



TEACHERS` MANUAL

A DIGITAL COLLECTION OF READY-TO-USE
LESSON PLANS



PROJECT AUTHOR TEAM



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OVERVIEW

This e-manual brings together all lesson plans developed within the Erasmus+ project “The Second Life of Waste”. It is designed as a practical digital resource for teachers who wish to integrate sustainability, waste reduction, and circular economy topics into their lessons.

The manual presents structured lesson plans supported by interactive tasks, discussions, and creative activities. For greater flexibility, all lessons are also available on Padlet, allowing teachers to access, download, and use individual lesson plans separately, according to their teaching needs.

What this e-manual includes:

- A complete collection of project-developed lesson plans;
- Practical classroom activities focused on waste, recycling, and sustainability;
- Interactive and student-centred tasks encouraging critical thinking;
- Flexible access to individual lessons via Padlet

Target group:

Primary and secondary school teachers Students aged 10–19

Project focus:

Sustainability • Circular economy • Waste reduction • Environmental awareness

Author team of Erasmus+ project “The second life of waste”

INTRODUCTION

This e-book is one of the key outcomes of the Erasmus+ Cooperation Partnership in School Education project “The Second Life of Waste”(No 2023-1-LV01-KA220-SCH-000159311). It was developed to support schools in addressing sustainability challenges through education and to provide teachers with meaningful, practice-oriented teaching materials.

The teaching materials were created through close international cooperation among educators from six European countries and partner schools:

- Jelgavas 4. vidusskola (Latvia);
- Vilkaviškio Salomėjos Nėries pagrindinė mokykla (Lithuania);
- Kanepi Gümnaasium (Estonia); Hungary, Budapesti Gazdasagi
- SZC Harsanyi Janos Technikum;
- Sultan Hatun Mesleki ve Teknik Anadolu Lisesi (Türkiye);
- Croatia, Prirodoslovna skola Split;

The project was implemented from December 2023 to December 2025. During this period, teachers collaborated, designed, tested, and refined teaching materials in real classroom environments. The main objective of the project was to strengthen students' environmental literacy, green skills, critical thinking, and active citizenship, while encouraging a deeper understanding of how waste can become a valuable resource and gain a “second life”.

The lesson plans included in this e-book address the key thematic areas developed within the project work packages, such as waste sorting and recycling, plastic pollution, glass and textile waste reuse, sustainable use of food and water resources, and the principles of circular economy and responsible consumption. The materials are based on a practical, inquiry-based and interdisciplinary approach. They combine research tasks, discussions, creative activities, fieldwork and collaborative learning, helping students understand the connections between everyday habits, environmental protection, economic processes and long-term sustainability.

This e-manual is intended as a practical support tool for teachers who wish to integrate sustainability topics into their teaching practice and inspire students to become informed, responsible and active members of society.

Table of Contents

1. Environmental Art, Eco Art, Digital Environmental Art(Renata Mihaljević)

Subjects: English, Art, IT / Age group: 14–18

Duration: 6 lessons (6 × 45 min) – English: 2, Art: 2, IT: 2

2. Waste Disposal (Renata Mihaljević)

Subjects: English (interdisciplinary with Ecology/Biology) / Age group: 14–18

Duration: 4 lessons (4 × 45 min) – English: 4

3. Understanding Microplastic Pollution (Iveta Balode)

Subjects: English (interdisciplinary with environmental studies and civic education) /

Age group: 15–18 (Grade 11)

Duration: 3 lessons (3 × 40 min) – English: 3

4. Glass and Its Secondary Use (Kristine Romanovska)

Subjects: English (interdisciplinary with social sciences and economics) / Age group:

14–18

Duration: 1 lesson (40 min)

5. Creation of New Products: Sustainability and Entrepreneurship (K. Romanovska)

Subjects: Social Sciences (circular economy, entrepreneurship) / Age group: 15–16 (Grade 10)

Duration: Project work (4–5 weeks)

6. From Tree to Paper – Why Paper Recycling Matters (Dace Bebriša)

Subjects: Environmental Science (interdisciplinary with Geography and Citizenship) /

Age group: 14–18

Duration: 4 lessons (4 × 40 min)

7. Glass Recycling Efficiency and Sustainability in Europe (E. Karčiauskienė, J. Šataitienė)

Subjects: English, Art, IT / Age group: 13–15

Duration: 6 lessons (6 × 45 min) – English: 4, Art: 2

8. Glass Recycling Efficiency and Sustainability in Europe (E. Karčiauskienė, J. Šataitienė)

Subjects: English, Natural Sciences, IT, Art / Age group: 13–15

Duration: 4 lessons (4 × 45 min)

9. A Story of Transformation – Transforming Knitwear (Yasemin Argun, Yıldız Gül)

Subjects: Literature, Creative Writing, Social Sciences, Art / Age group: 14–18

Duration: 5 lessons (5 × 40 min)

10. Making Costumes from Textile Products (Sibel Şebnem Özdemir, Melek Nur Türk)

Subjects: Drama, Textile and Fashion Design, Social Studies, Environmental Science /

Age group: 14–16

Duration: 6 lessons (6 × 40 min)

11. Fast Fashion: Being a Conscious Consumer and Friendly to the Environment (Nuray Yıldırım Cevahir, Hakan Güngör)
Subjects: English, Social Studies, Environmental Science / Age group: 14–18
Duration: 4 lessons (4 × 40 min)

12. Up-cycling a Knitted Pullover (Mine Demirboya, Bedriye Albayrak, Sibel Şebnem Özdemir)
Subjects: Textile and Fashion, Art and Design, Social Studies, IT / Age group: 14–18
Duration: 4 lessons (4 × 40 min)

13. Paper Recycling – From Waste to New Life (Merike Luts)
Subjects: English / Age group: 14–15
Duration: 4 lessons (4 × 45 min)

14. Learning by Doing – Recycling Paper (Terje Tammekivi)
Subjects: Environmental Education, Technology, English, IT / Age group: 14–18
Duration: 2 lessons (2 × 60 min)

15. Learning by Doing – Robotics (Terje Tammekivi)
Subjects: Environmental Education, Technology, English, IT / Age group: 14–18
Duration: 2 lessons (2 × 60 min)

16. The Conscious Customer (Vizkeletiné Gulyás Anikó, Bodnár Edina)
Subjects: English, Economy, Biology, Geography / Age group: 14–18
Duration: 4 lessons (4 × 45 min)

17. The Importance of Clean Water (Bodnár Edina)
Subjects: English (interdisciplinary with Biology, Chemistry, Geography) / Age group: 14–18
Duration: 3 lessons (3 × 45 min)



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LEARNING SCENARIO – ENVIRONMENTAL ART, ECO ART, DIGITAL ENVIRONMENTAL ART (interdisciplinary or separate)

Title

ENVIRONMENTAL ART, ECO ART, DIGITAL ENVIRONMENTAL ART

Author

Renata Mihaljević, PRIRODOSLOVNA ŠKOLA – SPLIT, CROATIA

Summary

Table of summary

Subject	This scenario can be used freely for separate Art lessons, English lessons, and IT lessons. Though, it could be used as an interdisciplinary lesson combining Art, English, and IT, as well as Ecology or Science. It is possible to include one/two more lessons for Ecology or Science to deepen students' knowledge about waste disposal. See links in online teaching material.
Topic	climate change, waste disposal, environmental art, eco art, active citizenship, sustainable environment
Age of students	14-18
Preparation time	English – 100' for preparation of the presentation for the students Art - 20' for teacher and 30' for students (collecting material) IT- 30' preparing ART STEPS
Teaching time	2 x 45 min lessons English 2 x 45 min lessons Art 2 x 45 min lessons IT
Online teaching material	<i>LINK FOR ARTSTEPS - for IT lessons.</i> https://www.artsteps.com/ <i>VIDEOS WHAT IS ENVIRONMENTAL ART: for English and Art</i> https://youtu.be/C8bFSRmOrE8 https://youtu.be/OJGinfL75vY https://youtu.be/OmmU69h4Vzk?si=TCJ4SVqht_pvom1O <i>FROM TRASH TO ART:</i>



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	<p>https://www.dw.com/en/from-trash-to-art/video-18324363</p> <p><i>VIDEO EU WASTE SEPARATION: for Ecology/Science</i> https://multimedia.europarl.europa.eu/en/video/infoclip-reducing-environmental-impact-at-the-european-parliament-waste-collection-and-sorting- 1129358</p> <p><i>HOW DO WE MANAGE WASTE IN THE EU?</i> https://www.youtube.com/watch?v=pE7a4N9GDKk&ab_channel=Eurostat</p>
Offline teaching material	<i>Various waste materials: paper, carton, glass, plastic, light bulbs etc.</i> <i>I-pads or laptops, water colors for glass painting, paintbrushes etc.</i>
Resources used	<i>See in online teaching material: Internet, YouTube -see above, Art steps</i>

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Integration into the curriculum

The lessons could also be organized as an interdisciplinary lesson for English, Art, and IT (also Ecology or Science). In that case an agreement and arrangement with English, Art, and IT (Science / Ecology) teacher should be achieved upon the time of the year depending on their curriculum.

Outcomes of the lessons

Student can speak in English about environmental artists.

Student can understand a presentation in English about environmental artists.

Student can speak in English about waste separation, active citizenship, sustainable environment.

Student can look critically the world around him/her and express his/her vision of that and convey this through art to other people.

Student can create an exhibition in virtual reality in the program Art steps.



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Aim of the lesson

This learning scenario aims to increase the environmental awareness of students and to convey this to other people. Also, to teach students about environmental art, eco art and it introduces them with some of the artists. Furthermore, it encourages them to reflect, think critically and express their thoughts about sustainable environment, climate change and ecological problems through art. The idea is that they learn how it is important to reduce the amount of the things they buy and for creating art and to make art of the materials they already have and do not need any more. In other words, to reuse and recycle materials and turn them into art. Students also can get out into nature and create art from pieces of nature they find like leaves, branches, stones, gravel etc., make artwork that appreciates and honors the natural beauty of Earth and nature.

Also, interdisciplinary: first the English teacher shows videos about what Environmental Art is and assigns a few students to prepare and present presentations about environmental artists. For example: Rosalie Gascoigne, Andy Goldsworthy, Chris Jordan, Agnes Denes, Christo and Jean Claude... In that way students get a deeper knowledge about environmental artists and at the same time practice English and presentation skills. As this learning scenario aims to develop the four language skills (speaking, reading, listening, and writing), it can be implemented any time in the year for an English as a foreign language class. After that Art teacher encourages students to create environmental art/eco art. Finally, an IT teacher encourages the students to create virtual/ digital exhibition of their art in “Art steps”.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Nature-Based Learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, create, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, conversations, to persuade, to do research, to write a presentation in English).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using garbage and objects they do not need anymore and work creatively with others.

Critical Thinking and Problem Solving - Students analyse, make connections between information, reflect critically on the world around them and on learning experiences (assessment).



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Activities

Name of activity	Procedure	Time
First and second lesson ENGLISH		
Introduction	Brainstorming- waste separation – the teacher elicits the brainstorming about the waste separation and sustainable environment.	5'
	Video about Environmental Art – see in online teaching material.	10'
	The teacher in advance chooses a few students and assigns them presentations about the most famous Environmental Artists. For example: Rosalie Gascoigne, Andy Goldsworthy, Chris Jordan, Agnes Denes, Christo and Jean Claude... In that way students get a deeper knowledge about environmental artists and during Art lessons produce some Environmental Art by themselves. Students present their presentations. After each presentation students answer questions about what they learned and comment the presentation (peer assessment) and the teacher assess the work according to the rubric and comments. See annex 1	75'
Conclusion	Students get a deeper knowledge about Environmental artists and at the same time practice English and presentation skills. This learning scenario aims to develop the four language skills (speaking, reading, listening, and writing) and at the same time prepares the students for Art lessons.	
Third and fourth lesson ART		
Introduction	Brainstorming – waste separation and Environmental Art Art teacher revises with the students what they learned about Environmental Art during English lessons and what they know about waste separation. Video clip from trash to art can be shown. See in materials.	10'
	After brainstorming students in groups decide which materials they would use and what do they want to express with their piece of art. They think critically about the waste disposal and sustainable environment. They decide	80'



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about the message of their art. They create a piece of art using different materials and methods: painting on glass, glueing carton and paper with plastic, making sculptures...Some of the main themes can be making origami from old flyers, creating string art with thread, Styrofoam, and nails, assembling a robot from cardboard boxes and tubes, bottle caps and other materials, painting and decorating glass bottles and jars, using cardboard, bottle caps and plastic bottles to create different artworks. At the end of the workshop, they can take pictures of the created art and organize a temporary real exhibition at school. They can also create a digital/ virtual exhibition and put/publish it on the school webpage or elsewhere. See next IT lessons.

Students also can get out into nature and create art from pieces of nature they find like leaves, branches, stones, gravel etc., and make artwork that appreciates and honors the natural beauty of Earth and nature. To make their exhibit more permanent they take pictures and expose them in real and digital/virtual world. See next IT lessons.

Conclusion	Afterwards, when the exhibition would be over the students then can collect and divide art exhibits into the leftover garbage, separate it and take it to recycling containers near the school.	15'
Homework assignment	Previously the teacher asked the students to collect pieces of waste they do not need: paper, carton, tetra pack, glass, plastic, plastic cap, light bulbs, used clothes etc.	20'

Fifth and sixth lesson IT

Introduction	Brainstorming about what they did in English and Art lessons and what is the purpose of the lessons in IT – Art steps - creating a virtual exhibition of their art to increase the environmental awareness of students and to convey this to other people.	5'
	Students can work in pairs or groups, and they should be thought how to work in the program Art steps. The main goal is to learn how to create a virtual reality gallery through which they could present their art. The workshop should start with a short theoretical intro into VR and Art steps software, followed by the basic commands in Art steps. The creation of the gallery could be divided in five parts: Defining the space, designing the space, adding, and placing artefacts, planning a guided tour, and submitting and sharing.	20'
Conclusion	At the end, everyone can take a virtual walk through their gallery and have a link ready for sharing with the others. The link can be shared via social media and on school and project websites.	55'



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Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on assessment rubrics he /she can create, or he can decide for formative assessment consulting peer assessment rubrics. See examples in Annexes.

***** **AFTER IMPLEMENTATION** *****

Student feedback

Teacher's remarks

Examples of environmental art done for the project and the virtual/digital exhibition.

VIRTUAL /DIGITAL EXHIBITION OF ENVIRONMENTAL ART THAT STUDENTS
CREATED:

<https://www.artsteps.com/view/6645b1ff8668ac212c18d7d9>



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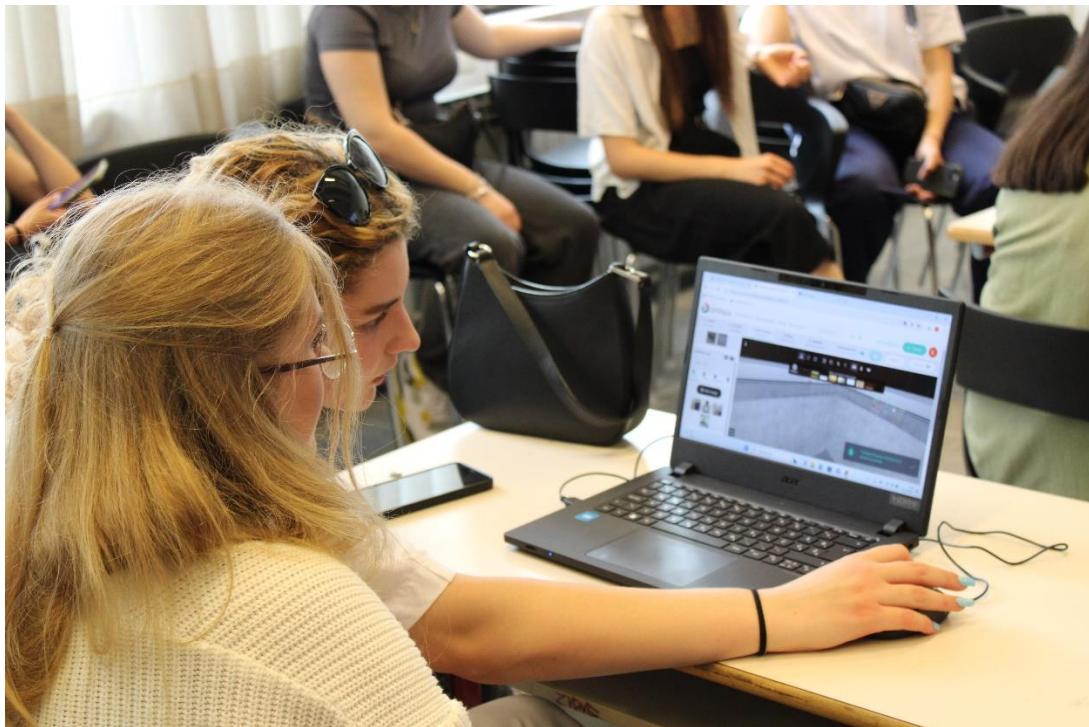




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Students work in Art steps program:



Annex 1.

EXAMPLE OF RUBRIC FOR ENVIRONMENTAL ART PRESENTATIONS – ENGLISH LANGUAGE

The presentation should have - min 15 slides, last max 10 min, contain sources and questions in the end and present the work of assigned artist.

	4	3	2
Organization	Excellent, has all elements	Misses 1/2 elements	Misses more elements
Graphics	Excellent, attractive graphics	1/2 graphics not attractive	3 and more graphics not attractive
Elocution	Excellent, fluent, no pronunciation mistakes	Few pronunciation mistakes	Lot of pronunciation mistakes
Eye contact	Excellent	Occasionally reads	Reads most of the time



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EXAMPLE OF RUBRIC FOR GROUP WORK FOR ART/ IT LESSONS – PEER ASSESSMENT

Group Evaluation Rubric

Criterion	4	3	2	1
Effort	Produced additional resources for the group; extraordinary effort demonstrated	Fully prepared; completed all agreed tasks; competent, but not extraordinary	Minimal preparation; superficial knowledge of resources; minimal effort	Little or no evidence of preparation; no effort shown
Attitude	Exceptionally positive and constructive; encourages other group members	Positive; supportive; mostly constructive and upbeat	Neutral; neither encouraging nor discouraging; disinterested in the performance of others	Disparaging; negative, withdrawn or belligerent; absent
Contribution	Outstanding contribution; above-and-beyond; work is excellent in form and substance	Good quality work: few revisions or additions are necessary	Poor quality work; substantive errors; much revision and editing are required	Poor quality; little, if any, contribution to group goals

Group Member	Group leader	Effort	Attitude	Contribution	Total
	yes				
	no				
	no				



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LEARNING SCENARIO – WASTE DISPOSAL

Title

WASTE DISPOSAL

Author(s)

Renata Mihaljević, PRIRODOSLOVNA ŠKOLA SPLIT, CROATIA

Summary

Table of summary

Subject	This scenario can be used freely for English language lesson. Though, it could be used as an interdisciplinary lesson combining English language, Ecology or Biology.
Topic	climate change, waste separation, waste disposal, active citizenship, sustainable environment
Age of students	14-18
Preparation time	30 min for the teacher and 30 min for the students
Teaching time	4 x 45 min lessons
Online teaching material	<p>VIDEO EU WASTE SEPARATION: https://multimedia.europarl.europa.eu/en/video/infoclip-reducing-environmental-impact-at-the-ep--waste-collection-and-sorting-_129358</p> <p>HOW DO WE MANAGE WASTE IN THE EU? https://www.youtube.com/watch?v=pE7a4N9GDKk&ab_channel=Eurostat</p> <p>INFOGRAPHIC _STATISTICS https://multimedia.europarl.europa.eu/en/infographic/how-to-reduce-packaging-waste-in-the-eu_20231109ST009917</p> <p>INFOCLIP: CIRCULAR ECONOMY - RECYCLING OF PLASTIC WASTE INTO TRAVEL SUITCASES https://multimedia.europarl.europa.eu/en/video/infoclip-circular-economy-recycling-of-plastic-waste-into-travel-suitcases_180141</p> <p>INFOCLIP: CIRCULAR ECONOMY - RECYCLING OF PAPER TOWELS https://multimedia.europarl.europa.eu/en/video/infoclip-circular-economy-recycling-of-paper-towels_178432</p> <p>INFOCLIP: CIRCULAR ECONOMY: SUSTAINABLE TEXTILE STRATEGY https://multimedia.europarl.europa.eu/en/video/infoclip-circular-economy-sustainable-textile-strategy_1219968</p> <p>INFOCLIP : CIRCULAR ECONOMY - WASTE REDUCTION AND RECYCLING https://multimedia.europarl.europa.eu/en/video/infoclip-circular-economy-waste-reduction-and-recycling_152501</p>
(EU Parliament resources used)	



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Offline teaching material EU additional resources	<p><i>INFOCLIP: CIRCULAR ECONOMY - LANDFILLS</i> https://multimedia.europarl.europa.eu/en/video/infoclip-circular-economy-landfills_1152500</p> <p><i>This scenario</i> https://www.youtube.com/watch?v=bZ_ip_moX1g&ab_channel=EuropeanParliament</p>
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Integration into the curriculum

The lesson could also be organized as an interdisciplinary lesson with the Biology / Ecology teacher. In that case an agreement and arrangement with Biology / Ecology teacher should be achieved upon the time of the year depending on their curriculum.

