible and equitable for all members of our community, and what are the key challenges in achieving this goal?"

In the end of this part the teacher facilitates a summative and reflective conversation with the students (10 minutes).

Additional activity for older students (45 minutes):

"Becoming agents of change" (45 minutes): this part consists of 2 activities based on SSI approaches (Monroe et al., 2019).

1. Activity 1 (20 minutes):

In this activity the students form a group of 5 and then choose a specific challenge that they would like to address. In order for students to be engaged and explore further the problem, the role play game approach is utilised. More specifically, the students are proposed to take the roles of: Citizen that faces the challenge (e.g., old person), policy maker, volunteer, Mayor, representator of the transportation company. The teacher provides the students with the necessary information about the perspective of each one of the roles.

2. Activity 2: (25 minutes):

In this activity the groups of students design their collective actions with the help of the teacher. After the design, they create a poster in order to present the other groups their initiatives.

Citizen Facing the Challenge (e.g., Older Person):

Background: This citizen is a 72-year-old retiree living in Groningen in the Netherlands. They have limited experience with digital technology and struggle to use a smartphone or computer. They have some physical mobility issues, which make it challenging for them to walk long distances or access public transportation easily. They enjoy social activities with their friends and value their independence.

Volunteer:

Background: The volunteer is a 20-year-old student in the University. They are enthusiastic about community engagement and have volunteered for local organizations in the past. They have good digital literacy skills and are interested in promoting inclusivity in sustainable mobility. They are available to volunteer part-time and can offer their tech skills to help older individuals like the older person.

Representative of the Transportation Company:

Background: As a representative of a major public transportation company operating in the Netherlands, with a focus on bus and tram services. The company has a reputation for reliability but faces challenges in ensuring accessibility for all passengers, including those with mobility issues. The representative of the company is responsible for considering budget constraints, implementing improvements, and addressing customer feedback to enhance inclusivity.

Policy Maker:

Background: The policy maker is a city council member in Utrecht, a major city in the Netherlands. They are passionate about sustainability and have been involved in local government for many years. Utrecht has set ambitious goals for sustainable mobility, including reducing emissions and increasing accessibility. However, they face budget constraints and need to consider the opinions of other council members and the public.

Mayor:

Background: Mayor in one of the small cities in the Netherlands have a strong commitment to making a leader in sustainable mobility and inclusivity. The city has allocated a substantial budget for transportation initiatives and has implemented various policies to reduce carbon emissions. However, the mayor must balance these goals with public opinion, traffic congestion, and other city needs.

These scenarios provide a diverse range of perspectives and challenges that students can consider when designing collective actions to improve inclusivity in sustainable mobility in the Netherlands. Students can use these role-play scenarios as a basis for their discussions and decision-making activities.

The students discuss each other performing their role, expressing this perspective. The teacher facilitates the conversation and helps the students to evolve their argumentation skills.

Assessment

Assignment for this lesson will be the student's poster and presentation regarding their action plan. In that way, they will be able to assess the students not only regarding their knowledge on the topic but also on how they perform the competence of "acting for sustainability" as this is provided by the Green-Comp framework.



References

Margulieux, L. E., McCracken, W. M., & Catrambone, R. (2016). A taxonomy to define courses that mix face-to-face and online learning. *Educational Research Review*, 19, 104-118. <https://doi.org/10.1016/j.edurev.2016.07.001>

Monroe, M. C., Plate, R. R., Oxarart, A., Bowers, A., & Chaves, W. A. (2019). Identifying effective climate change education strategies: A systematic review of the research. *Environmental Education Research*, 25(6), 791-812.

Lesson Plan 6

Sustainable mobility for us and the others, now and in the future



Lesson Plan 6 - Sustainable mobility for us and the others, now and in the future

School Level:

Age groups:

10-14

Thematic area	How to adopt and promote sustainable mobility and environmental equity
Duration	1 teaching period (45 minutes)
Classroom setting	A regular classroom with desks and chairs.

Prior knowledge

Before teaching this lesson, **teachers** need to have a basic understanding of:

- Sustainable values
- Environmental justice and equity
- Intergenerational equity
- Sustainable mobility
- Benefits of sustainable mobility for nature and people (physical, psychological health, human-nature connection)

Before following this lesson, **students** need to have a basic understanding of:

- The environment and its importance
- Sustainability
- Discrimination

Lesson Overview

The current lesson plan helps students recognise the benefits of sustainable mobility, reflecting on what can be done to adopt and promote this practice for current and future generations' health. At the same time, the lesson addresses equity, preparing students to identify what constitutes environmental injustice and ways to ensure fairness for current and future generations.

Materials needed

List of necessary materials / resources for current lesson plan:

- Whiteboard or chalkboard
- Markers or chalk
- Projector and screen (optional for multimedia presentations)
- Art supplies for posters (paper, acrylic, cartons, markers, pens, pencils, scissors, etc.)
- Case studies from [Blended Learning Module 2. Valuing sustainability and supporting fairness](#) (see material template below)
- [Examples of environmental posters for idea generation](#)

Learning Outcomes

Upon completion of this lesson, students should be able to:

- **Recognise** the benefits of sustainable mobility for current and future generations.
- **Identify** practices to support environmental fairness for all current and future generations, focusing on mobility equity.