Outcomes of the lessons

Student can talk about waste disposal, waste separation, sustainable environment, active citizenship in English and in mother tongue.

Student can write a report in English concerning waste disposal.

Student can talk critically about the world around him and suggest changes and improvements.

Aim of the lesson

The main aim of the lessons is to teach students how waste separation and waste disposal is important for our planet salvation and that we can achieve this only by putting our heads together and actively participating in that process. Also, they must understand where the separated waste goes and that it is all part of the process - circular economy- from the collected material we produce something new and reuse it in that way.



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The topic is integral part of the curriculum in all EU countries of different subjects. As this learning scenario aims to develop the four language skills (speaking, reading, listening, and writing), it can be implemented any time in the year for an English as a foreign language class. Students will learn how to look for and use online sources of information, which also constitutes an essential element of the national curriculum. They will speak in English language while discussing, preparing for interviewing, creating a presentation / summary/report about what they learned from the lectures and in the waste management company. Furthermore, they will learn how to write a summary / report after doing some research.

The lesson could also be organized as an interdisciplinary together with the Ecology / Biology teacher. In that case an agreement and arrangement with Ecology / Biology teacher should be achieved upon the time of the year depending on their curriculum.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).



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Activities

Name of activity	Procedure	Time
First lesson		
Introduction	Create in advance a questionnaire in Forms: What do I know about sorting waste, management, and recycling? – see questions in ANNEX 1	
	Students answer the questionnaire and discuss. After that the teacher gives them the results/answers and students in pairs / groups summarize the questions. For example, each group summarizes answers of a set of 4 questions. One group writes the conclusion of the summary.	20'
	They use mobile phones / laptops and open web pages of the Waste management company in their town as well as pages of their town/city council devoted to communal service and try to find the information they did not know to answer in the questionnaire.	20'
	There will certainly be the questions they will not be able to find the answers and they write them down to be asked during the visit to the Waste management company in their town. See possible questions in ANNEX 2	
Conclusion	Students should prepare the list of the questions to be asked at the local waste management company. If they do not manage at school, they can finish it as homework. Suggestion is that the students answer the same questionnaire “What do I know about sorting waste, management, and recycling?” after the lectures and after the research that they will do in the following lessons. Consequently, it is possible to compare how much they have learned through the process. REPORT: The teacher explains to students what report writing is, how it is done, shares materials about that with them. Here we need a report on survey findings, which is not complicated. The teacher clarifies what their research homework is: interviews with people, their friends, and families; finding figures, etc. Students must prepare a survey: interview their families, friends, peers about the habits concerning the waste separation and waste disposal and make notes about the answers and figures.	5'
Second lesson		
Introduction	The second lesson is meant to be a field work. The teacher organizes a visit to a waste management company of their town and preferably to one restorer in their town. But in case it is too complicated to organize a visit an	



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expert from the waste management company can be invited to school to answer the questions to the students. Furthermore, there are enclosed videoclips created by the EU Parliament that can be shown to the students as a replacement to the fieldwork.

Fieldwork and the visit are the desirable scenario because the students learn the best from experience, from what they see alive. Visit to a restorer is also very necessary so that they would understand the whole process – from waste separation to creation of the new products from the waste material. The process of circular economy will be clearer to them after those two visits. During the visit the students ask the experts the prepared questions and write down the answers. They can ask the questions in their mother tongue and then translate the answers into English.

Conclusion Students find the answers to the prepared questions and understand the whole process of waste disposal - from waste separation to creation of the new products from the waste material. They practice English by translating the answers into English.

Homework assignment * The first part of the homework is to translate the answers they got in the waste management company into English. 15'
The second part of the homework: preparation for the report on survey findings. Students must prepare a survey: interview their families, friends, peers about the habits concerning the waste separation and waste disposal and make notes about the answers and figures. 15'

Third lesson

Introduction Students in groups explain what method they used to conduct their investigation (surveys/questionnaire, interviews) and inform the teacher about the results of the research.

Reports The teacher explains main aspects of a report:

- formal style
- introduction, body, and conclusion
- analytical thinking
- extensive research of information and evidence to support a conclusion
- careful proofreading and neat presentation
- format of the report (see Annex 3.)

40'

Students write their report in groups and follow the detailed instructions that teacher had given them last time. They use the knowledge acquired during the field work while comparing the data they collected throughout the survey. The teacher monitors, answers their questions, helps them with suggestions if necessary.

Fourth lesson

Reports Students finish their reports in groups, and they read them in the classroom. 45'
Other students ask questions, discuss, compare, and comment. They decide



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about the booklet format and the order of the reports in it. They create a booklet of all reports for homework, and they can publish it on the school webpage to warn the wider audience about the problems of waste disposal and to draw the peoples' attention on this problem, as well as to explain that we all must contribute to achieve our goal and to save our planet.

Assessment

Assessment rubrics can be used for peer assessment and for formative assessment. The teacher can assess the students work based on report assessment rubrics that he/she can prepare.

Group Evaluation Rubric:

Criterion	4	3	2	1
Effort	Produced additional resources for the group; extraordinary effort demonstrated	Fully prepared; completed all agreed tasks; competent, but not extraordinary	Minimal preparation; superficial knowledge of resources; minimal effort	Little or no evidence of preparation; no effort shown
Attitude	Exceptionally positive and constructive; encourages other group members	Positive; supportive; mostly constructive and upbeat	Neutral; neither encouraging nor discouraging; disinterested in the performance of others	Disparaging; negative, withdrawn or belligerent; absent
Contribution	Outstanding contribution; above-and-beyond; work is excellent in form and substance	Good quality work: few revisions or additions are necessary	Poor quality work; substantive errors; much revision and editing are required	Poor quality; little, if any, contribution to group goals



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Group Member	Group leader	Effort	Attitude	Contribution	Total
	yes				
	no				
	no				

***** AFTER IMPLEMENTATION *****

Student feedback

/

Teacher's remarks



Pictures of visit to municipal company “Čistoća” in Split and recycling yards during the mobility to Croatia





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Pictures of the lecture done by the Expert specialist in environmental protection:





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Annex 1

Questions 1

What do I know about sorting waste, management, and recycling?

1. What kind of garbage do you separate at home?
2. Does your school sort waste?
3. What kind of waste is sorted in your school?
4. What is the approximate amount of waste per week (litres) in your home?
5. Do you know how much your family must pay for garbage removal?
6. Do you understand how the price of the waste removal service is formed?
7. If you answered YES in the previous question, then write a comment as you understand it.
8. Write what happens to the garbage after it is taken out to the nearest garbage container.
9. Do you know what harmful substances can end up in nature if the waste is not treated properly?

If you know, name any!

10. Have you heard about waste recycling and how to recycle it?
11. Write 5 recommendations that you would give to a person who does not understand waste recycling!
10. Do you have knowledge about hazardous waste collection? What do you know?
11. When you go to the store to shop, do you take your shopping bag with you? Always never sometimes another answer
12. Your suggestions on how to reduce waste daily?
13. How to properly dispose of worn-out electrical equipment and batteries?
14. What are the problems of using too much plastic in food packaging?
15. What does global warming and climate change have to do with waste sorting?
16. How and what inventions of science and technology can help solve the problem of waste?

Mini examples!

17. Write 3 recommendations, what should society do to reduce waste?
18. What could be your personal contribution to waste reduction?
19. Are there waste sorting containers available in your city? Where and what?



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20. Do you have an idea of how much waste is generated in your city every day (think about how much waste is generated in your family)?
21. How many landfills are there in your city and municipality?
22. What kind of waste is generated more every day, industrial or population (household waste)?
23. Has your city introduced a move away from single-use plastics? Mini examples!
24. Are there rules for sorting and managing waste in your city? If you know, mini examples.
25. What educational campaigns and measures would be needed to inform the public about the importance and challenges of waste management?
26. Which age group(s) of the population do you think you need help/information on the secondary use of waste?



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ANNEX 2

Questions for waste management companies.

- a. What are the most common types of waste that end up in waste collection points/land fields?
- b. How much waste enters our city's waste management companies each year? What is the trend? Has the amount of waste been similar in the last 5-10 years, or is there a tendency for it to increase?
- c. How many locations in our city have recycling bins available?
- d. What type of waste separation is most difficult to implement in your city?
- e. What type of waste separation is the most challenging to implement?
- f. What are the consequences if waste separation is not done correctly?
- g. Do city residents participate in waste separation? What is the tendency?
- h. How is waste collected and removed from residents in the city?
- i. How are recyclable waste processed in our city?
- j. What are the main issues related to waste management in our city?
- k. Do we know how many households practice composting in our city?
- l. How can we reduce the amount of waste in our city?
- m. What can we do or help within our project "The Second Life of Waste" to change the situation regarding the increasing volume of household waste? Is there any way we could cooperate and contribute?
- n. What are the objectives of waste management policy in our city?
- o. What are the possibilities for waste recycling in our city? What is being recycled?
- p. What happens after the emptying of the waste separation containers?
- q. What are the waste management costs in our city? How are these costs incurred?
- r. What are sustainable alternatives for waste management in our city?
- s. What happens after the emptying of the waste separation containers?
- t. Have there been issues in our city related to illegal waste disposal? What are they?
- u. What are examples of best practices for waste management in other cities?
- v. Can our city's waste management system be considered sustainable and effective?



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Questions for waste management company or a city council representative.

1. What are the goals of waste management policy in our city?
2. How much waste ends up in our city's waste management facilities each year? What is the tendency? Has the amount of waste in the last 5-10 years been similar, or is there a tendency to increase?
3. How many waste collections and sorting points are in the city?
4. Have you got plans to create more waste sorting points in the city?
5. How is the collection of hazardous waste organized?
6. Are there waste sorting programs for young people and students in the city?
7. Is it possible to obtain information on waste management procedures and regulations? Where is this information available?
8. Can waste management in our city be considered effective?
9. Are there waste collection days in the city where large or hazardous waste can be disposed of?
10. What options are there in the city for disposing of old electronics and household appliances?
11. Are there plans in the city to introduce researched composting programs?
12. How are problems related to illegal dumping of waste in the city's territory prevented and addressed, if any?
13. How is transparency and accountability ensured in waste management companies and administrations?
14. Are there enough waste bins placed in public areas during events in the city?
15. Does waste sorting differ in different parts of the city?
16. Are there plans to introduce new waste management solutions in the city, such as the latest technology?
17. How is the initiative for waste sorting and recycling promoted in the city?
18. Is there a waste sorting option provided in public transport?



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19. How is cooperation between the city government and waste management companies ensured to improve the waste management situation?
20. How is cooperation for waste sorting and recycling ensured with surrounding cities and districts?
21. How is public participation and awareness of waste management issues ensured?
22. Are there plans to introduce new waste reduction measures and initiatives in the city?
23. Can waste management in our city be considered effective and sustainable?

ANNEX 3. FORMAT OF THE REPORT

Title page

Clearly describes what the report is about.

Table of contents

A list of the major and minor sections of the report.

Introduction

Sets the scene and gives some background information about the topic. States the aim/purpose of the investigation and outlines the sections in the body of the report.

Main body

Organised into sections: what was investigated, how it was investigated, what was found (evidence), and interpretations.

Conclusion

Summary, what the report achieved – did it meet its aims, the significance of the findings and a discussion and interpretation of the findings.

Recommendations

What is recommended as a course of action following the conclusion?

References

A list of all the sources you used.

Appendices

Any information (graphs, charts, tables, or other data) referred to in your report but not included in the body.



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LEARNING SCENARIO –

Microplastic Pollution: Understanding the Problem from Different Perspectives

Title:

One Problem, Many Perspectives: Understanding Microplastic Pollution.

Author(s) Iveta Balode, Jelgava Secondary School No 4, Latvia.

Summary: This learning scenario focuses on plastic and microplastic pollution as a global environmental issue. Through video analysis, jigsaw reading and student-created outputs, learners develop critical thinking, environmental awareness and B2-level English communication skills. The lesson sequence is student-centred and encourages learners to analyse the problem from different perspectives (individuals, policymakers, industry, activists).

Table of summary

Subject	English (can be used as an interdisciplinary environmental studies and civic education).	lesson combining English, lesson combining English, environmental studies and civic education).
Topic	climate change, waste disposal	
Age of students	15-18 (11th grade)	
Preparation time	30-40 min	
Teaching time	3x40 min	
Online teaching material	Video: "Microplastic pollution" by EUROPEAN PARLIAMENT https://youtu.be/byu4n3j4ot4?si=1lcg2flgh6jkegxf Reading source: "One bottle at a time". https://education.nationalgeographic.org/resource/one-bottle-time/	
Offline teaching material	Worksheets (video notes, jigsaw reading tasks) Lesson_2_Jigsaw_Reading_Worksheet_B2_Plasticpollution.docx Paper/poster materials or presentation slides	
Resources used	https://youtu.be/49OJoTsZY00?si=ZuknKIX_gJsLRPQy YouTube National Geographic Education ICT tools for presentations (Canva, PowerPoint, Google Slides)	

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Integration into the curriculum

The lesson can be integrated into:

- English (B2 level: listening, reading, speaking, presenting opinions)
- Social sciences/geography (environmental impact, sustainability)
- Civic education (active citizenship, responsibility, decision-making)

Outcomes of the lessons

The learning scenario aims to develop students' ability to critically analyse environmental problems, evaluate different viewpoints, and express informed opinions in English using B2-level academic and persuasive language.

Trends

- Collaborative Learning
- Peer Learning
- Student-centred learning
- ICT-supported learning
- Critical thinking and problem solving

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report). Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).



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Activities

Name of activity	Procedure	Time
	<p>First lesson</p> <p>Introduction</p> <p>The lesson begins with a short discussion designed to activate students' prior knowledge and encourage independent thinking. The teacher introduces the topic of microplastic pollution without providing definitions or explanations. Instead, students are asked to react to provocative statements and justify their opinions.</p> <p>Suggested questions and statements:</p> <p><i>Plastic pollution is exaggerated by the media.</i></p> <p><i>Banning plastic harms the economy more than it helps the environment.</i></p> <p><i>Consumers should not be blamed for plastic pollution – companies are responsible.</i></p> <p><i>Environmental problems should not be prioritised over economic growth.</i></p> <p><i>If recycling exists, using plastic is not a real problem.</i></p> <p>Students express agreement or disagreement and explain their reasoning. The teacher's role is to facilitate discussion, encourage different viewpoints and avoid confirming or rejecting answers. This stage helps students understand that the lesson will focus on analysis and evaluation rather than memorisation.</p>	10'
	<p>In the main part of the lesson, students work with a short informational video on microplastic pollution produced by the European Parliament. Before watching, the teacher explains that students should focus on identifying information rather than understanding every word. While watching the video, students complete a guided listening task individually. They are asked to note:</p> <p>two causes of microplastic pollution mentioned in the video two consequences for the environment or human health one solution or action proposed at a political or societal level</p>	23'



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After the video, students first compare their notes in pairs. The teacher then leads a whole-class discussion, encouraging students to move beyond factual recall and towards evaluation. Suggested guiding questions:

Which cause of microplastic pollution seems the most difficult to address? Why?

Which consequence do you find the most alarming?

Do the solutions presented in the video seem realistic and sufficient?

The teacher prompts students to justify their opinions using evidence from the video and to respond to each other's ideas, helping to develop critical listening and speaking skills.

Conclusion

To conclude the lesson, students are asked to reflect individually on the broader issue of responsibility. This reflection can be done in writing or as a short oral response. 7'

Suggested reflection question:

To what extent can political decisions solve environmental problems such as microplastic pollution?

Students are encouraged to support their answers with arguments rather than simple opinions. The teacher does not provide a final answer but highlights that different perspectives will be explored in the next lesson through reading and group work.

This ending helps students connect the video content to larger questions of citizenship, responsibility and decision-making, preparing them for deeper analysis in the following lessons.

Second lesson

Introduction

Focus on multiple perspectives, critical reading, and responsibility. The lesson begins with a short recap of the previous video-based lesson. The teacher does not summarise the content but invites students to recall ideas themselves. This helps shift responsibility for learning to the students. Suggested questions:

What arguments about responsibility did we hear in the video?

Did the video mainly blame individuals, governments or systems?



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The teacher then introduces the reading task and explains that students will analyse the same text from different perspectives, and that no single perspective represents the "correct" interpretation.

Students work with the article ***One Bottle at a Time*** from National

Geographic Education, using the jigsaw reading. The text is divided thematically, and students are assigned to expert groups, each representing a specific viewpoint.

23-25'

Expert group phase

Each group reads the text with a clear analytical ***focus***, not just for comprehension.

Group A – Individuals / consumers

Focus questions:

What responsibilities are placed on individuals in the text?

Does the text assume that people are free to choose sustainable options?

Group B – Society & lifestyle

Focus questions:

How does modern lifestyle contribute to plastic pollution?

Is convenience presented as a choice or as a necessity?

Group C – Industry & producers

Focus questions:

How visible is the role of companies in the text?

Is corporate responsibility clearly addressed or indirectly implied?

Group D – Environment & future generations

Focus questions:

What long-term consequences are emphasised?

Does the text appeal more to facts or to emotions?

Each expert group is asked to:

identify the main message from their perspective

select one sentence that supports their viewpoint

decide who is implicitly or explicitly held responsible

The teacher circulates, asking probing questions such as:

What makes this sentence persuasive?

What is not mentioned here?



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Jigsaw sharing phase

New mixed groups are formed with one student from each expert group. Each student explains their perspective to others, effectively becoming the "teacher" for that viewpoint.

Guiding questions for mixed groups:

Which perspective places the greatest responsibility on individuals?

Which perspective seems the least demanding? Why?

Do these perspectives contradict or complement each other?

This stage allows students to compare interpretations and recognise bias, emphasis and omission in a single text.

Conclusion	To conclude the lesson, students reflect on the reading as a whole and connect it to their own opinions. Suggested whole-class or written reflection questions: <i>Is the message of "one bottle at a time" empowering or misleading?</i> <i>Can individual action be meaningful without systemic change?</i> <i>Which perspective do you personally find the most convincing, and why?</i> The teacher highlights that the next lesson will require students to take a clear position and defend it publicly, using ideas from both the video and the reading.	5-7'
Homework assignment	Write a short opinion paragraph (120–150 words): <i>Who should take the main responsibility for plastic pollution: individuals, companies or governments?</i> Requirements (B2): refer to at least one idea from the video and one idea from reading use 2 academic expressions, e.g. o <i>It can be argued that...</i> o <i>From a long-term perspective...</i>	10-15'

Third lesson



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Introduction The lesson begins by clearly shifting responsibility to the students. The 5' teacher briefly reminds learners that they have explored the issue of microplastic pollution through both a video and a reading text, and that this lesson focuses on expressing and defending a personal or group viewpoint. Suggested teacher prompts:

In the previous lessons, you analysed the problem from different perspectives. Today, you will take a position and defend it. There is no single correct solution – the aim is to justify your ideas clearly and critically.

Students are then placed into role-based groups, either based on their homework choice or assigned by the teacher. Each group represents a different group (**Consumers, Companies / Producers, Governments / Policymakers, Environmental Activists / NGOs, Nature / Future Generations** - marine animals affected by plastic, children who will live in polluted environments, ecosystems damaged by microplastics)

Students work collaboratively to prepare and present their viewpoints. Each group receives a specific, challenging task that requires evaluation rather than repetition of facts.

40'

Group 1 – Students / consumers

Task focus:

What realistic changes can young people make without radically changing their lifestyle?

Which actions are symbolic and which are genuinely effective?

Group 2 – Policymakers / governments

Task focus:

Which regulations or bans could realistically reduce plastic pollution?

How can governments balance environmental protection and personal freedom?

Group 3 – Companies / producers

Task focus:

How far should companies be required to change packaging and production?

Should environmental responsibility affect profit and pricing?

Group 4 – Environmental activists

Task focus:

How would you persuade society to act without using fear or guilt?

What arguments are most likely to change behaviour?



Each group prepares a short presentation (poster, slides or spoken presentation) that:

- refers to both the video and the reading
- includes clear arguments and at least one counterargument
- uses B2-level academic language

The teacher's role during this stage is to support, question and challenge, for example:

- What evidence supports this claim?*
- Who might disagree with you and why?*
- Who benefits the most from plastic use?*
- Who suffers the most from plastic pollution?*
- Is it possible to solve this problem without changing our lifestyle?*
- Is plastic pollution a choice or a consequence of modern life?*
- Who has more power than responsibility?*

Conclusion

Fourth lesson

Introduction

Conclusion

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on report assessment rubrics.

***** AFTER IMPLEMENTATION *****

Student feedback

student 1. I liked that we could share our own opinions and there were no right or wrong answers. The video and reading helped me understand the problem better, but the discussions made me think more deeply about responsibility.

student 2. The jigsaw reading was interesting because everyone had different information. I learned new ideas from my classmates, not only from the text. It helped me see the problem from more than one perspective.



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student 3. I liked that the lesson was not only about facts, but also about thinking and discussing. The controversial questions made the discussion more active and engaging.

Teacher's remarks

The lesson was engaging and student-centred. Students actively participated in discussions, demonstrated critical thinking, and were able to justify their opinions using evidence from the video and reading material. The jigsaw reading method ensured equal participation, and the final presentations showed a clear understanding of multiple perspectives. Overall, the lesson successfully promoted environmental awareness, communication skills and active citizenship.

Annex 1. [Lesson_2_Jigsaw_Reading_Worksheet_B2_Plastic pollution.docx](#)



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LEARNING SCENARIO – GLASS AND ITS SECONDARY USE

Title

Glass and its secondary use

Author(s)

Kristine Romanovska

Summary

Table of summary

Subject	This scenario can be used freely for English language lesson. Though, it could be used as an interdisciplinary lesson combining English language.....
Topic	climate change, waste disposal
Age of students	14-18
Preparation time	30 min
Teaching time	40 min
Online teaching material	Pictures of glass products (bottles, jars, windows). Pictures of various waste containers. Worksheet tasks as separate online tasks (sorting task). (Optional) short video about glass recycling.
Offline teaching material	Pictures of glass products (bottles, jars, windows). Pictures of various waste containers. Worksheet (sorting task). (Optional) short video about glass recycling.
Resources used	A3 page Sticky notes Computers

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Integration into the curriculum

Social sciences and economic

Outcomes of the lessons

Example: Student can speak in English about glass and waste separation, active citizenship, sustainable environment.

Aim of the lesson

Students understand what glass is, how it is produced, why it is important to recycle it, and how to properly sort glass waste.

Lesson Outcomes

- At the end of the lesson, students will:
- know what glass is made of;
- understand why glass can be recycled;
- be able to name examples of glass products made from recycled glass;
- know how to properly sort glass waste.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).



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Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).

Activities

Name of activity	Procedure	Time
First lesson		
Introduction	Example-	10'
1 At the beginning of the lesson, the teacher introduces the students to the topic of the lesson and the outcome to be achieved.		3
2 Students receive color cards and divide into working groups. Each group should write on sticky notes where they encounter glass in their daily lives. The sticky notes should be glued into a thought spider – it is advisable to group the answers into the thought spider according to the purpose of using glass. Each group should attach their thought spider to the board in a classroom.		8
3 Discussion - how widely is glass used in our everyday lives (consumer). What are the students' conclusions?		5
4 The teacher raises the question – do the students have an understanding of glass as a resource? Invites them to vote – those who have an understanding – to raise their hands. Then the teacher asks the students – what would they like to find out about glass as a resource?		2
5 Questions that students want to know: -what is glass made of, how does it happen? -how much glass waste is there in the world? -is glass sorted, because we use glass for different purposes, which can be seen in the thought spiders created by students. -is glass recycled in Latvia? -what else can be produced from glass bottles that we throw away because they are not accepted for deposit?		2
6 Using the students' questions, having already roughly anticipated them in advance, the teacher has prepared the next task - to create an informative poster on one topic. The poster should contain information based on sources, informative. The poster should also be visually attractive, appealing		13



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to the consumer, to think about saving glass as a resource. The students' work continues in groups. Each group has its own topic about glass, using the students' questions. Students can use the information sources prepared by the teacher (attached links) and can also use their own found ones.

- <https://in.saint-gobain-glass.com/knowledge-center/glass-manufacturing-process>
- <https://glassallianceeurope.eu/the-world-of-glass/>

7	Student groups present their work using the Elevator Speech method (presentation time one minute).	5
8	The teacher verbally evaluates the students' activity, involvement, and work results. Invites students to write down what they learned (found out, learned, clarified, or understood) from the lesson, and to write it on "exit cards" and leave them next to their computers.	2
Conclusion	<p>Students actively engaged in the learning process and, working in groups, were able to identify how widely glass is used in everyday life for various purposes.</p> <p>Creating thought spiders helped to structure knowledge and promote understanding of the diverse uses of glass.</p> <p>During the discussion, students came to the conclusion that glass is an essential everyday consumption material, but little had been thought about it as a resource before.</p> <p>The questions asked by students demonstrated interest in the origin, production, amount of waste and recycling options of glass, especially in Latvia.</p> <p>Creating informative posters developed students' skills in searching, selecting and analyzing information from various sources, as well as in creatively presenting it.</p> <p>Elevator Speech presentations promoted the ability to briefly and purposefully present the most important information.</p> <p>At the end of the lesson, exit cards showed that students had expanded their understanding of glass as a resource and were aware of the importance of saving and recycling it.</p>	

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on report assessment rubrics.



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LEARNING SCENARIO – DESIGNING NEW PRODUCTS

Title

Designing New Products from Reused Resources

Author: Kristīne Romanovska

Summary

Table of summary

Subject	Social Sciences / Interdisciplinary (English + Economics + Environmental Education)
Topic	Sustainability, Circular Economy, Entrepreneurship, Resource Reuse
Age of students	15-16(10 th grade)
Preparation time	1–2 hours
Teaching time	4–5 weeks (project work)
Online teaching material	<p>Internet resources (image databases, sustainability websites)</p> <ul style="list-style-type: none">• Presentation tools (PowerPoint, Google Slides, Canva) <p>Licenses <i>Attribution CC BY</i></p>
Offline teaching material	<ul style="list-style-type: none">• A4 paper• Craft materials• Printed worksheets• Markers, scissors, glue
Resources used	<ul style="list-style-type: none">• Reusable materials selected by students (e.g. plastic, paper, textiles, glass)• Digital devices• Classroom supplies



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Integration into the curriculum

The lesson can be organised as an interdisciplinary project combining English, economics, and environmental education. It supports competence-based learning and sustainability education.

Outcomes of the lessons

By the end of the lessons, students will be able to:

- explain the principles of sustainability and the circular economy;
- identify and analyse ways in which existing resources can be reused;
- collaboratively plan and create a product using selected reusable materials;
- present ideas and products clearly using appropriate visual and digital tools;
- evaluate product feasibility, usefulness, and environmental impact;
- demonstrate responsibility through task distribution and teamwork;
- reflect on their learning process and contribution to group work.

Aim of the lesson

To develop innovative approaches to combining existing resources while enhancing teamwork, creativity, communication, and entrepreneurial thinking.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- 21st Century Skills Development



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21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).

Activities

Name of activity	Procedure	Time
Steps 1. Create a working group. 2. Each group chooses its resource. 3. Based on their selected resource, the group develops <ul style="list-style-type: none">• a mind map on an A4 sheet;• prepares a presentation;• creates a product;• designs an advertisement for it.		
First lesson		
Introduction	Teacher introduces the topic of sustainability, circular economy, and project tasks.	10'
Group work:	Students form groups and choose a resource for reuse.	20'
Conclusion	Discussion of selected resources and initial ideas.	10'
Second lesson		
Introduction	Review of project goals and assessment criteria.	



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Group work:

20'

Creation of a mind map on an A4 sheet showing reuse ideas.

On an A4 sheet, the group must create a mind map about the resource they have chosen, focusing on how this resource can be reused. The more ideas included, the better.

It is important that the mind map corresponds with the images used in the presentation, showing what can be made from the selected resource. If the group develops additional ideas for products that could be created from this resource, these ideas should also be added to the mind map.

Assessment Criteria:

- adherence to the given time limit;
- content quality (number of ideas and logical grouping of products);
- clarity and structure of the mind map;
- visual design;

names of group members written on the back of the sheet.

Conclusion Groups briefly present their mind maps. 10'

Homework assignment Search for product ideas and images(recommended in different languages). 10'

Third lesson

Introduction Discussion of presentation structure and visual style. 5'

A presentation must be created that includes images of products made from the group's selected resource. 30'

When searching for images and examples, it is recommended to use the resource name in not only in your native language.

Use English, German, Russian, and other languages, as this significantly broadens the range of available information.

Assessment Criteria:

- consistent and unified visual style;
- presentation title;
- names of group members on the first slide;
- products shown in images are thematically grouped;
- slide titles included;
- conclusions presented on the second-to-last slide, addressing:
 - the variety of products made from the selected resource,
 - possible uses of these products,
 - the level of difficulty involved in producing them,
 - additional by-products or materials used;
- correct spelling and grammar in Latvian;
- final slide included;
- adherence to the given time limit.



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Conclusion	Reflection on progress.	5'										
Fourth lesson												
Introduction		5'										
	Using the selected resource (and adding additional materials if necessary), the group must produce a product. One of the previously identified ideas may be used. Assessment Criteria: <ul style="list-style-type: none">• product description, including:<ul style="list-style-type: none">◦ required materials,◦ time needed for production,◦ costs in euros,◦ expected lifespan of the product;• planned selling price; number of produced items: 5 items.	30'										
Conclusion	Reflection on progress.	5'										
Fifth lesson												
Introduction	Final adjustments and rehearsal.	30'										
	Presentation & product display: Groups present their work, products, and advertisements.											
Conclusion	Class discussion and feedback.	5'										
<p>Work is more successful when planning and task distribution are clearly defined. The division of responsibilities and individual accountability within the group will affect the individual assessment. It is recommended to create a table describing each group member's individual responsibilities.</p> <table border="1"><thead><tr><th><i>Team member</i></th><th><i>Responsibilities</i></th></tr></thead><tbody><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table>			<i>Team member</i>	<i>Responsibilities</i>								
<i>Team member</i>	<i>Responsibilities</i>											



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Samples created by students:



Assessment

Assessment rubrics are used for teacher, peer, and individual assessment, focusing on content, creativity, collaboration, and responsibility.

***** **AFTER IMPLEMENTATION** *****

Student feedback

Students report increased awareness of sustainability and improved teamwork skills.

Teacher's remarks



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Teacher's remarks

The project successfully promotes interdisciplinary learning, creativity, and active student engagement.

Annex 1.

Rubric for teacher

Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)
Mind Map (Content & Structure)	Many well-developed ideas; products clearly grouped; very clear structure	Several relevant ideas; mostly logical grouping	Few ideas; grouping unclear	Very few ideas; no clear structure
Presentation (Content & Organisation)	Clear, informative, well-organised; strong conclusions	Clear and organised; conclusions present	Some information unclear or missing	Disorganised; key elements missing
Visual Design	Highly attractive, consistent style, effective visuals	Clear and neat design	Basic design; limited visual appeal	Poor or confusing design
Product Design & Functionality	Product is creative, functional, and sustainable	Product is functional and mostly sustainable	Product is basic or partly functional	Product incomplete or not functional
Use of Resources & Sustainability	Resource reuse is innovative and clearly explained	Resource reuse is clear	Limited explanation of reuse	Reuse not clear or not sustainable
Teamwork & Responsibility	Excellent cooperation; tasks clearly shared and fulfilled	Good cooperation; minor issues	Uneven contribution	Poor cooperation or lack of responsibility
Communication & Presentation Skills	Confident, clear, engaging delivery	Clear delivery	Some difficulty explaining ideas	Unclear or very limited communication
Time Management	All tasks completed on time	Minor delays	Several delays	Tasks not completed on time

SCORING (OPTIONAL)

- 28–32 POINTS – EXCELLENT PERFORMANCE
- 20–27 POINTS – GOOD PERFORMANCE
- 12–19 POINTS – SATISFACTORY PERFORMANCE
- BELOW 12 POINTS – NEEDS IMPROVEMENT

Peer Assessment Note

Peers should evaluate both the group outcome and individual contribution, providing constructive feedback.



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Jelgavas
4
Vidusskola

LEARNING SCENARIO – WASTE DISPOSAL

Title

From Tree to Paper – Why Paper Recycling Matters

Dace Bebriša

Summary

In this learning scenario students explore how paper is produced, where paper is made and recycled in Latvia, and why recycling paper is important for the environment. Using images, discussion, and research, students learn to understand the paper production process and how responsible waste management supports sustainability and climate protection.

Table of summary

Subject	Environmental Science (interdisciplinary: Geography, Citizenship)
Topic	Paper production, recycling, sustainability, waste management
Age of students	14-18
Preparation time	30 min
Teaching time	40 min lessons x 4
Online teaching material	<ul style="list-style-type: none">Photos of paper production and recyclingShort videos about how paper is madeGoogle search / online maps of paper factories in Latvia
Offline teaching material	<ul style="list-style-type: none">Printed imagesWorksheetsPaper samples (newspaper, cardboard, office paper)



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Resources used	<ul style="list-style-type: none">• Flipchart and markers <p>Teacher-prepared materials, photos, student research, real-life examples of paper.</p>
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Integration into the curriculum

This lesson can be organised as an interdisciplinary lesson combining:

- Geography (where paper is produced and recycled in Latvia)
- Environmental studies
- Civic education

Students learn how their everyday choices influence the environment.

Outcomes of the lessons

- Explain how paper is produced from trees
- Describe the main stages of paper production and recycling
- Identify where paper is produced and recycled in Latvia
- Use key environmental and recycling vocabulary correctly
- Understand why paper recycling is important for protecting forests and the climate
- Analyse environmental problems related to paper waste
- Propose simple, practical ways to reduce paper use and improve recycling in their school and community
- Work collaboratively, present information clearly and share their ideas



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Aim of the lesson

The aim of this learning scenario is to help students:

- understand how paper is produced
- learn where paper is produced and recycled in Latvia
- describe processes in English
- understand why paper recycling is important for nature and climate
- become more responsible and active citizens

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile Learning

21st century skills

ICT Literacy

Students use digital tools to find information about paper production and recycling in Latvia.

Communication

Students explain processes, discuss environmental problems, and present their ideas.

Collaboration

Students work in groups to analyse information and create presentations.

Creativity and Innovation

Students create posters and ideas for reducing paper waste.

Critical Thinking and Problem Solving

Students analyse how paper waste affects the environment and suggest solutions.

Activities



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Name of activity	Procedure	Time
First lesson		
Introduction	Students look at a photo showing paper waste and paper production. The teacher asks guiding questions about what they see.	10'
Second lesson		
Introduction	Review of key ideas from the previous lesson	10'
Research	Students find information about where paper is produced and recycled in Latvia.	25'
Conclusion	Groups share their findings.	10'
Third lesson		
Introduction	Warm-up activity	5'
Project work	Students create a big poster: "From Tree to Paper and Why We Should Recycle Paper".	40'
Conclusion	Discussion	5'
Fourth lesson		
Introduction	Review of main ideas	5'
Presentation	Students present their project	25'



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Conclusion Peer feedback and reflection

10'

Assessment

- Peer assessment using simple rubrics
- Teacher assessment based on:
 - Use of English
 - Understanding of the topic
 - Participation
 - Creativity

***** AFTER IMPLEMENTATION *****

Student feedback

Students enjoyed learning about how paper is made and were surprised to see how much work and nature are needed to produce paper. They became more aware of the importance of recycling.

Teacher's remarks

The topic was very motivating because it connected daily life with environmental responsibility. Using real photos and research about Latvia made the lesson meaningful.

Annex 1.

Questions 1 – Understanding

1. Where does paper come from?
2. How is paper made?
3. Where is paper produced or recycled in Latvia?
4. What types of paper do we use every day?

Questions 2 – Critical thinking

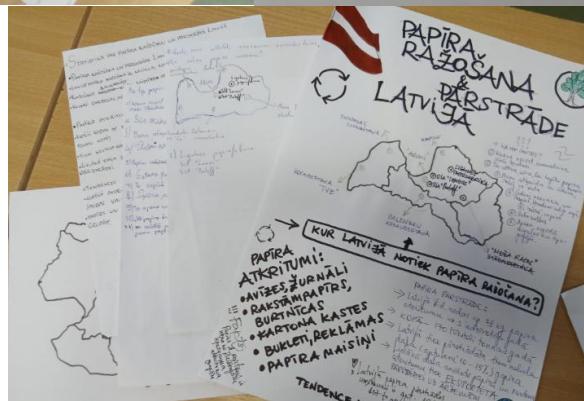
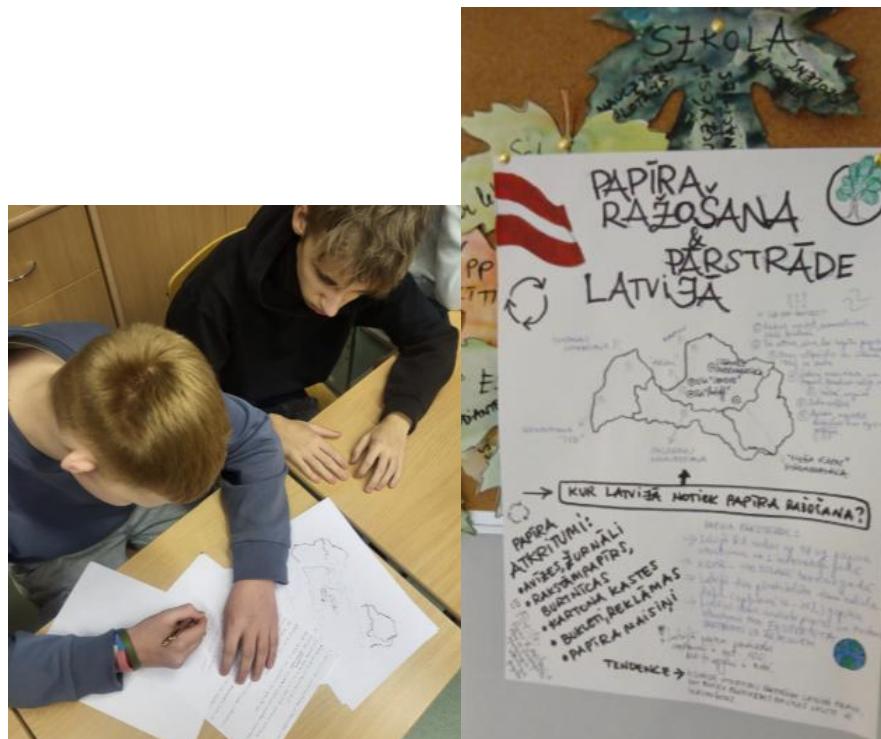
1. Why is recycling paper important?
2. What happens if paper is not recycled?
3. How can students reduce paper waste?
4. How does recycling help protect forests and climate?