Description
of the lesson
activities

1. Introduction (5 - 10 minutes):

Start with a short discussion about students' experience with transportation and mobility (e.g., pedestrian and bike lanes, road networks, public transit). Adapt it to fit your context. For example: How do you move around for your daily activities (e.g., to attend school or join extracurricular activities)? What do you like and dislike about our city when you have to move around?

2. Activity 1 (15 minutes):

As a class write down a) the positive aspects of the local transport and infrastructure system and b) the negative aspects of the local transport and infrastructure system. Then, create a list of how this impacts the physical and mental health of people living in the city now and those who are yet to come. Ask questions like: what will future people be able to do, and how will they feel? Encourage your students to put themselves in their shoes. If your city has an environmentally friendly mobility system, prioritise the benefits you experience daily. If your city faces various challenges, prioritise what could be improved. Note down all students' ideas on a whiteboard. [This activity can be group work if time allows or if this lesson plan is split into two teaching periods]. After students' brainstorming, present examples of sustainable mobility and the benefits of nature's preservation to our mental and physical health

3. Activity 2 (10 minutes):

Present a short story of marginalised individuals and/or communities (e.g., in terms of race, culture, and abilities) facing environmental inequity by not having access to healthy natural environments and sustainable mobility options. You can adapt the case studies presented in the Blended Learning Module 1 (make a video or short presentation to fit students' ages). Ask students whether this is something fair or not. Using this story as a reference, explain the concept of environmental justice to students. Discuss how these individuals/communities lack equal access to environmental benefits compared to other privileged ones.

4. Activity 3 (10 minutes):

Ask students to think of what should be done to support fairness. In their groups, they have to draw a poster for a local campaign they will join to promote solutions for environmental equity and sustainable mobility. Policymakers will attend the campaign; thus, both individual and collective actions should be promoted. You can show examples of posters from national or international campaigns/protests.

10. Closing activity (5 minutes):

Recap the lesson's main points and reflect with your students on 2 key takeaways they have learned. You can prepare an exit ticket as a form of formative assessment.

Additional or alternative activity to the Activity 3, for older students (45 minutes):

Divide the students into groups of 2-3 and ask them to prepare a letter to an authority (e.g., city mayor, prime minister, president, depending on your context) highlighting what needs to be done for sustainable mobility and environmental equity.

Assessment

Assign each student the take-home task of creating a presentation for environmental equity focused on mobility. This individual project should focus on how students can implement sustainable mobility and equity practices and what needs to be done on a policy level.



References

The content is original, but inspiration is drawn from the resources below, which can be used to enhance your lesson plans:

Greenpeace. (n.d.). Making transport sustainable. A guide for teachers and youth leaders. <https://www.greenpeace.org.uk/wp-content/uploads/2021/02/GP-Sustainable-Transport-7-11-years.pdf>

European Commission. (n.d.). EU Urban Mobility Observatory. https://urban-mobility-observatory.transport.ec.europa.eu/index_en

Sipone, S., Garcí-a, V. A., Barreda, R., & Rojo, M. (2019). Learning about sustainable mobility in primary schools from a playful perspective: A focus group approach. *Sustainability*, 11(8), 2387. <https://doi.org/10.3390/su11082387>

Material Template: Case Studies

Case Study Title: Fairness for all regardless of ability.

Description: "Your neighbourhood lacks proper curb cuts and ramps at intersections, and in many places, the parked cars block the entrance or exit. The pavements are narrow and close to the main roads. Crosswalks lack audible signals, and due to the huge traffic, the cars might stop in the middle of the crosswalks when the green light for the pedestrians is on".

Is this something fair?

What should we do to ensure equity?

Case Study Title: Fairness for all, regardless of race, income and status

Description: "Historically, certain neighbourhoods, where low-income communities and people of colour live, cannot access reliable and sustainable transportation. The communities are placed in areas with increased industrial activities, close to large roads or highways, and neglected".

Is this something fair?

What should we do to ensure equity?

Conclusion

In conclusion, the journey towards a more sustainable future begins with education and awareness. Through the implementation of the comprehensive lesson plans provided in this curriculum, teachers have the opportunity to inspire their students to become active agents of change in combating climate change and promoting sustainable living. By fostering a deep understanding of environmental issues and encouraging critical thinking and problem-solving skills, we equip our students with the tools they need to contribute meaningfully to a greener world.

As empowered individuals equipped with this knowledge and skillset, students can engage in productive discussions about climate change. These discussions, guided by scientific evidence and respectful discourse, are crucial for fostering collective action. Remember, when discussing climate change (European Union, n.d.):

- **Ground your conversations in facts and data.** Rely on credible sources like the Intergovernmental Panel on Climate Change (IPCC) and reputable media.
- **Humanize the issue by connecting it to real-life impacts.** Share local or global examples of climate disasters and their consequences.
- **Provide actionable steps individuals can take.** Motivate with achievable and positive options, catering to diverse circumstances.
- **Maintain a collaborative and open-minded approach.** Welcome different perspectives and encourage ongoing learning through continued dialogue.

The engagement of both educators and students in initiatives such as the Erasmus+ **SMILE project** is vital in addressing the challenges posed by climate change and promoting sustainable mobility. By working together to implement these lessons, we can cultivate a generation of informed and empowered individuals who are committed to making a positive impact on the planet!



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TRAINING CURRICULUM

SMILE

Supporting Climate Change and Sustainable Mobility Education in Schools



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