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Jelgavas 4.
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No. - 2023-1-LV01-KA220-SCH-000159311

LEARNING SCENARIO – GLASS RECYCLING

Title

Glass Recycling Efficiency and Sustainability in Europe

Author(s)

Erika Karčiauskienė, Jūratė Šataitienė, VILKAVIŠKIS SALOMĖJA NĖRIS BASIC SCHOOL, LITHUANIA

Summary

Table of summary

Subject	This scenario can be used freely for English language lesson. Though, it could be used as an integrated lesson combining English language, natural sciences and IT / art
Topic	Atmospheric change, glass waste management, civic engagement, eco-friendly surroundings
Age of students	13-15
Preparation time	Up to 40 min for the teacher and 30 min for the students
Teaching time	4 x 45 min English lessons 2 x 45 min Art lessons
Online teaching material	<p>LINKS FOR READING:</p> <p>"Is glass a sustainable material? – FEVE" https://feve.org/about-glass/sustainable-material/</p> <p>"Recycling and Circular Economy – Glass for Europe" https://glassforeurope.com/recycling-2/</p> <p>"Recycling AGC Glass Europe" https://www.agc-glass.eu/en/sustainability/decarbonisation/recycling</p> <p>"In glass recycling management, technology puts Europe ahead of ..." https://picvisa.com/glass-recycling-management-technology-puts-eu-ahead-of-ue/</p> <p>"Maximising Glass Recycling From MSW PICVISA" https://picvisa.com/maximising-glass-recycling-from-msw-in-europe/</p> <p>"Glass Recycling Efficiency: Global Statistics and Trends - Gradeall" Apr 25, 2024 https://gradeall.com/glass-recycling-efficiency-global-statistics-and-trends/</p> <p>VIDEO:</p> <p>The basics about recycling glass as a part of environmental chemistry. https://www.youtube.com/watch?v=vhpc0UULjDU</p> <p>What really happens to recycled glass? https://www.youtube.com/watch?v=LR9FtWVjk2c&t=87s</p>



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Offline teaching material	This scenario, students' smartphones, tablets or laptops Various glass waste and other materials needed for art lessons.
Resources used	See in ONLINE TEACHING MATERIALS above

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Integration into the curriculum

The lessons could also be organized as an interdisciplinary lesson with English, natural sciences, IT and art teachers. In this case, coordination and agreement with teachers of other subjects should be established based on their curriculum and the time of the year.

Outcomes of the lessons

Students can talk in their mother tongue and English about glass waste management, atmospheric change, civic engagement, eco-friendly surroundings.

Students can create written and digital works on the situation of glass recycling in their own countries, summarize the findings of the questionnaire and give ideas to improve the current situation.

Aim of the lesson

The aim of this interdisciplinary learning scenario is to highlight the critical role of glass recycling and reusing in environmental sustainability. Students will explore how effective waste separation and disposal, particularly focusing on glass, is vital for preserving our planet and supporting the circular economy. By understanding how glass is recycled, from waste collection to its transformation into new products, students will grasp the importance of reducing waste, conserving resources, and minimizing environmental impact. This topic is an integral part of the curriculum across EU countries and provides a hands-on approach to teaching sustainability. The lessons aim to develop students' English language skills—speaking, reading, listening, and writing—while engaging them in researching, discussing, and presenting their findings on the significance of glass recycling. Students will also produce written reports



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and summaries based on their research. Through collaboration with IT and art, students will gain a deeper understanding of how glass recycling supports ecological balance and sustainability. This learning scenario encourages interdisciplinary learning and can be tailored to align with the Ecology or Biology curriculum, depending on the timing.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).

Activities

Name of activity	Procedure	Time
First and second lesson ENGLISH		
Introduction	Watching a video <i>The basics about recycling glass as a part of environmental chemistry</i> and brainstorming – students' knowledge and habits related to the usage and recycling of glass, the impacts of glass recycling and glass waste management.	10'
	Pair work – reading practice. According to the links provided above, students gather information, discuss it in pairs and prepare short summaries of it for	30'



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their peers as well as 5-6 questions to get the feedback from the whole class.

After each link has been read and discussed, students work on the following task – they go into deeper discussion on the topic according to the prompts provided in ANNEX 1. 15'

While discussing, students have to prepare a list of tips: The Lifecycle and Advantages of Glass Recycling.

Final task. Students write a letter to the mayor of their town suggesting ways of improving glass recycling practices. Volunteers read their letters to the whole class. Summarizing and feedback. 35'

Conclusion Through this lesson, students gain a deeper understanding of glass recycling and its significance in promoting sustainability. At the same time, they practice their English language skills – speaking, reading, listening, and writing – while exploring this important environmental topic. This learning scenario prepares students to apply their knowledge in a creative context, fostering a connection to both the art and environmental sciences. Students will also be equipped to approach the upcoming Art lesson with an awareness of how to use recycled materials, turning them into meaningful works of art.

Third and fourth lesson

Introduction Brainstorming – highlighting the main ideas from the previous lessons relating the importance of glass recycling and sustainable lifestyle. 5'

Watching a video *What really happens to recycled glass?* 13'
While watching, students have to get answers to the open-ended and multiple-choice questions. See ANNEX 2 72'

Under the supervision of a teacher, students present and discuss the answers. For an even deeper understanding of the information from the video, students have to accomplish a gap-filling exercise. See ANNEX 3

Online search for information using students' smartphones or IT classroom to find out the situation of glass recycling in their country. See ANNEX 4
After students have gathered the information, they have to create any digital presentation on their findings – poster, slide-based, video clip and other.

Conclusion In English lessons, students develop their communication skills by analyzing the benefits of glass recycling in general and in their own country, writing reflections, and discussing the sustainability of glass as a material. They also expressed their ideas through essays, presentations, or creative writing inspired by the glass recycling process.



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Fifth and sixth lesson

Introduction	Students have their lessons in art studio. Brainstorming – what students learnt in the lessons about glass recycling. Students provide their ideas about objects that could be made of or with glass.	5'
	After brainstorming, students are divided into groups and follow the art studio teacher's instructions and safety guidelines to create their own glass pieces. They engage in a hands-on experience with melted glass, exploring fusing techniques and applying their understanding of color, texture, and form to design unique artworks.	85'
	Since working with melted glass involves high temperatures, students focus on designing and assembling their pieces, while the art teacher manages the kiln process. Once the glass has cooled, students reflect on what they've learned, discussing the transformation of glass during the heating process. Each student creates a fused glass piece, such as a pendant, coaster, sun catcher, or small sculpture, gaining insight into how glass changes with heat. See ANNEX 5	
Conclusion	By combining environmental awareness with artistic expression, students not only enhance their creativity but also become more conscious of sustainable practices - how recycled glass can be transformed into new objects, both functional and artistic. This lesson encourages them to think critically about waste management and inspire them to find beauty and purpose in recycled materials.	

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on digital presentation assessment table:

Criteria	Excellent (4 points)	Good (3 points)	Satisfactory (2 points)	Needs Improvement (1 point)
Content & Accuracy	Presentation provides detailed, accurate, and well-researched information about glass recycling in the country.	Information is mostly accurate, with some minor gaps or missing details.	Basic information is provided but lacks depth or accuracy.	Information is unclear, incorrect, or insufficient.
Structure & Organization	Content is well-organized with a clear introduction, body, and conclusion. Ideas flow logically.	Mostly well-structured but may have minor gaps in organization.	Some structure, but parts of the presentation feel disorganized or unclear.	Lacks structure; difficult to follow.



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Visuals (Slides/Posters)	Visuals are clear, engaging, and effectively support the message. Well-designed and creative.	Good use of visuals, but some areas could be clearer or better designed.	Visuals are present but may not effectively support the content.	Visuals are missing, unclear, or poorly designed.
Delivery & Communication	Presenter speaks clearly, confidently, and engages the audience. Eye contact and voice modulation are excellent.	Mostly confident, with some hesitation or lack of engagement.	Some difficulties in speaking clearly or engaging the audience.	Lacks confidence, unclear speech, little engagement.
Use of Language	Excellent grammar, vocabulary, and fluency. Language is engaging and appropriate.	Good language use, with minor errors that do not affect understanding.	Some grammar or vocabulary mistakes, but the message is mostly clear.	Many language errors, making it difficult to understand.

This rubric allows both teachers and students to assess presentations effectively. The weight of each criterion can be adjusted if needed.

***** AFTER IMPLEMENTATION *****

Student feedback

/

Teacher's remarks

/

Annex 1.

Open-ended prompts for deeper discussion

1.

The text discusses how recycling glass can help reduce pollution and save energy. Think about your own home and family. How could you make changes to recycle more glass and reduce your environmental impact?

2.

The text mentions that Europe has a goal to recycle 70% of glass and metal waste by 2025. What are some goals you have for yourself or your community related to environmental issues? How can you work towards achieving those goals?

3.



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The text explains that glass can be recycled over and over again without losing its quality. Think about something you use every day that could be reused or recycled. How could you make a difference by reusing or recycling that item?

Annex 2.

Open-Ended Questions for video What really happens to recycled glass?

1. Describe the initial steps involved in the glass recycling process as presented in the video.
2. What challenges are associated with removing contaminants from recycled glass?
3. How does the separation of metals from glass occur during recycling?
4. Explain the role of the revolving trommel screen in the glass recycling process.
5. What are the environmental benefits of recycling glass instead of producing new glass?
6. Discuss the potential uses for recycled glass mentioned in the video.
7. How does the quality of recycled glass impact its reuse in manufacturing?
8. What technological advancements have improved the efficiency of glass recycling?
9. In what ways can consumers contribute to more effective glass recycling?
10. Reflect on any surprising facts or misconceptions about glass recycling that the video addressed.

Multiple-Choice Questions for video What really happens to recycled glass?

1. What is the first step in the glass recycling process?
A) Melting the glass
B) Crushing the glass into smaller pieces
C) Sorting glass by color
D) Removing labels from glass containers
2. Which machine helps separate glass from contaminants?
A) Magnetic separator
B) Revolving trommel screen
C) Optical sorter
D) Air classifier
3. What is the purpose of using a magnetic separator in glass recycling?
A) To remove plastic contaminants
B) To separate glass by color
C) To extract metal contaminants
D) To crush the glass into finer particles
4. Why is it important to remove contaminants from recycled glass?
A) To reduce the weight of the glass
B) To ensure the purity and quality of the recycled product



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- C) To change the color of the glass
- D) To increase the melting point of the glass

5. What can recycled glass be turned into?

- A) New glass containers
- B) Fiberglass insulation
- C) Construction materials
- D) All of the above

6. How does recycling glass benefit the environment?

- A) Reduces the need for raw materials
- B) Lowers energy consumption
- C) Decreases landfill waste
- D) All of the above

7. What is 'cullet' in the context of glass recycling?

- A) A type of contaminant
- B) Crushed recycled glass ready for reuse
- C) A machine used in recycling
- D) A byproduct of glass manufacturing

8. Which contaminant is specifically targeted by the magnetic separator?

- A) Plastic
- B) Paper
- C) Metal
- D) Ceramics

9. What happens to glass that cannot be recycled into new containers?

- A) It is discarded in landfills
- B) It is used in construction materials
- C) It is incinerated
- D) It is exported to other countries

10. What is a common misconception about glass recycling?

- A) All glass collected is recycled into new glass products
- B) Recycling glass saves energy
- C) Glass can be recycled indefinitely
- D) Recycled glass is used in fiberglass insulation

ANSWER KEY:

- 1. B
- 2. B
- 3. C
- 4. B
- 5. D



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- 6. D
- 7. B
- 8. C
- 9. B
- 10. A

Annex 3.

Glass Recycling: What Happens to Recycled Glass?

Recycling glass is a process that involves several important steps to turn used glass into new products. The first step in the process is _____ (1), where the glass is collected and sorted by color. Once sorted, the glass is transported to a recycling facility where it is _____ (2) into smaller pieces. This helps prepare it for further processing.

One of the main challenges in glass recycling is _____ (3), as glass containers can often have other materials attached to them, such as labels, caps, or even food residues. To solve this problem, facilities use machines like _____ (4) to remove contaminants. This is a key step to ensure that the recycled glass, known as _____ (5), is clean and of high quality.

Next, the glass is processed and _____ (6) to remove any remaining impurities. This makes the glass suitable for re-use in various industries, including the production of new glass containers, construction materials, and even _____ (7). One of the advantages of recycling glass is that it saves energy, as recycled glass melts at a _____ (8) temperature than raw materials. This makes the recycling process much more energy-efficient compared to making new glass from scratch.

Interestingly, not all glass can be recycled into new glass products. Some glass ends up being used in _____ (9) or other applications, like road materials. However, one of the biggest challenges in the recycling process is ensuring that all contaminants are removed, as this can affect the quality and usefulness of the recycled glass.

Despite the benefits, many people still have misconceptions about glass recycling. One of the most common myths is that all glass collected for recycling is turned into new glass containers. In reality, a large portion of recycled glass ends up being used in other ways, such as in _____ (10) insulation.

ANSWER KEY:

- 1. collection
- 2. crushed
- 3. contamination



- 4. magnetic separator
- 5. cullet
- 6. cleaned
- 7. fiberglass
- 8. lower
- 9. construction
- 10. fiberglass

Annex 4.

The situation of glass recycling in your country

Instructions for Students:

1. Research each of the categories listed in the table using reliable sources (government websites, recycling centres, news articles, etc.).
2. Fill out the table with the information you find. If you cannot find specific data, leave the cell blank and try to look for alternative sources or estimate based on your findings.
3. Reflect on the challenges and advantages of glass recycling in your country and make suggestions for improvement based on the information you gather.

Category	Details/Information
Quantity of Glass Recycled How much glass is recycled annually? (in tons, percentage)	
Collecting Locations Where and how can glass waste be collected?	
Recycling Process What is the process for recycling glass?	
Types of Glass Recycled What types of glass are recycled?	
Recycling Facilities What are the main recycling facilities in the country?	
Problems in Glass Recycling What challenges are faced in glass recycling?	
Public Awareness How aware is the public about glass recycling? What campaigns, educational events...?	
Environmental Impact What is the environmental benefit of recycling glass?	
Recycled Glass Products	



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What are the products made from recycled glass?	
Government or Local Initiatives Are there any government or local initiatives promoting glass recycling?	
Recent Changes/Improvements Have there been any recent improvements in glass recycling? (e.g., new technologies, changes in laws)	

Annex 5.





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LEARNING SCENARIO – GLASS RECYCLING

Title

Glass Recycling Efficiency and Sustainability in Europe

Author(s)

Erika Karčiauskienė, Jūratė Šataitienė, VILKAVIŠKIS SALOMĖJA NĖRIS BASIC SCHOOL, LITHUANIA

Summary

Table of summary

Subject	This scenario can be used freely for English language lesson. Though, it could be used as an integrated lesson combining English language, natural sciences and IT / art
Topic	Glass sorting and recycling
Age of students	13-15
Preparation time	Up to 30 min for the teacher and 20 min for the students
Teaching time	4x45 min
Online teaching material	Kahoot for students' self-assessment https://create.kahoot.it/details/44fc5817-b0d1-4379-ba2d-13d30294c182?drawer=
Offline teaching material	This scenario, students' smartphones, tablets or laptops Various markers, colored pencils, glue, magazine cutouts
Resources used	See in ONLINE TEACHING MATERIALS above

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Integration into the curriculum

The lessons could also be organized as an interdisciplinary lesson with English, natural sciences, IT and art teachers. In this case, coordination and agreement with teachers of other subjects should be established based on their curriculum and the time of the year.

Outcomes of the lessons

Students can talk in their mother tongue and English about glass waste management, atmospheric change, civic engagement, eco-friendly surroundings.

Students can create digital and non-digital art works related to glass recycling in their own countries, summarizing information they find out in the glass recycling factory, analyzing problems and promoting suggestions to improve the current situation.

Aim of the lesson

The aim of this interdisciplinary learning scenario is to highlight the critical role of glass recycling and reusing in environmental sustainability. Students will explore how effective waste separation and disposal, particularly focusing on glass, is vital for preserving our planet and supporting the circular economy. By understanding how glass is recycled, from waste collection to its transformation into new products, students will grasp the importance of reducing waste, conserving resources, and minimizing environmental impact. This topic is an integral part of the curriculum across EU countries and provides a hands-on approach to teaching sustainability. The lessons aim to develop students' English language skills—speaking, listening, and writing—while engaging them in researching, discussing, and presenting their findings on the significance of glass recycling. Students will also produce digital and non-digital art works based on their research. Through collaboration with IT and art, students will gain a deeper understanding of how glass recycling supports ecological balance and sustainability. This learning scenario encourages interdisciplinary learning and can be tailored to align with the Ecology or Biology curriculum, depending on the timing.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.



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Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).

Activities

Name of activity	Procedure	Time
First lesson		
Introduction	Introduction of Kaunas Glass factory to the students; safety instructions while visiting the factory. Students are told to take informative photos.	5'
	During the visit, students and teachers take part in an educational lecture followed by a guided excursion through the factory. The guide introduces participants to the full process of glass production—from raw material selection to the final shaping and packaging of glass products. Safety, sustainability, and recycling practices are emphasized throughout the presentation. The visit deepens students' understanding of how glass recycling can become part of a sustainable circular economy. See ANNEX 3	40'
Conclusion	Through this lesson, students gain a deeper understanding of glass collecting and recycling and its significance in promoting sustainability.	
Second and third lessons		
Introduction	Brainstorming – highlighting main ideas from the presentation in the glass factory.	5'
	During the interdisciplinary lessons in IT classroom students prepare the presentation in any digital format using the information and the photos they took in the glass factory. They have to cover the following questions: 1. Why is glass recycling important for the environment?	40'



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2. What are the main steps in the glass recycling process?
3. How does recycling glass save natural resources and energy?
4. What challenges or difficulties do recycling factories face?
5. How can we, as students and citizens, contribute to better glass recycling?
6. How much glass is collected for recycling each year?
7. What percentage of collected glass is successfully recycled?
8. Is the amount of recycled glass increasing or decreasing over time? Why?
9. What types of glass can be recycled and what cannot?
10. What happens to the glass after it is collected from containers?
11. How many times can glass be recycled without losing quality?
12. What new products are made from recycled glass?

	Students give their presentations in their IT classroom and evaluate each other according to the evaluation table. See ANNEX 1	30'
	Kahoot for self-assessment on the whole information students gather about glass recycling.	15'
Conclusion	In the lessons, students improve their communication skills by exploring the advantages of glass recycling at the factory, preparing presentations, and discussing the sustainability of glass as a material.	
Fourth lesson		
Introduction	Students have their lesson in art classroom. Brainstorming – what students learnt in the previous lessons about glass recycling. Students provide their ideas about objects that could be put into glass container.	5'
	After brainstorming, students are divided into groups and follow the instructions (see ANNEX 2) to design their own <u>Glass recycling containers</u> . They engage in this experience using A2 sheets of paper and different materials (markers, colored pencils, glue, magazine cutouts) to create their works. After finishing, students present their works explaining their container's design and how it promotes recycling. See ANNEX 4	30' 10'
Conclusion	By merging environmental awareness with artistic creativity, students boost their imagination while gaining a deeper understanding of sustainable practices. This lesson encourages critical thinking about waste management.	

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on digital presentation assessment table:



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Criteria	Excellent (4 points)	Good (3 points)	Satisfactory (2 points)	Needs Improvement (1 point)
Content & Accuracy	Presentation provides detailed, accurate, and well-researched information about glass recycling in the country.	Information is mostly accurate, with some minor gaps or missing details.	Basic information is provided but lacks depth or accuracy.	Information is unclear, incorrect, or insufficient.
Structure & Organization	Content is well-organized with a clear introduction, body, and conclusion. Ideas flow logically.	Mostly well-structured but may have minor gaps in organization.	Some structure, but parts of the presentation feel disorganized or unclear.	Lacks structure; difficult to follow.
Visuals (Slides/Posters)	Visuals are clear, engaging, and effectively support the message. Well-designed and creative.	Good use of visuals, but some areas could be clearer or better designed.	Visuals are present but may not effectively support the content.	Visuals are missing, unclear, or poorly designed.
Delivery & Communication	Presenter speaks clearly, confidently, and engages the audience. Eye contact and voice modulation are excellent.	Mostly confident, with some hesitation or lack of engagement.	Some difficulties in speaking clearly or engaging the audience.	Lacks confidence, unclear speech, little engagement.
Use of Language	Excellent grammar, vocabulary, and fluency. Language is engaging and appropriate.	Good language use, with minor errors that do not affect understanding.	Some grammar or vocabulary mistakes, but the message is mostly clear.	Many language errors, making it difficult to understand.

This rubric allows both teachers and students to assess presentations effectively. The weight of each criterion can be adjusted if needed.

***** AFTER IMPLEMENTATION *****

Student feedback

/

Teacher's remarks

/

Annex 1.



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STUDENT PRESENTATION EVALUATION: GLASS RECYCLING

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2-1)
Content Knowledge	Shows strong understanding of glass recycling; accurate and detailed information.	Good knowledge with minor gaps.	Basic knowledge; some inaccuracies.	Limited or unclear knowledge.
Organization	Clear structure: introduction, main points, and conclusion flow smoothly.	Mostly organized with some minor lapses.	Some structure but ideas not fully connected.	Lacks clear structure.
Visuals/Materials	Creative, clear, and well-designed visuals support the message.	Visuals are useful but not very engaging.	Few or unclear visuals.	No visuals or they distract from the presentation.
Delivery & Speaking	Confident, clear voice, good eye contact, engages the audience.	Clear most of the time, minor issues with confidence or clarity.	Uneven delivery, limited audience connection.	Difficult to hear or follow, little engagement.

Annex 2.

- Include the title "My Glass Recycling Container"
- Create the container design and its features
- Add catchy slogans, e.g., "Recycle Glass, Save the Earth!" (why recycling glass is essential – environmental benefits, energy saving, etc.)
- Use bright colours and images to grab attention and markers, coloured pencils, glue, magazine cut-outs for extra creativity
- Each group presents their poster, explaining their container's design and how it promotes recycling.
- The focus is on eco-friendliness, originality and clear communication.



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Annex 3.





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Annex 4.





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LEARNING SCENARIO – *Slow Fashion, Fast Fashion, Textile Waste- LITERATURE/HISTORY/ SOCIAL SCIENCES* (interdisciplinary or separate)

Title

A STORY OF TRANSFORMATION- Transforming Knitwear

Author(s) : Yasemin ARGUN, Yıldız GÜL Sultan Hatun KTMAL – SİNOP/TÜRKİYE

Summary : This lesson plan will help students develop creative writing and storytelling skills while raising awareness about the environmental impact of textile waste. Through the transformation of old knitwear into characters and narratives, students will explore the concepts of sustainability, up-cycling, and personal responsibility. The project-based approach encourages collaboration, critical thinking, and innovation, making it suitable for interdisciplinary use across Literature, Science, Social Studies, and Art.

Table of summary

Subject	This scenario can be used freely for Literature, Creative Writing , Textile Recycling , Up-cycling. but can also be adapted as an interdisciplinary lesson incorporating environmental science and textile arts.
Topic	Climate Change, Textile Waste, Up-cycling
Age of students	14-18
Preparation time	20 minutes (gathering materials, preparing examples)
Teaching time	5 lessons (each 40 minutes)
Online teaching material	<ul style="list-style-type: none">Access to a computer , tablets or smart phones for research (optional)Presentation materials (poster boards, PowerPoint slides, etc.)
Offline teaching material	<ul style="list-style-type: none">Writing materials (paper, pens/pencils)Old knitwear and other textile materials (provided by students or collected beforehand)
Resources used	<ul style="list-style-type: none">Old knitwear items for transformationWriting materials (notebooks, pens)Art supplies (markers, colored pencils, paints)

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Integration into the curriculum

The lesson focuses on sustainability, creative writing, and active citizenship. Students will practice their English communication skills while learning about waste separation and sustainable practices so it could also be organized as an interdisciplinary lesson with Science, Social Studies, and Art. (Science can cover the environmental impact of waste and sustainable solutions, Social Studies can explore civic responsibility and community initiatives, and Art can incorporate creative projects using recycled materials.)

Outcomes of the lessons

- Students will develop a deeper understanding of the importance of up-cycling and textile recycling in reducing environmental impact.
- Students will improve their creative writing skills and apply them to the development of a narrative around transformation.
- Students will gain practical skills in transforming old knitwear into new, functional pieces.
- Students will reflect on their own consumption habits and consider ways to reduce textile waste in their own lives.

Students will have a deeper understanding of the concept of transformation in literature and textile art. They will have developed practical skills in up-cycling and creative writing, as well as a greater appreciation for sustainable fashion practices.

Aim of the lesson

As this learning scenario aims to develop creative writing and storytelling skills by creating a character inspired by an old knitwear item.

Students will understand and discuss the environmental impact of textile waste.

Students will gain practical skills in textile up-cycling and design.

Students will foster awareness and appreciation of recycling through a creative project.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning



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21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).

Activities

Name of activity	Procedure	Time
A STORY OF TRANSFORMATION- Transforming Knitwear		
First lesson Introduction to Transformation and Storytelling		
Introduction	<ul style="list-style-type: none"> ➤ Begin the lesson by discussing the concept of sustainability and the environmental impact of textile waste. ➤ Show examples of creative projects or products made from reused knitwear or other textiles to inspire students. 	15'
	<p style="text-align: center;">Brainstorming Session</p> <ul style="list-style-type: none"> ➤ Have students brainstorm individually or in small groups by asking: <p>*What kind of story can be developed around reused textile materials or old clothes? *How can characters, settings, or plot elements reflect a sustainable lifestyle?</p>	25'
Conclusion	<ul style="list-style-type: none"> ➤ Encourage them to consider different genres (e.g., science fiction, fantasy, realistic fiction) and how each could incorporate reuse. 	
Homework assignment	Bring an old piece of knitwear to the next class!	



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Second lesson

Character Creation and Story Development

Introduction	Choosing Materials	15'
	<ul style="list-style-type: none">➤ Provide students with old knitwear and other textile materials.(Tell them to bring materials beforehand.)➤ Allow time for students to examine the materials, noting textures, colors, and potential uses in their stories.➤ Encourage them to think creatively about how these materials can influence their storytelling.	
	Storyboarding	15'
	<ul style="list-style-type: none">➤ Ask students to create a simple storyboard outlining their story idea:<ul style="list-style-type: none">○ Main characters○ Setting○ Conflict or problem related to reuse of textiles/clothes	
Conclusion	<ul style="list-style-type: none">➤ Emphasize the use of reused textile materials or old clothes to the plot	10'
Homework assignment	Assign students to write a rough draft of their short story based on their storyboard.	
	Third lesson <i>Understanding Textile Recycling and Up-cycling</i>	
Introduction	<ul style="list-style-type: none">➤ Begin by asking students a few thought-provoking questions: *What happens to clothes when we throw them away? *Have you ever reused or repurposed old clothes? How? *Why do you think recycling textiles is important?	5'
	Writing Session	30'
	<ul style="list-style-type: none">➤ Give brief information on environmental impact of textile waste and benefits of recycling.➤ Instruct students to write their short stories based on their rough drafts.➤ Encourage them to describe the reused textile materials or old clothes and their significance to the characters or plot.	
Conclusion	<ul style="list-style-type: none">➤ Encourage them to reflect on how storytelling can raise awareness about sustainability	5'
	Fourth lesson <i>Finalizing the project</i>	



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Introduction	<ul style="list-style-type: none"> ➤ Give students time to revise their stories based on peer feedback ➤ Encourage them to refine their narratives, ensuring the reuse of textile materials or old clothes enhances the storytelling. 	5'
	<p style="text-align: center;">Getting ready for presentation</p> <ul style="list-style-type: none"> ➤ Instruct students to prepare a presentation of their story to share with the class: <ul style="list-style-type: none"> ○ Create visuals (poster boards, PowerPoint slides, etc.) that highlight key aspects of their story and the reused materials. 	30'
Conclusion	<ul style="list-style-type: none"> ➤ Finalizing their presentation to ensure clarity and engagement 	5'
Fifth lesson		
Presentation and Reflection		
Introduction	<ul style="list-style-type: none"> ➤ Getting ready for presenting their creative story telling ➤ Students present their up-cycled knitwear characters and read their stories. 	5'
Conclusion	<ul style="list-style-type: none"> ➤ Discuss what was learned about transformation, recycling and the creative process. 	

Assessment

Assessment Criteria & Rubric					
Criteria	Excellent (4)	Good (3)	Satisfactory (2)	Needs Improvement (1)	
Creativity & Originality	Story is highly imaginative and show unique connections to materials.	Story is creative and materials are thoughtfully used.	Story is somewhat creative, with limited use of materials.	Lacks originality; little or no connection to reused materials.	
Incorporation of Sustainability Concepts	Sows strong understanding of up-cycling and environmental impact.	Shows general understanding of sustainability in textile use.	Some attempt to integrate sustainability; lacks clarity.	Little or no integration of sustainability concepts.	
Story Structure & Writing	Clear, engaging narrative with well-developed characters, setting, and plot.	Mostly clear and structured story; some development of ideas.	Basic structure; underdeveloped characters or plot.	Disorganized or incomplete story with minimal development.	
Use of Recycled Materials	Excellent transformation of old knitwear; highly integrated into the story or design.	Good use of materials that support the narrative or design.	Basic use of recycled materials; not strongly linked to story.	Minimal or ineffective use of recycled materials.	



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Presentation & Communication	Confident, clear, and well-organized presentation using visuals.	Clear presentation with minor gaps; visuals support the story.	Presentation lacks clarity or organization; visuals limited.	Presentation is unclear, rushed, or lacking visuals.
Collaboration & Participation	Actively contributed, helped others, and showed leadership in group work.	Participated regularly and cooperated with group members.	Limited participation; needed reminders to stay on task.	Minimal contribution; did not collaborate effectively.

Scoring Guide

- 24-21:** Outstanding – Exceeds expectations in all areas.
- 20-16:** Good – Meets expectations with some strong elements.
- 15-11:** Satisfactory – Basic performance with room for growth.
- 10 or below:** Needs Improvement – Major areas need development.

Group member	Creativity & Originality	Sustainability Concepts	Story Structure & Writing	Use of Recycled Materials	Presentation & Communication	Collaboration & Participation

***** AFTER IMPLEMENTATION *****

Student feedback

Students found the lessons engaging and eye-opening, especially in realizing the environmental impact of textile waste. They enjoyed combining storytelling with hands-on upcycling, which enhanced their creativity and made the writing process more personal. Many expressed that the activity helped them become more conscious of sustainability and rethink their consumption habits. Some faced challenges linking materials to story elements but felt it improved their creative thinking and collaboration skills.

Teacher's remarks

The project successfully engaged students through its interdisciplinary approach, combining literature, environmental education, and art. It promoted creativity, collaboration, and critical thinking. While some students initially found it challenging to integrate storytelling with up-cycling, peer feedback and hands-on activities helped them improve. Overall, the lessons increased student motivation and awareness of sustainability.

Annex 1. Reflection Questions

Questions 1

How did your understanding of textile waste change?

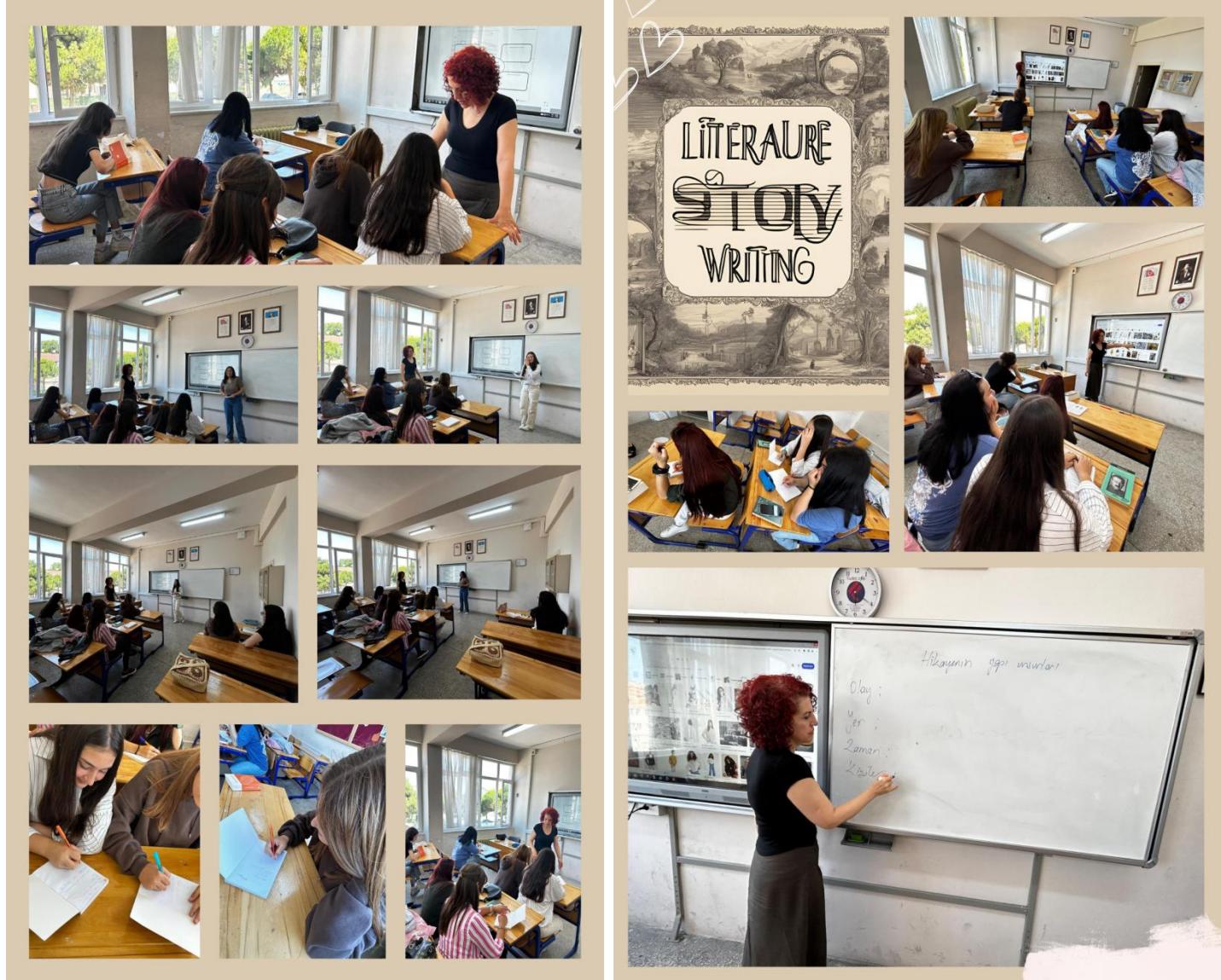
Questions 2

What challenges did you face in storytelling and upcycling?



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LEARNING SCENARIO - *Slow Fashion, Fast Fashion, Textile Waste/DRAMA* (interdisciplinary or separate)

Title

MAKING COSTUMES FROM TEXTILE PRODUCTS

Author

Sibel Şebnem ÖZDEMİR, Melek Nur TÜRK , Sultan Hatun KMTAL, SİNOP -TÜRKİYE

Summary

This lesson plan will teach students how to design and make costumes using textile materials. They will learn about choosing fabrics, making patterns, cutting, sewing techniques, and adding decorations. The project encourages creativity, problem-solving and practical skills in textile arts. They will also focus on environmental impact of fast fashion and engage in the principles of slow fashion.

Table of summary

Subject	This scenario can be used freely for Textile and Fashion Design, Social Studies, Environmental science. It could also be used as an interdisciplinary lesson combining English language skills.
Topic	Climate Change, Waste Disposal, Sustainable Consumption. Costume Making from Textile Products
Age of students	14-16
Preparation time	2 hours per person (for reviewing materials, customizing activities, and gathering resources)
Teaching time	40 minutes per lesson (6 lessons total)
Online teaching material	<ol style="list-style-type: none">1. Presentation Slides (PowerPoint, Google Slides) with visuals, key terms, and discussion prompts2. Online collaborative document (Google Doc, Padlet) for brainstorming and sharing ideas3. Online quiz platform (Kahoot, Quizizz) for formative assessment.4. Video tutorials on sewing techniques5. Digital fashion design software6. Online resources on costume history and design
Offline teaching material	<ul style="list-style-type: none">• Fabric swatches• Sewing kits (needles, thread, scissors, pins, measuring tape, etc.)• Patterns and templates• Mannequins or dress forms (if available)• Markers, poster board, construction paper, recycled materials for project-based activities.



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	<ul style="list-style-type: none">• Rubrics for assessment (printed or digital).
Resources used	<ul style="list-style-type: none">• European Union document "SLOW FASHION FAST FASHION TEXTILE WASTE"• Textile design books• Costume-making guides• Internet sources for inspiration• Examples of sustainable fashion brands and initiatives

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Integration into the curriculum

This lesson plan integrates with art, environmentalism, consumerism, global issues, research skills, design, and practical life skills curricula, integrating creativity with hands-on learning in textile arts.

Outcomes of the lessons

- Students will be able to tell the difference between fast fashion and slow fashion
- They will discuss fast fashion's environmental and social impacts and come up with ideas to reduce textile waste
- Students will discuss waste separation, active citizenship, and sustainable environment
- They will express themselves clearly in English, both in writing and speaking.

Aim of the lesson

- To develop students' critical thinking skills, communication skills.
- To draw attention to the global issues in the context of sustainable consumption and environmental responsibility.
- To develop students' understanding of costume design and textile production.
- To enhance practical sewing and design skills.
- To encourage creativity and problem-solving skills.
- To encourage students to be more informed citizens for a sustainable future.

Trends

- Project- based learning



- Collaborative learning
- Peer learning
- Sustainable fashion
- DIY fashion
- Integration of technology in textile design.

21st century skills

- ICT Literacy : Students will use ICT tools for research, organization, communication, and evaluation of information.
- Communication skills : Students will share thoughts and ideas, listen effectively, and communicate with each other to inform, persuade, research, report... etc.
- Collaboration and teamwork : Students will come together to accomplish a common goal and share responsibility for collaborative team-work
- Creativity and innovation : Students will form new ideas using ICT tools and work creatively with others to find solutions
- Critical thinking and problem-solving : Students will analyze information, make connections, reflect critically on the world around them, and come up with solutions to the problems posed by fast fashion.

Activities

Name of activity	Procedure	Time
First lesson - <i>Defining the Problem</i>		
Introduction	Brainstorming	
	<p>*Ask the students:</p> <ul style="list-style-type: none">-What is fashion to you?-Where do you get your clothes? <p>*Write responses on board and then show a powerful image depicting textile waste. And asks the questions to deepen the theme</p> <ul style="list-style-type: none">-What do you see?-What does this make you think?	10'
	<p>*Discussion time:</p> <p>Students share ideas and discuss the questions and the teachers quides them.</p> <ul style="list-style-type: none">-What are the key differences between fast fashion and slow fashion?-What are the environmental consequences of fast fashion?	20'
Conclusion	Summarize the key points of the problem	10'

Second lesson - Fast Fashion Consequences		
Introduction	<i>Teamwork</i>	
	Divide students into small groups. Each group is assigned a specific consequence of fast fashion (e.g., water pollution, carbon emissions, labor exploitation)	10'
	Each group researches and prepares a short presentation outlining the problem and its impact.	25'
Conclusion	Summarize key points and transition to the next lesson	5'
Homework assignment	Students will find and bring images of inspirational costumes..	
Third lesson – Introduction to Costume Design and sketching a costume		
Introduction	<i>Reviewing homework and discussing different design inspirations.</i>	
	Show examples of different costume styles, discuss fabric choices, and demonstrate sketching ideas.	5'
	Divide students into small groups to discuss the videos and some info graphics. In small groups, students brainstorm ideas for repurposing old clothes or textiles. Encourage creativity and sustainability.	30'
	Teach basic costume sketching techniques and planning layouts. Students will sketch their costume ideas and label fabric choices.	
Conclusion	Check students' progress and answer questions.	5'
Fourth lesson – fabric selection and Sewing Techniques		
Introduction	<i>Reviewing fabric choices and Safety tips</i>	
	Review fabric choices and discuss durability and function. Demonstrate cutting and basic sewing techniques.	5'
	Demonstrate how to create patterns from sketches. Students begin measuring and drafting patterns. Check students' progress and answer questions.	30'
Conclusion	Troubleshoot sewing issues.	5'
Fifth lesson - Costume Assembly and Embellishments		
Introduction	<i>Discuss how details enhance costume aesthetics.</i>	
	Show embellishment techniques (beading, embroidery, painting, etc.).	5'
	Students will assemble and add embellishments to costumes.	30'



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Conclusion	Assess progress and plan finishing touches.	5'
Homework assignment	Finalize costume details.	
Sixth lesson - Costume Showcase and Evaluation		
Introduction	<i>Set up a mini costume exhibition.</i>	
	Students present their costumes and explain their design choices.	5'
	Peer and teacher feedback on creativity and craftsmanship.	30'
Conclusion	Reflect on learning experience.	5'

Assessment

Assessment rubrics can be used for peer assessment and for formative assessment. The teacher can assess the students work based on report assessment rubrics that he/she can prepare.

Group Evaluation Rubric: Up-cycling a Knitted Pullover

Criteria	4 - Excellent	3 - Good	2 - Satisfactory	1-Needs Improvement
Creativity	Shows exceptional originality and creativity in design, combining several innovative techniques.	Shows good creativity and originality in design; uses some innovative techniques.	Displays basic creativity; design is original but lacks complexity.	Limited creativity; design is unoriginal and lacks innovative techniques.
Sustainability	Explains the environmental impact of their choices; reuses materials effectively and minimizes waste.	Demonstrates an understanding of sustainability concepts and repurposes materials with consideration for waste.	Demonstrates a basic understanding of sustainability; some materials are reused but not effectively.	Shows little understanding of sustainability; minimal effort to repurpose materials.
Communication	Presents ideas clearly with supporting visuals and communicates well with others.	Shares ideas clearly but may lack some visual support.	Communicates ideas but lacks clarity; minimal engagement with the group members.	Struggles to communicate ideas; presentation is unclear and lacks engagement.



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Criteria	4 - Excellent	3 - Good	2 - Satisfactory	1-Needs Improvement
Collaboration	Actively contributes to group work; encourages and supports peers; demonstrates strong teamwork skills.	Contributes to group work; collaborates well with peers but may not take a leadership role.	Participates in group work; some collaboration but lacks initiative.	Limited contribution to group work; struggles to collaborate effectively with peers.

Scoring Guide

- **16-14:** Outstanding performance; exceeds expectations in all areas.
- **13-10:** Good performance; meets expectations with some areas for improvement.
- **9-6:** Satisfactory performance; meets some expectations but requires significant improvement.
- **5-4:** Needs improvement; does not meet expectations in most areas.

Group member	Creativity	Sustainability	Communication	Collaboration

***** AFTER IMPLEMENTATION *****

Student feedback

Students found the lessons highly engaging and meaningful. Many expressed enjoyment in the hands-on aspects, such as sketching, sewing, and costume assembly. They appreciated the opportunity to be creative while learning about sustainability and the impacts of fast fashion. The collaborative nature of the project fostered teamwork, and students felt a sense of accomplishment during the costume showcase. Some students mentioned challenges with sewing techniques or time management but said they learned a lot. Overall, they felt more conscious about textile waste and inspired to repurpose materials in everyday life.

Teacher's remarks

The lessons successfully combined artistic creativity with environmental awareness. Students demonstrated growth in practical skills like fabric handling, pattern design, and sewing, as well as key competencies such as collaboration, communication, and critical thinking. The project encouraged personal expression and responsibility toward sustainable practices. Teachers noted increased student motivation and enthusiasm throughout the activities. The costume exhibition allowed for meaningful reflection and peer evaluation. Lessons were effective in meeting the interdisciplinary goals and can be adapted for future sustainability-themed projects across other disciplines.



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LEARNING SCENARIO – FAST FASHION - English, Social Studies / Environmental Science. (interdisciplinary or separate)

Title

FAST FASHION: *Being a conscious consumer and friendly to the environment.*

Author

Nuray YILDIRIM CEVAHİR, Hakan GÜNGÖR , Sultan Hatun KMTAL, SİNOP -TÜRKİYE

Summary

This lesson focuses on the concept of fast fashion, its global impacts, and potential solutions to reduce its negative effects.

Students will be able to define fast fashion and explain its impact on the environment.

Students will understand the importance of being a conscious consumer and making sustainable fashion choices.

Students will be able to identify ways in which they can reduce their carbon footprint through their clothing choices.

Table of summary

Subject	This scenario can be used freely for English, Social Studies / Environmental Science. It could also be used as an interdisciplinary lesson combining English language skills.
Topic	Fast fashion, being a conscious consumer, sustainability, textile recycling, up-cycling
Age of students	14-18
Preparation time	3 hours for gathering materials, setting up online resources for the students
Teaching time	4 lessons. Each lesson takes 40 minutes. Total 160 minutes.
Online teaching material	<ol style="list-style-type: none">1. Fast Fashion Environmental Impact Fast Fashion Effects On Environment The Planet Voice - YouTube2. Fast Fashion - Definition - Causes &...: English ESL video lessons (islcollective.com)3. PPT or a video fast fashion and sustainability.4. Reading text.5. Internet access for videos and online resources.
Offline teaching material	<ul style="list-style-type: none">• Projector or smart board.• Presentation materials (slides on fast fashion, sustainability, and conscious consumerism, examples of sustainable fashion brands and practices) videos on textile recycling and up-cycling)• Internet access for videos and online resources.• Printed copies of the provided text on fast fashion and its environmental impact.



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Resources used

- [Fast Fashion Environmental Impact | Fast Fashion Effects On Environment | The Planet Voice - YouTube](#)
- [Fast Fashion - Definition - Causes &....: English ESL video lessons \(islcollective.com\)](#)

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Integration into the curriculum

This lesson plan integrates with subjects such as Environmental Science, Social Studies, and Economics, focusing on sustainability, consumer behavior, and ethical decision-making .

Outcomes of the lessons

- Students will understand what fast fashion is and its implications.
- Students will analyze the social, economic, and environmental impacts of fast fashion.
- Students will develop critical thinking, reading, and writing skills.
- Students will explore alternatives to fast fashion and develop action plans to address fast fashion issues.

Aim of the lesson

The aim of this lesson is to foster awareness about fast fashion, encourage ethical consumption, and integrate English language skills into global citizenship education.

Trends

- Sustainability in education.
- Integrating real-world issues into language learning.
- Enhancing digital literacy.



21st century skills

- Critical thinking
- Collaboration
- Communication
- Media literacy
- Social responsibility

Activities

Name of activity	Procedure	Time
First lesson		
Introduction	<i>Introduction to Fast Fashion- Being a conscious consumer and friendly to the environment..</i>	
	<ul style="list-style-type: none">▪ Greet students and introduce the topic of fast fashion.▪ Show a brief slideshow about fast fashion.▪ Ask students what they know about fast fashion and its impact on the environment.▪ Write their responses on the board.▪ Introduce the concept of fast fashion and its negative impact on the environment, such as waste, pollution, and exploitation of garment workers.▪ Explain that the goal of the lesson is to help students become more conscious consumers and make eco-friendly choices.	15'
	Vocabulary building (25 minutes) <ul style="list-style-type: none">▪ Distribute the vocabulary list and review key terms: (Fast fashion, Landfill, Chemicals, Sustainable, Throwaway society)▪ Use example sentences to illustrate each term. Provide visual aids or images to support understanding.▪ Conduct a quick vocabulary matching activity:▪ Students match words to their definitions on sticky notes or small cards.▪ Discuss the matches as a class.	25'
Conclusion	Briefly discuss the environmental impacts of textile waste and the fashion industry, connecting this to climate change (e.g., pollution, resource depletion).	10'
Homework		
Second lesson		
Introduction	<i>Reading session</i>	

<ul style="list-style-type: none"> ▪ Hand out the text about fast fashion to students . ▪ Students read the article silently. ▪ Encourage students for highlighting or underlining key points and unfamiliar words. Emphasize the key words and new vocabulary. ▪ Conduct a guided reading session. 	20'
<p>Reading Comprehension Questions (15 minutes)</p> <ul style="list-style-type: none"> ▪ Ask them comprehension questions during or after the reading to ensure understanding. ▪ Discuss the answers as a class. ▪ Encourage students to provide evidence from the text to support their answers. 	15'
<p>Conclusion Summarize the topic</p>	5'
<p>Third lesson</p>	
<p>Introduction <i>Speaking Activity / Group Discussion</i> <i>Practical Steps to Reduce Carbon Footprint</i></p> <ul style="list-style-type: none"> ▪ Divide students into small groups. 	5'
<ul style="list-style-type: none"> ▪ Provide discussion questions: <ul style="list-style-type: none"> ○ What are some ways to reduce the environmental impact of fast fashion? ○ Do you think people should change their shopping habits? Why or why not? ○ Buying fewer clothes and shopping more mindfully ○ Choosing secondhand, vintage, or sustainable clothing options ○ Caring for and repairing clothes to extend their lifespan ○ Advocating for more sustainable practices in the fashion industry ○ How can companies promote sustainable fashion? ○ Each group presents their ideas to the class. 	25'
<p>Conclusion</p> <ul style="list-style-type: none"> ▪ Discussion on the different ideas presented. ▪ Encourage students to ask questions and provide feedback. 	5'
<p>Fourth lesson</p>	
<p>Introduction <i>Reflection and Conclusion</i></p> <p>Each group presents their up-cycled item, explaining the design process, materials used, and environmental impact. T</p>	5'
<ul style="list-style-type: none"> ▪ Have the students watch the video about fast fashion environmental impact. <p>Fast Fashion Environmental Impact Fast Fashion Effects On Environment The Planet Voice - YouTube</p>	30'



- Take a small quiz about the video (fast fashion destroying our planet) interactive or game mode.

[Fast Fashion - Definition - Causes &...: English ESL video lessons \(islcollective.com\)](http://www.eslvideolessons.com/fashion.html)

- Discuss the various ways that students can make a difference in reducing the environmental impact of fast fashion.
- Writing slogans on the board.

Conclusion ▪ Close the lesson by having students reflect on what they learned and how they can apply it to their own clothing choices and behaviors. 5'

Assessment

- Students will be evaluated based on their participation in class discussions, group activities, and presentations.
- The evaluation will include understanding of key concepts, critical thinking skills, creativity in project work.
- Results will be assessed through quizzes, presentations, and reflection assignments to value students' comprehension and engagement with the topic.

This lesson plan aims to educate students about the importance of being conscious consumers in the fast fashion industry and empower them to make sustainable fashion choices to reduce their environmental impact.

***** AFTER IMPLEMENTATION *****

Student feedback

Students appreciated learning about fast fashion through real-world examples, group discussions, and hands-on activities like up-cycling. Many expressed increased awareness of how their fashion choices impact the environment. Some students mentioned enjoying the interactive video quiz and group presentations. A few noted that the vocabulary was initially challenging, but the visual aids and discussions helped them understand. Overall, they found it both informative and engaging.

Teacher's remarks

The lessons successfully promoted environmental awareness and responsible consumer behavior. Students demonstrated improved critical thinking and collaboration skills. They actively engaged in reading, discussions, and creative presentations. The up-cycling activity encouraged innovation and practical understanding of sustainability. The lesson structure allowed for flexibility and adaptation across different learning levels. Teachers observed a noticeable shift in students' attitudes toward fashion consumption and environmental responsibility.

BIBLIOGRAPHY

Reading text : [1 Fast fashion, Clothes, fashion, General reading comprehens... \(islcollective.com\)](https://islcollective.com)

Youtube video: [Fast Fashion Environmental Impact | Fast Fashion Effects On Environment | The Planet Voice - YouTube](https://www.youtube.com/watch?v=JyfJyfJyfJy)

Quiz: [Fast Fashion - Definition - Causes &...: English ESL video lessons \(islcollective.com\)](https://islcollective.com)

SOME PHOTOS





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LEARNING SCENARIO – SLOW FASHION (interdisciplinary or separate)

Title: *Up-cycling a Knitted Pullover*

Author(s) : Mine Demirboya , Bedriye Albayrak, Sibel Şebnem Özdemir Sultan Hatun KMTAL, SİNOP - TÜRKİYE

Summary : This lesson will introduce students to the concept of slow fashion through a practical, hands-on activity of up-cycling old knitwear. Students will explore the environmental impacts, learn new up-cycling techniques and reflect on sustainable practices.

Table of summary

Subject	This scenario can be used freely for textile and fashion, art and design, social studies or IT lessons. It could also be used as an interdisciplinary lesson combining English language skills.
Topic	climate change, fast fashion, textile waste
Age of students	14-18
Preparation time	1 hour for gathering materials, setting up online resources, and organizing the workspace.
Teaching time	4 lessons. Each lesson takes 40 minutes.
Online teaching material	<i>What is Climate Change? Explore the Causes of Climate Change .6 minutes</i> https://www.youtube.com/watch?v=EuwMB1Dal-4 <i>Climate Change - A Short Film [4K] 3.30 minutes</i> https://www.youtube.com/watch?v=JAa58N4Jlos <i>Global Warming and Climate Change: 6 minutes</i> https://www.youtube.com/watch?v=G9t_9Tmwv4 <i>FAST FASHION The Hidden Climate Crisis 5 minutes</i> https://www.youtube.com/watch?v=pEFS96HL4VA <i>How does fashion impact the environment? 9 minutes</i> https://www.youtube.com/watch?v=O4270SWkehI <i>TEXTILE MOUNTAIN - THE HIDDEN BURDEN OF OUR FASHION WASTE 22 minutes</i> https://www.youtube.com/watch?v=UC4oFmX8tHw <i>How Textile Recycling Works The Journey of a T-shirt Textile Sorting 6 minutes</i> https://www.youtube.com/watch?v=vAm0Pd5frh4 <i>examples of some creative ideas.</i> https://tr.pinterest.com/sewmuchfunPA/upcycling-textiles/ https://tr.pinterest.com/ideas/upcycled-textiles/925829504025/
Offline teaching material	<ul style="list-style-type: none">• Old knitted pullovers (one per student or group)• Basic sewing kits (needles, threads, scissors)• Fabric paint, patches, and other decorative materials
Resources used	<ul style="list-style-type: none">• Internet-enabled devices for research• Whiteboard and markers• Projector ,smart board or screen for video presentations• Art supplies (sketch paper, colored pencils, etc.)



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Integration into the curriculum

This lesson combines textile arts with environmental science and English language skills, focusing on the sustainable practices within fashion. It could also be organized as a digital workshop in IT classes. It supports interdisciplinary curriculum goals by allowing students to communicate in English on topics such as waste separation, active citizenship, and sustainable environment practices.

Outcomes of the lessons

Students will learn about slow fashion principles, gain insights into the environmental effects of climate change and textile waste, and take responsibility for sustainable consumption. Working in groups will enhance students' teamwork and communication skills as they share ideas for up-cycling.

By the end of the lesson, students will have the practical skills and a deeper understanding of sustainability in fashion, and they will recognize their role as responsible consumers.

Aim of the lesson

The aim of this lesson is to understand the environmental impact of fast fashion and the issues caused by textile waste. Students will learn creative up-cycling techniques to repurpose old textiles, transforming waste into valuable items. This lesson also fosters the development of essential 21st-century skills, including critical thinking, communication, collaboration, and creativity, which will help students approach environmental issues with innovative, sustainable solutions.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

- **ICT Literacy:** Students research and organize information online.
- **Communication:** Students share ideas, discuss designs, and present outcomes.



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- Collaboration:** Students work together in groups to achieve a shared goal.
- Creativity and Innovation:** Students develop and apply creative up-cycling ideas.
- Critical Thinking and Problem Solving:** Students analyse the impact of fast fashion and explore sustainable solutions.

Activities

Name of activity	Procedure	Time
First lesson		
Introduction	<i>Introduction to Slow Fashion and Textile Waste</i>	
	Start the lesson with the questions asked to measure the preliminary assessment. See questions in ANNEX 1. Write their responses on the board.	5'
	Briefly introduce climate change, fast fashion, and textile waste. Show some short video clips or info graphics detailing the environmental impacts of textile waste and fast fashion. Divide students into small groups to discuss the videos and some info graphics.	25'
Conclusion	Briefly discuss the environmental impacts of textile waste and the fashion industry, connecting this to climate change (e.g., pollution, resource depletion). Present photos or examples of up-cycled fashion to inspire students.	10'
Homework assignment	Students will research various up-cycling ideas and techniques online. They will bring an old textile clothing, knitted item for the next lesson's activity.	
Second lesson		
Introduction	<i>Exploring Up-cycling and Sustainable Practices</i>	
	In small groups, students brainstorm ideas for repurposing old clothes or textiles. Encourage creativity and sustainability.	10'
	Students will start the up-cycling process by choosing their materials and beginning to transform their pullovers. The teacher will provide guidance on basic techniques such as cutting, sewing, and applying fabric paint or patches. Students use the old textiles they brought from home to start a small up-cycling project, such as creating a tote bag, pillow cover, or fabric bracelet.	20'
Conclusion	Each group presents their ideas and discusses materials they might need to create an - item.	10'



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Third lesson

Introduction *Hands-On Up-cycling Activity*

Briefly introduce the activity. Remind students of safe use of any materials (e.g., scissors, glue). 5'

Students will collaborate to create their up-cycled items using old textiles. 30'
During this lesson, students will finalize their up-cycled pullovers, integrating feedback where necessary.

Conclusion Students pair up and explain their up-cycled item, discussing the choices they made and how it benefits the environment. 5'

Fourth lesson

Introduction *Presentation and Reflection*

Each group presents their up-cycled item, explaining the design process, materials used, and environmental impact. 5'

Allow time for students to share their insights on the up-cycling process, what they learned about environmental impacts of fashion, and how they feel about creating something new from old materials.

Pose reflective questions such as: See ANNEX 2

How did this activity change your perspective on fashion?

How did you learn more about how thrown-away clothes affect the environment?

What was the hardest part of reusing old items to make something new, and how did you handle it?

Why is sustainability important in the context of fashion?

Conclusion Summarize key takeaways regarding the importance of slow fashion, the impact of textile waste, and the creative possibilities of up-cycling. 5' Discuss how students can continue to practice slow fashion in their own lives. Encourage students to share their up-cycling efforts with friends and families, fostering community awareness.

Assessment

Assessment rubrics can be used for peer assessment and for formative assessment. The teacher can assess the students work based on report assessment rubrics that he/she can prepare.



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Group Evaluation Rubric: Up-cycling a Knitted Pullover

Criteria	4 - Excellent	3 - Good	2 - Satisfactory	1-Needs Improvement
Creativity	Shows exceptional originality and creativity in design, combining several innovative techniques.	Shows good creativity and originality in design; uses some innovative techniques.	Displays basic creativity; design is original but lacks complexity.	Limited creativity; design is unoriginal and lacks innovative techniques.
Sustainability	Explains the environmental impact of their choices; reuses materials effectively and minimizes waste.	Demonstrates an understanding of sustainability concepts and repurposes materials with consideration for waste.	Demonstrates a basic understanding of sustainability; some materials are reused but not effectively.	Shows little understanding of sustainability; minimal effort to repurpose materials.
Communication	Presents ideas clearly with supporting visuals and communicates well with others.	Shares ideas clearly but may lack some visual support.	Communicates ideas but lacks clarity; minimal engagement with the group members.	Struggles to communicate ideas; presentation is unclear and lacks engagement.
Collaboration	Actively contributes to group work; encourages and supports peers; demonstrates strong teamwork skills.	Contributes to group work; collaborates well with peers but may not take a leadership role.	Participates in group work; some collaboration but lacks initiative.	Limited contribution to group work; struggles to collaborate effectively with peers.

Scoring Guide

- **16-14:** Outstanding performance; exceeds expectations in all areas.
- **13-10:** Good performance; meets expectations with some areas for improvement.
- **9-6:** Satisfactory performance; meets some expectations but requires significant improvement.
- **5-4:** Needs improvement; does not meet expectations in most areas.

Group member	Creativity	Sustainability	Communication	Collaboration



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Reflection Questions (Annex 1):

Questions 1 -What is Slow Fashion?

Questions 2 - What are the key principles behind Slow Fashion?

Questions 3 - Why is clothing waste a big problem?

Questions 4- What can we do to make our clothes choices better for the planet? How does reusing or changing old clothes help?

Questions 5- How can we teach sustainable fashion in schools and communities?

Reflection Questions (Annex 2) :

Questions 1-How did this activity change your perspective on fashion?

Questions 2 -How did you learn more about how thrown-away clothes affect the environment?

Questions 3 -What was the hardest part of reusing old items to make something new, and how did you handle it?

Questions 4-Why is sustainability important in the context of fashion?

***** AFTER IMPLEMENTATION *****

Student feedback

Students learned how fashion impacts the environment. Many appreciated the chance to reuse old clothes in a meaningful way and felt more conscious about sustainable consumption. Some students found sewing and design tasks challenging, but peer collaboration and teacher guidance helped them overcome difficulties. Overall, the project increased their awareness of textile waste and motivated them to adopt more environmentally responsible habits.

Teacher's remarks

The lesson effectively combined sustainability education with creative practice. Students were highly engaged throughout the process, showing enthusiasm in both the storytelling and up-cycling activities. The interdisciplinary nature of the project encouraged collaboration, communication, and critical thinking. While some students initially struggled with sewing or connecting creative writing to recycled materials, peer feedback and guidance helped improve outcomes. Overall, the project successfully raised awareness about textile waste and empowered students to think more sustainably and creatively.



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Students bring their old knitted clothes.



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Annex 1.

Questions 1 -What is Slow Fashion?
Questions 2 - What are the key principles behind Slow Fashion?
Questions 3 - Why is clothing waste a big problem?
Questions 4- What can we do to make our clothes choices better for the planet? How does reusing or changing old clothes help?
Questions 5- How can we teach sustainable fashion in schools and communities?

Annex 2.

Questions 1
How did this activity change your perspective on fashion?
Questions 2
How did you learn more about how thrown-away clothes affect the environment?
Questions 3
What was the hardest part of reusing old items to make something new, and how did you handle it?
Questions 4
Why is sustainability important in the context of fashion?



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LEARNING SCENARIO – Paper recycling

Title

Paper Recycling – From Waste to New Life

Author(s)

Merike Luts

Summary

Table of summary

Subject	English
Topic	Sustainability, Waste Disposal, Recycling (focus on paper)
Age of students	14-15
Preparation time	45 min
Teaching time	4 lessons (45 min each)
Online teaching material	YouTube videos on paper recycling, Padlet/Google Docs for collaboration
Offline teaching material	Printed fact sheets on paper recycling, worksheets, markers, poster paper
Resources used	EU paper recycling statistics, materials on sustainable environment, authentic videos



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Integration into the curriculum

The lesson integrates English communication skills with environmental awareness. Students will practice speaking, reading, and writing skills while learning about sustainability, recycling practices, and environmental citizenship.

Outcomes of the lessons

Student can speak and write in English about waste separation, paper recycling, active citizenship, sustainable environment.

Aim of the lesson

1. To build vocabulary and communication skills in English related to environment and recycling.
2. To raise awareness of the importance of recycling paper.
3. To encourage students to apply English in real-life contexts (campaign creation, discussions).

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy: Using online resources for research and presentations

Communication: Discussing, presenting, persuading in English



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Collaboration: Working in pairs/groups on tasks and projects
Creativity and Innovation: Designing posters/campaigns
Critical Thinking and Problem Solving: Analyzing benefits of recycling and suggesting solutions

Activities

Name of activity	Procedure	Time
First lesson		
Introduction		10'
	Brainstorming activity: "What happens to a sheet of paper after we throw it away?" Teacher introduces vocabulary (recycle, reuse, deforestation, pulp, environment).	
Procedure	Students read a short article about paper recycling. Comprehension check with True/False and vocabulary exercises.	20'
Second lesson		
Introduction	Video viewing: "How Paper is Recycled" (short documentary). Students note down key steps.	10'
Procedure	Group work: Each group summarizes one stage of the recycling process in English and prepares a short presentation.	25'
Conclusion	Class creates a collective flowchart of the recycling process	10'
Homework assignment	Write a short paragraph (80–100 words): "What would happen if people stopped recycling paper?"	
Third lesson		
Introduction	Warm-up quiz on paper recycling facts (multiple choice).	5'
Procedure	Project work: Students design an awareness campaign (poster, slogan, or short script for a social media video) in English to encourage their peers to recycle paper.	30'



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Conclusion Gallery walk: Groups display their posters; classmates give feedback 10'

Fourth lesson

Introduction Quick recap of key vocabulary and ideas. 5'

Procedure Group presentations of campaigns (role-play, posters, or digital slides). 30'

Conclusion Reflection: "What have we learned about paper recycling and how can English help us make a difference?" 10'

Assessment

Peer assessment: Students assess group campaigns using a rubric (clarity, creativity, accuracy of English, persuasiveness).

Teacher assessment: Based on participation, written homework, and project quality.

***** AFTER IMPLEMENTATION *****

Student feedback

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Teacher's remarks

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Annex

Vocabulary List

recycle, reuse, landfill, deforestation, pulp, environment, container, resource, pollution, renewable, awareness, campaign, reduce, separate, collection point, biodegradable, waste management, conservation, raw materials, eco-friendly, sustainable forestry

English Worksheet – Paper Recycling

Grade: 9 | Subject: English | Topic: Sustainability & Recycling

In this lesson, you will learn new vocabulary about paper recycling, understand how paper is recycled, and practice your English skills through reading, writing, and group activities.

Part 1: Vocabulary

Learn and practice these words:

- recycle



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- reuse
- landfill
- deforestation
- pulp
- environment
- container
- resource
- pollution
- renewable
- awareness
- campaign
- reduce
- separate
- collection point
- biodegradable
- waste management
- conservation
- raw materials
- eco-friendly
- sustainable forestry

Exercise 1. Match the words to their definitions.

Example: recycle → to process used materials so they can be used again.

Write your answers in your notebook.

Part 2: Reading

Read the short text about paper recycling:

Paper recycling is one of the most common forms of recycling. Used paper is collected, sorted, cleaned, and turned into pulp. This pulp is then used to create new paper products. Recycling paper saves trees, reduces deforestation, uses less water and energy, and decreases the amount of waste that ends up in landfills.

Exercise 2. Answer the questions:

1. Why is recycling paper important?
2. What steps are involved in recycling paper?
3. How does recycling paper help protect forests?

Part 3: Writing

Exercise 3. Write a short paragraph (80–100 words):
What would happen if people stopped recycling paper?



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Part 4: Speaking & Collaboration

Exercise 4. In small groups, design a campaign to encourage students to recycle paper.

Options:

- Create a poster with a slogan.
- Write a short script for a social media video.
- Prepare a short class presentation.

Part 5: Reflection

Exercise 5. Discuss with a partner:

- What new words did you learn today?
- What can you do in your daily life to recycle more paper?



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LEARNING SCENARIO – WASTE DISPOSAL

Title

Learning by Doing – Recycling Paper Author(s)

Terje Tammekivi

Summary

Table of summary

Subject	Interdisciplinary (Environmental education, Technology, English, IT)
Topic	climate change, waste disposal. Learning by doing
Age of students	14-18
Preparation time	30-45 minutes
Teaching time	Total duration 2 hours
Online teaching material	instructional videos
Offline teaching material	Used paper
Resources used	Waste paper

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Integration into the curriculum

The lesson could also be organized as an interdisciplinary lesson with science, technology, IT, environmental education

Outcomes of the lessons

The student has become acquainted with one of the handicraft techniques on how to make new material by recycling waste paper, has gained an overview of the process of making paper and practically designed at least one sheet of paper.

Aim of the lesson

As this learning scenario aims to develop to develop students' awareness of waste recycling and practical skills through hands-on activities.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).



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Activities

Name of activity	Procedure	Time
First lesson		
Introduction	Discussion about waste paper and recycling	10'
Main activity	Making recycled paper from waste materials. First phase - to make pulp, use softer paper, such as coffee filters, napkins, egg trays, etc., but cardboard and office paper are also suitable.	40'
Conclusion	Reflection on sustainability.	10'
Second lesson		
Introduction	Instruction to the second phase, paper making history	10'
Main activity	To make paper, you need two frames of the same size. One of them must be covered with a net, a mosquito net is suitable. With the help of a frame with a net, the paper is picked out.	40'
Conclusion	Reflection on learning by doing method	10'
Homework assignment	Design outcome	30'

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on report assessment rubrics.

***** **AFTER IMPLEMENTATION** *****

Student feedback

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Teacher's remarks

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LEARNING SCENARIO – WASTE DISPOSAL

Title

Learning by Doing – Robotics Author(s)

Terje Tammekivi

Summary

Table of summary

Subject	Interdisciplinary (Environmental education, Technology, English, IT)
Topic	climate change, waste disposal. Learning by doing
Age of students	14-18
Preparation time	30-45 minutes
Teaching time	Total duration 2 hours
Online teaching material	EV3 programming environment, instructional videos
Offline teaching material	Tools, Lego EV3 kits
Resources used	Waste paper

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Integration into the curriculum

The lesson could also be organized as an interdisciplinary lesson with science, technology, IT, environmental education

Outcomes of the lessons

Students are aware of the block system and programming with it. Students are more daring to experiment with the possibilities of programming with the help of a robot. Students will be able to assemble a robot according to the instruction and be bolder in further developing the design of the robot. Students use waste paper as additional tools and obstacles.

Aim of the lesson

To introduce students to block-based programming and problem solving using robotics.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

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Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Students analyse each other's outcomes, make connections between information, reflect critically on the world around them and on learning experiences (assessment).



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Activities

Name of activity	Procedure	Time
First lesson		
Introduction	Introduction to EV3 and block programming.	10'
Main activity	Programming the robot using a color sensor. Primary programming begins with a block system. With a block system, you can create videos, games and set machines in motion. Through the block system, students learn the easiest way to program the EV3 robot to move and rotate and use one sensor: a color sensor. Within this framework, the student programs the robot to move along the line from point A to point B.	40'
Conclusion	Reflection on sustainability.	10'
Second lesson		
Introduction	Instruction to the second phase, building paper blocks as tracks	10'
Main activity	Programming a robot using color sensors and paper obstacles on tracks.	40'
Conclusion	Reflection on learning by doing method	10'
Homework assignment		

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on report assessment rubrics.

***** AFTER IMPLEMENTATION *****

Student feedback

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Teacher's remarks

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LEARNING SCENARIO – THE CONSCIOUS CUSTOMER

Title

THE CONSCIOUS CUSTOMER

Authors: Vizkeletiné Gulyás Anikó, Bodnár Edina

BGSZC Logisztikai és Kereskedelmi Technikum és Szakképző Iskola, Budapest, Hungary

Table of summary

Subject	This scenario can be used freely for English language lesson. Though, it could be used as an interdisciplinary lesson combining English language, Economy, Biology or Geography.
Topic	Conscious customer, overconsumption, food waste
Age of students	14-18
Preparation time	30 min for the teacher and 30 min for the students
Teaching time	4x45'
Online teaching material	<p><i>Consumer society – Sustainability:</i> https://www.youtube.com/watch?v=5pMymxIW2Qw</p> <p><i>What is Earth Overshoot Day?</i> https://www.youtube.com/watch?v=WkWfCE4Qvt8</p> <p><i>Country Overshoot Days 2025:</i> https://overshoot.footprintnetwork.org/newsroom/country-overshoot-days/</p> <p><i>conscious consumers</i> https://www.youtube.com/watch?v=9oAtfZmV9qY</p> <p><i>Netflix documentary reveals the dark side of overconsumption</i> https://www.youtube.com/watch?v=1Q8_uUuwvGo https://www.youtube.com/watch?v=OVfZw_egJW8</p> <p><i>types of advertisements</i> https://www.youtube.com/watch?v=Qc0DW5qj7LY</p> <p><i>What are Eco-Labels or Sustainability Labels? Different types of Eco Labelling:</i> https://www.youtube.com/watch?v=XbqbGE_fqe0 https://www.youtube.com/watch?v=l7TbDf2dnGl</p>



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What is Fairtrade?

<https://www.youtube.com/watch?v=Rq6Q6HIUqql>

Fairtrade and Sustainability

<https://www.youtube.com/watch?v=lovcxSy7V5s>

Hungarian Food Bank Association

https://www.elelmiszerbank.hu/en/about_us/who_we_are.html

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Integration into the curriculum

The lessons could also be organized as an interdisciplinary lesson with the Biology / Geography / Economy teacher. In that case an agreement and arrangement with the colleagues should be achieved upon the time of the year depending on their curriculum.

Outcomes of the lessons

Students can talk about Overshoot Day, types of shoppers, advertisements and Eco-labels in English and in mother tongue.

Students can explain key concepts like sustainability, fair trade, ethical consumption, and consumer rights.

Students can write a report in English concerning how to be a Conscious Customer.

Students can talk critically about the world around them and suggest changes and improvements. They can give examples of responsible shopping practices (e.g. avoiding impulse buying, choosing eco-friendly products).

Students learn about product labels, consumer protection websites, price comparison tools, eco-certifications (e.g. EU Ecolabel, Fair Trade).



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Aim of the lesson

The aim of the lesson is for students to become conscious customers, to learn about and adopt the available resources and guidelines that help them become responsible consumers.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

ICT Literacy - ICT tools are used to do research, organise, communicate, and evaluate information.

Communication - Students articulate thoughts and ideas, listen effectively, use communication for a range of purposes (e.g. to inform, interviews with people, conversations, to persuade, to do research, to write a summary/report).

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Students create new ideas using ICT tools and work creatively with others.

Critical Thinking and Problem Solving - Evaluating product claims and advertisements. Comparing products and making thoughtful, informed choices. Weighing ethical, economic, and environmental factors before purchasing.

Information Literacy - Researching reliable sources (e.g. eco-labels, consumer protection info). Distinguishing between factual information and marketing or bias. Interpreting product labels and certifications.

Personal & Social Responsibility - Reflecting on the impact of personal consumer choices on society and the environment. Understanding their role as active, responsible participants in the economy.



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Activities

Name of activity	Procedure	Time
First lesson		
Introduction:	Overshoot Day – Definition - see in ANNEX 1. Find out the date of Overshoot Day in your country for the past year.	3'
	Students use mobile phones / laptops and open web pages of the Country Overshoot Days 2025. They collect the Overshoot Day date for their own country and compare it with the others.	5'
Types of shoppers:	Let's get to know the different types of shoppers. Students use the test to describe themselves and determine which type they belong to. - see in ANNEX 2.	15'
Types of advertisements	Let's explore the different types of advertisements: how do they try to influence us? Students watch video about "Different Types of Advertising" and they discuss it.	10'
Quiz Game About Advertisements	Everyone receives a paper with "T" for True and "F" for False. The teacher reads out the statements and students decide whether they are correct or not. Students discuss them. They try to recall advertisements that serve good examples for the statements. - see in ANNEX 3.	10'
Homework assignment	Watch videos about Eco-Labels. Work in pairs, choose one international and one national ecolabel. Each pair should create two cards: On one side, write 3-5 sentences about the importance of the ecolabel. On the other side, attach the ecolabel itself. Bring both cards with you to the next lesson. – see in ANNEX 4.	2'
Second lesson		
Eco-labels	Students work in small groups. Everyone picks an ecolabel and finds information online about its meaning. It is important that they do not choose their own handmade card. Present the information you have learned. Why is it worth looking for products with the label you chose?	20'
Fair Trade	Students watch the short film about Fair Trade, followed by a discussion of the video watched.	10'
Conscious Consumers	Students gather the GREEN COMPASS for shopping to become CONSCIOUS CONSUMERS, and make a list – see ANNEX 5.	15'



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Third lesson

Introduction	To reinforce what they learned in the previous lessons, students visit a museum (Hungarian Museum of Trade and Tourism), where they continue to explore the topic of conscious shopping in a workshop setting. This activity must be organized by the teachers in advance.	
At the museum	The museum education session seeks answers to the following questions: 40' What does conscious shopping mean today? How do retailers try to influence us when we shop? How can we control our spending instead of letting it control us? What do you do to promote sustainability? What does environmental awareness mean to you? Starting from the museum's commercial exhibition, they arrive at the present day in an interactive way. Students work together in small groups, answering questions, solving puzzles, etc.	
Homework assignment	Introduction: My food waste diary (Annex 6) Do you know how much you waste? Have you ever thought about how much food waste you generate? Often, the lunch sandwich ends up in the bin. To avoid food waste, we need to know our weaknesses. A good way of doing this is to keep a so-called waste diary for 1 week, recording what and how much has gone into the bin. The waste diary helps us to face up to the numbers and use the results to start reducing waste. Please complete the Excel table to face the food waste you produce a week.	5'

Fourth lesson

Homework discussion	Students work in groups of 4-5. Within the group, everyone reports on the results entered in their own Excel table. They then compare their answers within their group. Optional task: each group chooses who wasted the least and who wasted the most food during the week.	15'
Introduction	What could be done with the leftover? – Brainstorming activity in small groups Introduction of the Hungarian Food Bank Association to the students The Hungarian Food Bank Association is a non-profit organization that works to make a link between surplus food and people in need in Hungary in order to help reduce poverty, hunger and malnutrition. The Food Bank receives leftover food for free from food producers and retailers in all cases. They give the food to their partners free, who then distribute on a non-profit basis to people in need.	15'



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Field trip	Field trip to the Hungarian Food Bank Association Guided tour of the Food Bank premises, visiting the warehouse, interactive discussion with the manager and Q&A session	60'
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Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on report assessment rubrics.

Criteria	4 - Excellent	3 - Good	2 - Satisfactory	1 - Needs Improvement
Collaboration & Participation	All group members participated actively and equally. Group stayed focused and helped each other.	Most members participated and worked well together. Minor off-task behavior.	Uneven participation; some members less engaged. Occasionally off-task.	One or two did most of the work; group had trouble working together.
Understanding of Content	Excellent understanding of conscious consumerism. Information is accurate and relevant.	Good understanding; mostly accurate and clear information.	Basic understanding; some unclear or superficial information.	Limited understanding; inaccurate or missing information.
Critical Thinking	Demonstrated deep thinking; clearly justified choices with multiple factors.	Some reasoning shown; includes justification and explanations.	Limited reasoning; choices made but explanations weak or missing.	No justification provided; limited or no critical thinking evident.
Creativity & Presentation	Highly engaging, organized, and creative; visuals and layout enhance message.	Clear and mostly creative presentation; visuals used effectively.	Basic presentation; limited visuals or creativity.	Unclear, disorganized; little to no effort in design or presentation.
Use of Resources/Research	Excellent use of reliable sources (e.g. labels, articles); well-integrated facts.	Some use of relevant sources with minor errors.	Few resources used; unclear or limited application.	No research evident; irrelevant or missing information.

***** AFTER IMPLEMENTATION *****

Student feedback

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Teacher's remarks

Photos taken at the Hungarian Museum of Trade and Tourism



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LOGIKER



Photos taken at the Hungarian Food Bank Association





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Annex 1.

The goal of **Overshoot Day** is to highlight the date in a given year when humanity, through overconsumption and overuse, depletes the planet's sustainable resources. From this date onward, consumption is no longer sustainable. The date is symbolic and serves as a warning: from this point, consumption comes at the expense of the ecosystem, and immediate action is required. Primarily, consumption and pollution must be reduced.

Annex 2.

What Type of Shopper Are You?

By taking this test, you can find out which shopping type best describes you.

Instructions:

Read the statements below and mark on each axis how much you relate to them. The scale ranges from not at all like me to very much like me.

Statements:

- 1- When I'm feeling down, I often go shopping and comfort myself with a small purchase.
- 2- I believe in "love at first sight" when shopping—I see something and immediately feel like I must have it.
- 3- I've always bought this brand, and I don't see a reason to change now.



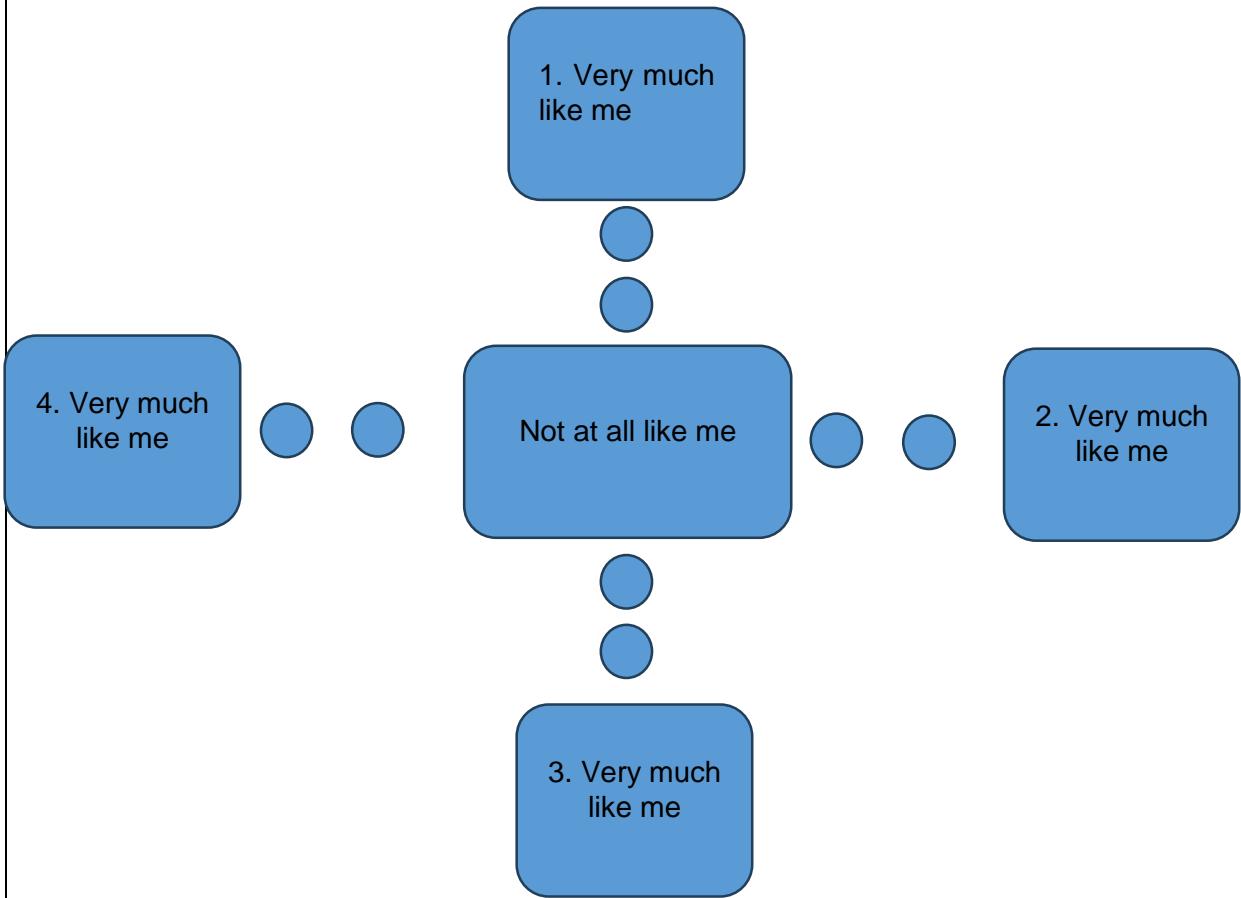
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4- I usually go to a store with a specific purchase in mind. I have a shopping list—on paper, in my head, or on my phone—and I stick to it.

Now, rate yourself on each statement and discover your shopping personality!



Look at the chart you got!

Which statement stands out the most? Once you're done, read the collected characteristics and compare your chart with your friends' or classmates' results!

RESULTS:

Emotional Shopper – Shopping or the purchased item itself brings you joy and temporarily lifts your mood.

Downside: You may later realize you didn't actually need it and spent money unnecessarily.

Impulse Buyer – You get excited because something looks good, is cheap, discounted, or trendy. In the moment, you find a reason to buy it.

Downside: The excitement fades quickly, and you may regret it the next day—plus, where did all your money go?

Brand-Loyal Shopper – You feel connected to a brand's image, style, or identity. You always stick to your favorite brands and follow new trends.



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Downside: You might buy things whether they suit you or not, and even if they are expensive, you still go for them.

Conscious Shopper – You know what you need and stick to your budget. You shop with purpose, make quick decisions, and balance quality with price.

Downside: Others might not understand why you shop so rationally and why you don't buy anything off-list.

Annex 3.

QUIZ GAME: ADVERTISEMENTS

True or False Statements About Advertisements: "Do You Think It's True or False?"

- a) The purpose of advertising is to draw attention to the product. (True. Every advertisement tries to make its product more attractive than others.)
- b) Advertisements provide reliable information about a product. (False. Advertisements often contain incomplete information.)
- c) Advertisements always lie. (False. They present the product in the best possible light, but they are not allowed to make false claims.)
- d) Almost anything can contain advertisements. (True. Even search engine rankings can include ads.)
- e) Advertising always achieves its goal, even against my will. (False. It may or may not influence you—everyone reacts differently.)
- f) Advertisements mostly feature attractive people. (True. Most people in ads are chosen for their above-average appearance.)
- g) Advertisements are meant for everyone. (False. Every ad is carefully designed to target a specific group of consumers.)

Annex 4.

Eco-labels: See 2 examples.



The purpose of the trademark is to protect food producers, influence consumer decisions through consumer information, improve overall food consumption culture, encourage food manufacturers to enhance quality, and strengthen the country's image. The Excellent Hungarian Food trademark clearly indicates that the product is of outstanding quality and stands out from the mass of goods available on store shelves.



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The label proves that the product was produced under fair prices and decent working conditions. It also represents an economic relationship based on balanced trade conditions between workers and farmers in developing countries. By purchasing products with this label, we help producers in developing countries fight poverty and reduce inequalities.

Annex 5.

Ideas on How to Be a Conscious Customer:

1. Planned and mindful shopping with a shopping list
2. Do I really need it?
3. Good quality, durable products!
4. Environmentally friendly production and packaging.
5. Fair Trade certified.
6. Local products from local producers.
7. Package-free goods or bulk purchases.
8. Seasonal shopping (fruits, vegetables).
9. Made from natural ingredients, minimally processed.
10. Don't follow trends, don't be influenced by ads!
11. Stay informed about discounts.
12. Read the labels!
13. Don't go shopping when you're hungry!
14. Set a time limit for your shopping.

Annex 6

My food waste diary

My food waste diary						
Date	Type of food waste	Amount (gram)	Method of treatment. Please choose from the list below	Causes of food waste Please choose from the list below	Type:	
			Garbage Drain Animals Compost Selective waste bin	1 - Non-edible food portion 2 - I do not eat this part of the food, although it is edible (e.g. bread crust, chicken skin) 3 - We bought too much and it expired, spoiled 4 - We forgot about it and it expired, spoiled 5 - We cooked too much and didn't feel like eating it 6 - Leftovers, we had too much 7 - Did not like it 8 - Food not cooked well, kitchen accident (e.g. burnt) 9 - Didn't have time to eat (e.g. unexpected programme, work) 10 - Food/meal not put in the fridge or put in late 11 - It looked suspicious. Not sure it was bad, but I threw it out instead 12 - Other:	Avoidable Not avoidable Possibly avoidable	



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No. - 2023-1-LV01-KA220-SCH-000159311

LEARNING SCENARIO – WATER WASTE & CLEAN WATER

Title

THE IMPORTANCE OF CLEAN WATER

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Table of summary

Subject	This scenario can be used freely for English language lesson. Though, it could be used as an interdisciplinary lesson combining English language, Biology, Chemistry or Geography. Also, it can be used as a project to work on before World Water Day.
Topic	Water waste, water purification
Age of students	14-18
Preparation time	30 min for the teacher and 30 min for the students
Teaching time	3x45'
Online teaching material	<i>The process of water purification:</i> https://www.youtube.com/watch?v=ZNyhY9dR2VE&t=132s

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Integration into the curriculum

The lessons could also be organized as an interdisciplinary lesson with the Biology / Geography / Chemistry teacher. In that case an agreement and arrangement with the colleagues should be achieved upon the time of the year depending on their curriculum. Ideally, it should be integrated into the curriculum in March, before World Water Day.

Outcomes of the lessons

Students can explain why clean water is important for health and the environment.

Students can describe the basic steps of how water can be filtered or cleaned.

Students can identify materials that help purify dirty water.

Students can use key vocabulary related to water purification and ask and answer questions about it

Students can work cooperatively in a group to solve a hands-on task.

Aim of the lesson

The aim of the lesson is for students to raise students' awareness of water-related global and local issues, develop water-related vocabulary in English, and encourage action through communication, critical thinking, and hands-on collaboration. Also, to explore the importance of clean water and how it can be achieved. To observe real-world water treatment processes.

Trends

- Project-Based Learning
- Collaborative Learning
- Peer Learning
- Mobile learning

21st century skills

Communication - Students explain processes (filter building, water treatment) clearly in English. Oral presentations and group discussion build public speaking confidence

Collaboration - Students work together to accomplish a common goal and share responsibility for collaborative work.

Creativity and Innovation - Groups can design their filter structure and presentation style

Critical Thinking and Problem Solving - Hands-on task simulates a real-world environmental challenge. Students must make decisions based on materials, instructions, and results



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Personal & Social Responsibility, Environmental Literacy - Raises awareness of environmental responsibility and real-life impact

Activities

Name of activity	Procedure	Time
First lesson		
Introduction:	Introduction to World Water Day to raise awareness of global water issues Students talk about the importance of water in pairs. -Where do you use water in your daily life? -Can you guess how many liters of water you use per day?	10'
Vocabulary building:	Students work in pairs or small groups. Matching words to definitions - see in ANNEX 1.	5'
Reading comprehension	Students read the text 'Top 5 Ways We Waste Water Without Realizing' – see ANNEX 2. After reading it, they answer the questions.	10'
Speaking activity	Discussion in pairs or small groups. <ul style="list-style-type: none">• What water-saving habits do you already follow?• What could you or your family do better?• Do you think water waste is a serious problem in your country? Why? / Why not? Each pair/group lists 3 water-saving tips for the classroom.	10'
Homework assignment	Students keep track of their own water use at home for one day (e.g., number of minutes in the shower, flushing, dishwashing, cooking, etc.) Bring this data to the next lesson for comparison/discussion.	5'



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Second lesson

Introduction	In this lesson students will explore how to clean dirty water. They will work in small groups and do a project work on water purification. They will apply water-related vocabulary in a practical, hands-on activity while developing teamwork, problem-solving and language skills. Materials needed: Simple DIY water filtration materials: plastic bottles, sand, pebbles, cotton, charcoal, dirty water (pre-made with soil, leaves, etc.)	
Warm-up discussion	Teacher asks: <ul style="list-style-type: none">• Where does clean water come from in your town?• What do you think is in dirty water?• How do people in poorer areas get clean water?	10'
Vocabulary building	Matching exercise: Teacher gives students images of the materials and tools they'll use, with a list of words (e.g. sand, pebbles, filter, trap, purify, contaminated). Students match them with the pictures.	5'
Group work	Students work in small groups. Without any help or instructions, they try to solve the problem and purify the dirty water. They can try several times, start the process again and again until they agree to finish and provide clean water.	20'
<p>For the teacher: Steps to Build a Filter</p> <ol style="list-style-type: none">1. Cut the plastic bottle in half. Use the top part as the filter.2. Put cotton in the neck.3. Add layers in this order: charcoal (optional), sand, pebbles4. Place the bottle upside down over a clean cup.5. Pour the dirty water in slowly.6. Observe what happens and collect the filtered water.		
Sharing and reflection	Each group presents briefly: <ul style="list-style-type: none">• What did you do?• Did your filter work well? Why or why not?• What would you improve?	10'



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Third lesson	
Field trip	Field trip to the local wastewater treatment plant to observe real-world water treatment processes.
Pre-teaching vocabulary	Introduce words and phrases students may hear during the visit: Students match the terms with the definitions –ANNEX 3
Preparation	Students have to prepare questions to ask during the visit. Examples: <ul style="list-style-type: none">• How long does it take to clean the water?• What happens to the sludge?• Is the cleaned water safe to drink?• How do you remove bacteria or harmful chemicals?• How much water is treated per day?
During the trip	Listen carefully, take notes and ask your questions.
After the trip	Discuss impressions: What surprised you? What was interesting or confusing?
Homework assignment	Option A: Write a report or blog post titled: "What I Learned at the Wastewater Treatment Plant" (min. 100–150 words) Option B: Design an informative poster in English explaining the water treatment process.

Assessment

Assessment rubrics can be used for peer assessment. The teacher can assess their work based on report assessment rubrics.



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3. Group Work Rubric (During Water Filter Project)

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (1-2)
Participation	Everyone was actively involved and spoke English	Most students participated	Uneven participation	One or more students did not engage
Collaboration	Respectful, effective teamwork and turn-taking	Minor issues, mostly cooperative	Some conflicts or confusion	Poor group dynamics
Problem-Solving	Creative, logical approach to building the filter	Completed task with some help	Needed guidance or corrections	Unsuccessful or off-task
Use of English	Group used English consistently	Mostly used English, with a few switches	Frequently switched to L1	Rare use of English during task
Final Result	Filter worked well; group could explain why	Filter worked with basic explanation	Filter was unclear or poorly explained	No working filter or no explanation

***** AFTER IMPLEMENTATION *****

Student feedback

/

Teacher's remarks

Photos taken during the water purification activity





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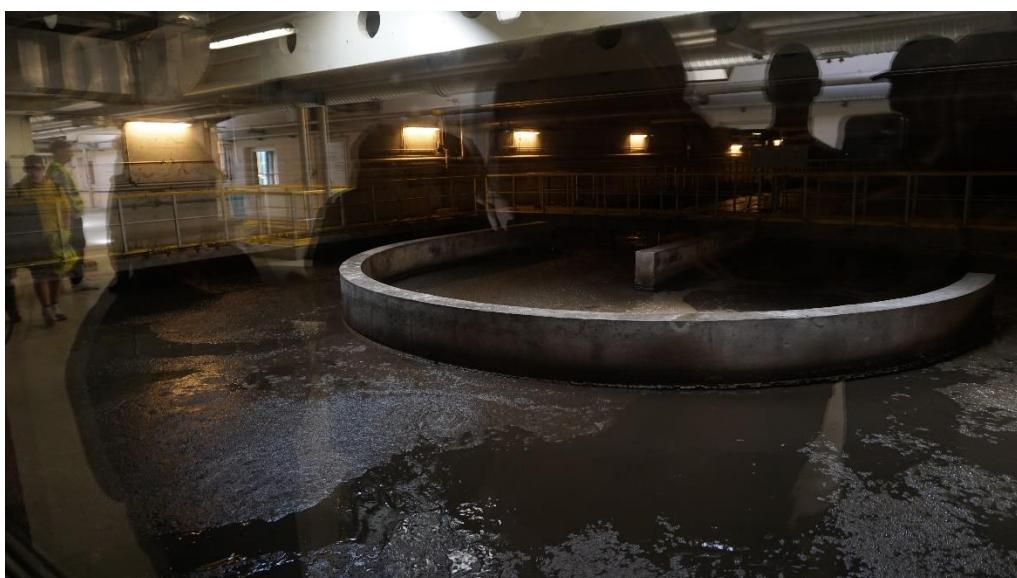
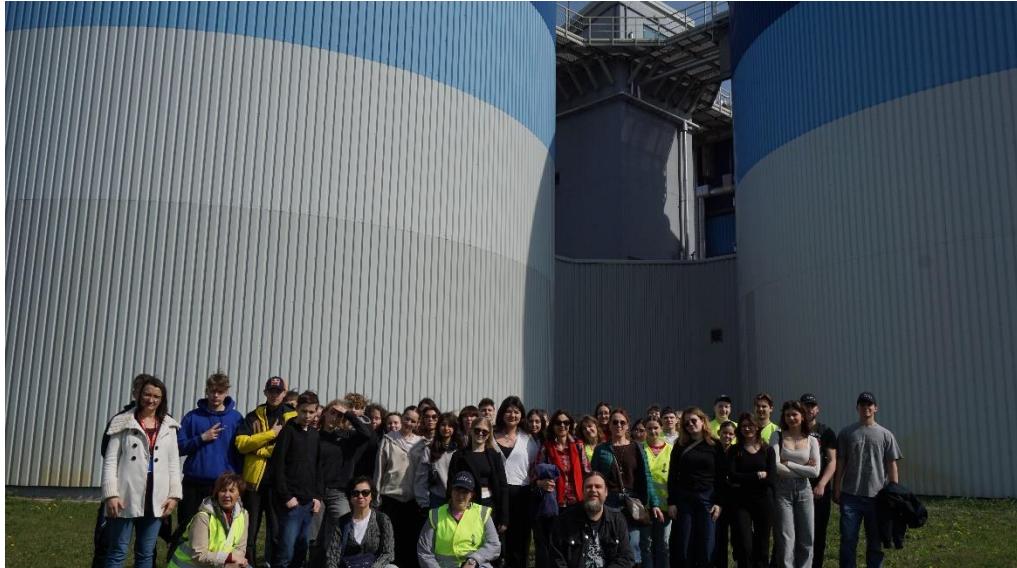
Photos taken during the visit to the Wastewater treatment plant



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Annex 1.

Match the words on the left with their definitions on the right.

Word	Definition
1. faucet	A. A small drop of liquid, especially water
2. leak	B. To use something too much or carelessly
3. drip	C. The act of using less of something to avoid waste
4. flush	D. To let water flow through a toilet
5. excessive	E. A device that controls the flow of water from a pipe
6. irrigation	F. Too much; more than needed
7. water meter	G. Water slowly escaping from a pipe or container
8. waste (verb)	H. To supply land or plants with water using pipes or canals
9. efficient	I. A device that measures how much water you use
10. conservation	J. Doing something in a way that saves time, money, or resources

Answer Key

1 → E
2 → G
3 → A
4 → D
5 → F
6 → H
7 → I
8 → B
9 → J
10 → C

Annex 2.



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Top 5 Ways We Waste Water Without Realizing

Water is one of the most precious resources on Earth, but many of us waste it every day—often without even noticing. Here are the top five ways people waste water in daily life:

1. Letting the Faucet Run

Many people leave the faucet on while brushing their teeth or washing dishes. This simple habit can waste several liters of water in just a few minutes. Turning off the tap while brushing can save up to 6 liters per minute.

2. Leaks and Drips

A small drip might not seem serious, but it adds up over time. A leaky faucet or pipe can waste hundreds of liters per month. Fixing leaks quickly is an easy way to reduce water waste at home.

3. Taking Long Showers

A 10-minute shower can use up to 100 liters of water—especially if you use a high-flow showerhead. This kind of excessive water use can be reduced by installing efficient fixtures or simply taking shorter showers.

4. Overwatering Gardens

Many people water their gardens too often or at the wrong time of day. Using smart irrigation systems and watering in the early morning can help plants get what they need without wasting water.

5. Flushing Too Often

Toilets use a lot of water with every flush—usually 6 to 12 liters. While flushing is necessary, some people flush items like tissues that should be thrown away instead. Consider using dual-flush toilets to save water.

Why It Matters

Wasting water not only increases our water bills but also harms the environment. Water conservation is essential—especially in areas that suffer from drought or limited clean water access. A simple way to start is by checking your water meter and tracking your daily use.



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Answer the following questions.

1. How much water can you save by turning off the tap while brushing your teeth?
2. What are two ways to reduce water waste during showers?
3. Why is overwatering a garden considered wasteful?
4. How much water can one toilet flush use, according to the text?
5. What is one reason why water conservation is important?
6. Which of these habits do you recognize from your own life?
7. What can you change today to help conserve water?

Annex 3.

Term	Meaning
sewage	waste water from homes and industries
wastewater	used water that needs cleaning
sludge	thick waste left after water is treated
treatment plant	facility that cleans water
filtration	removing particles from water
chemical treatment	using chemicals to kill bacteria
disinfection	final cleaning step to make water safe
recycled water	treated water that can be reused



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THE SECOND LIFE OF WASTE – TEACHERS’ MANUAL

The Second Life of Waste – Teachers’ Manual is a [digital collection](#) of lesson plans developed within the [Erasmus+ project](#) of the same name. The e-manual supports teachers in introducing [sustainability](#), [waste reduction](#) and [circular economy](#) topics through [practical, classroom-ready activities](#).

All lesson plans presented in this e-book are also available via Padlet, offering flexible access and the possibility to download and use individual lessons according to teaching needs. This approach allows educators to adapt the materials to different age groups, subjects and learning contexts.

By combining environmental education with [critical thinking](#), [creativity](#) and [active student participation](#), the manual encourages responsible attitudes towards waste and promotes sustainable everyday choices.

Target group:

- Primary and secondary school teachers
- Students aged 10–19

Project focus:

- Sustainability
- Circular economy
- Waste reduction
- Environmental awareness

Access all lesson plans with Padlet

Flexible download
• Digital resource



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